

# **THE FUTURE** **OF ENTERPRISE** **AND ENTREPRENEURSHIP**

*After Laudato si'*

A CONTRIBUTION OF UNIAPAC



*Edited by Rodrigo Whitelaw & Romain Buquet*

**Uniapac**

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# THE FUTURE OF ENTERPRISE AND ENTREPRENEURSHIP

*After Laudato si'*

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*FOREWORD by Rodrigo Whitelaw*

*AFTERWORD by Martin Maier S.J.*

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# UNIAPAC

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**U** NIAPAC is an ecumenical organization and an international non-profit organization headquartered in Paris. UNIAPAC was born in 1931 on the 40<sup>th</sup> anniversary of the encyclical *Rerum Novarum*. Today it convenes a confederation of Christian Business Leaders' Associations from 40 countries in Europe, Latin America, Africa and Asia and represents more than 45.000 active business executives around the world. Inspired by CST (Christian Social Teaching), its goal is to promote, amongst business leaders, the vision and implementation of an economy serving the human person and the common good of humanity at large.

UNIAPAC promotes the transformation of companies to contribute to the building of a more just and humane society, ensures personal development and training of its associates, and serves as a link between Christian associations of business executives across the world to facilitate exchanges and be recognised worldwide for the distinctive promotion of business as a noble vocation.

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# FOREWORD

by Rodrigo Whitelaw

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**T**his book is the result of more than 5 years of work within the framework of the project *The future of work, Labour after Laudato si'*. The investigation presented here focuses on the potential impact of transformative forces at work today that could affect the enterprise, entrepreneurship and work of tomorrow. These transformative forces are either external or internal to the world of business. They have to be, first, identified; and, second, assessed from the *Laudato si'* perspective, as either threats or opportunities, enhancing or compromising the contribution of enterprises to the future of decent work and the common good.

The research also focused on the importance of turning business into a noble vocation, aiming particularly at full employment in conditions of human dignity. We thereby affirm that work is an essential means of human fulfilment and a contribution to the common good.

## ► Theoretical framework

The theoretical framework of this research is Catholic Social Teaching (CST) with its fundamental principles of human dignity, common good, solidarity, subsidiarity, universal destination of goods, sustainability and the option for the poor. More recent references are the encyclical *Laudato si'* (LS) by Pope Francis, published in 2015, and the document *Oeconomicae et pecuniariae quaestiones* published in 2018 by the Congregation for the Doctrine of the Faith and the Dicastery for Promoting Integral Human Development, which proposes reflections for an ethical discernment regarding aspects of the present economic-financial system. Beyond Christian Social Teaching a major reference frame are the Sustainable Development Goals (SDGs) provided by the UN to unite global stakeholders in work towards a better and more sustainable future for everyone.

The research is rooted in an understanding of work as an essential factor of human dignity in accordance with Christian Social Teaching. The *Compendium of the Social Doctrine of the Church*<sup>1</sup> states: “The human person is the measure of the dignity of work.” (n. 271) In a Christian perspective, work is much more than merely a source of income. It is an integral part of human identity and fulfilment. Martin Luther, the great Church reformer, put it in this wonderful metaphor: “As the birds to flying, so is man born unto labour.” *Laudato si'* underlines, similarly, that “we are created with a vocation to work” (n. 128).

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1. PONTIFICAL COUNCIL FOR JUSTICE AND PEACE, *Compendium of the Social Doctrine of the Church*, 2004.



This research contributes to today's profound changes in the world of work with an in-depth reflection its ethical and anthropological foundations. We cannot have a sustainable and healthy economic life without collective values and a healthy concept of the human being, a healthy anthropology. Christian Social Teaching emphasizes the need to place the dignity of the worker at the centre of reflection on the future form of work. The economy is at the service of all human persons. A false and individualistic anthropology reduces the human person to an individual consumer and a 'factor' of production. But the human person is first and foremost a relational being. A proper culture of work promotes an integral approach and considers persons in their entirety, as an end and not as means. Human persons are not machines. They dream, and have feelings, histories and plans. They belong to a family and to a social, cultural and economic environment; and they need to feel a sense of accomplishment in all aspects of their lives. A danger today is that technology determines human working conditions while it should be the other way around. Ethical values connected to work are freedom, security, equity, dignity.

## ► Methodology

The research is the result of the work of **14 researchers** each of whom produced an original contribution. At an overall level the research co-ordinator followed specific steps to design and manage the project, while at the individual level each author was entitled to use the methodology of his/her choice.

## ► Macro level

The effort was made to find the right balance between giving a clear framework or common structure to all contributions, but also offering contributors some freedom, in order to produce a diverse result. The research coordinator prepared an analytical matrix and a bibliography, that were proposed to the potential contributors.

Three types of contributors were sought: high-level academic scholars, PhD researchers and business leaders, with a cross-fertilization approach between theory and practice. The high-level academic scholars were selected on the basis of their publication history, intellectual recognition and expertise on the topics of the research. Business leaders were recruited through a call for contributions issued in the UNIAPAC network. The voluntary basis ensured their full commitment during the long process of drafting the contribution. PhD researchers were selected within the framework of research collaboration programs between UNIAPAC and Business Schools and Universities (ICAM, ESCP in France) on the basis of the relevance of the subject of their PhD investigations in progress.

A systematic discussion was opened with contributors, to guide their work and reflections towards the objectives of the overall project. This included informal discussions, content sharing and intermediate seminars in Bilbao, Brussels, Fribourg, Geneva, Lille, Lisbon,

Paris, Praia (Cabo Verde), Rome, São Paulo. At the last two meetings of the UNIAPAC Think Tank (2018, 2019) contributors were invited to present and discuss their papers. UNIAPAC established an editorial committee to evaluate and select received contributions according to their relevance to the proposed analytical matrix. A final review was conducted, to assure papers were consistent with the project goals. Thanks to the guidance provided in earlier stages, very few changes were required. Contributions were received in English, French, Italian and Spanish, and translated into English if needed.

### ► **Micro level**

Contributors were given full freedom regarding the choice of methodology. This decision was taken to foster a large array of contributions, including not only experienced scholars, but also senior practitioners proposed by the UNIAPAC national associations. Thus, each of the 14 contributions has its own methodology.

Some favored a qualitative approach or multiple case studies. Others produced an essay, based on previous or current research or studies on future perspectives for social and economic policies. Two intellectual contributions are based on PhD researches with a qualitative approach, including semi-structured interviews of 50 business leaders and young entrepreneurs. In the framework of the ICAM chair “Meaning & Work”, a survey, based on quantitative techniques, was conducted. The representativeness of the sample was assured according to gender criteria, age, industry and size of the businesses involved. ▀



# THOUGHTS ON LONG-TERM GLOBAL PERSPECTIVES (2020-2050)<sup>1</sup>

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by Michel Camdessus

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**T**he world is changing at a pace that forces us to reconsider ideas about which we were once absolutely sure. Forecasting the future has never been so uncertain. We will have to do just that, however, so that governments and corporations can act in time and take the necessary measures to minimize risks and seize opportunities that have already presented themselves. This essay attempts to contribute to the discussion. It is based on recent work undertaken in the effort to examine the world in 2050 that has been carried out by researchers from all over the world under the aegis of the Emerging Markets Forum (EMF)<sup>2</sup> in Washington. Rather than delve into the risky practice of futurology, the group focused instead on shining a light on major noticeable trends in the world economy that – whether they converge or conflict – will contribute to shaping tomorrow's world.

These “megatrends” are listed below. Dealing with them will require radical choices that extend beyond the economic world. We therefore must identify those trends that – despite backward steps being taken by the international community – could lead the world towards a worthy future for humankind.

## I ► Megatrends

1. The first and most dominant trend is a demographic progression towards the confrontation of a continent of youth – Africa – and the rest of the world, which is growing older. Africa's population will double in 35 years to reach 2.5 billion people by 2050. It will quadruple by the end of the century, while at the same time Europe's population will dwindle to a mere 653 million.

Almost everywhere else, the population will stagnate and shrink. Thus, the nexus of tomorrow's problems rests in the clash between Africa and the world; especially in the way that Europe handles this challenge now and going forward.

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1. This essay is a summary, and in some parts, an update of the book “*Vers le monde de 2050*” (Fayard, 2017).

2. The EMF is a Washington-based think tank founded by a group of former leaders of international financial institutions. Its objective is to provide developing nations with analyses of their future perspectives so as to help them prepare their long-term social and economic policies.

2. The global economy will continue to grow at a pace of 3.5 %<sup>3</sup> per year (according to the latest data from the IMF, growth in 2018 and 2019 reached 3.7 %). Despite the sunny outlook, stormy clouds loom ahead, such as: conflicts, financial instability, and a widening gap between the haves and have-nots. The latter is not only a significant threat to social and political cohesion in countries; but endangers growth and true human development.
3. International trade has grown despite an American protectionist strategy and the increased tensions it has engendered.
4. Interdependent yet dangerously unstable world finance. The lessons of the 2008 crash have either been forgotten or were never learned. Thus, the world continues to be exposed to the constant risk of a financial crisis. Governments' ability to deal with the threat is uncertain, hamstrung as they are with irresponsible debt.
5. Emerging economies have made significant advances. In an extraordinary flipping of the balance of power, we are witnessing a tectonic shift of economic strength from the west (where it has been concentrated for the last few centuries) to the east. For better or worse, the world is being driven de facto by those who hold the economic reins of power. The G7 – which until now represented the most advanced countries – is no longer a credible driver of world power. In 2050, it will only represent 20 % of global GDP. This shift affects Europe in particular. In fact, European countries risk being sidelined from international leadership structures unless they unite. In 2050, other powerful nations will rule the world. To wit: of 9.8 billion people on Earth, 2.5 billion will be African, 1.7 billion Indian, 1.4 billion Chinese, 716 billion from Europe, and 435 billion from North America.

In this New World, the biggest European countries (France and Germany) will no longer have a “critical mass.” France, with 70 million people will probably be the 14<sup>th</sup> or 15<sup>th</sup> most powerful nation, which is what Thailand is currently ranked; but does anybody really care about Thailand's perspective on the world's big systemic problems today? Thus Europe, which united could still have a significant role to play will have to choose between unity or the possibility of falling into insignificance or dependence.

6. Booming urbanization – 65 % of people live in cities, including 800 million more in Africa. This will require huge investments so that 20 % of the population does not have to live in shantytowns as almost 1 billion do today.
7. The middle class is expanding in developing countries. 4 billion additional people will join the ranks of the middle class (as defined by the UN). 84 % of the world's population will belong to the middle and upper classes. This positive phenomenon

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3. Including 2 % in Europe, 4 % in emerging nations, and 4.5-5 % in Africa, on the condition that significant foreign assistance is provided to support their own measures. 3 Global GDP distribution between G7 and emerging nations.

will go coincide with another megatrend – the finite nature of natural resources; and it is impossible to predict the outcome of this confrontation.

8. The limits of natural resources – water, energy, minerals, arable land, and other resources are running out before our very eyes. This calls for radical changes in our consumption habits just as 4 billion people gain access to the advantages of this unsustainable model. With the current balance, we already need between 2 and 3 more planets just to feed everyone on Earth. What will happen if the new emerging middle classes adopt the western way of life? We must urgently consider the many changes that should be encouraged everywhere.
9. Climate change will aggravate this problem considerably, especially in currently disadvantaged countries. The IPCC's (Intergovernmental Panel on Climate Change) 2018 report on climate change is particularly alarming on this point. The current warming trend is not, in fact at  $+2^{\circ}$  (a level that is considered still acceptable by the COP21), but rather at  $+3.5^{\circ}$ ; and probably more. This observation is all the more worrisome because the summary of said report (addressed to the world's decision-makers) demonstrates that a jump of 2 % rather than 1.5 % would already bring a considerable increase in negative warming-related consequences.
10. Skyrocketing technological progress – digital, connectivity and information access for all, AI, and progress in medicine all open the door to a fascinating future. There are 3 unmistakable challenges that we face as a consequence of these advances :
  - a- A huge challenge for continuing education and retraining. By 2030, several hundreds of millions of workers will have to change careers.
  - b- The danger of military use and the outrageousness of “transhumanism”.
  - c- The urgent need to consider ethics so as to generalize “ethics that is people – and Earth – centred”, according to the words of Popes Benedict XVI and Francis.
11. New kinds of violence – terrorism and civil wars are far from over. They call for coordinated worldwide resistance.

Demographic upheaval, financial instability, the continuing growth in inequality, the limits of the Earth's resources worsened by climate change and a boom in needs, changes in the balance of power, and technological advances but a risk of the spread of violence all paint a somber picture. It is clear that humankind has never seen so many radical changes in such a short space of time. What can people and humanity do?

## **II ► What should be done**

For those who are paying attention, opinions on these perspectives may seem contrasted. Thoughts in emerging countries are rather calm, even optimistic; whereas in more established countries that were considered advanced until now (especially in Europe), discussions focus in the risks and challenges that come with these megatrends.

They don't do a good job of seeing the potential these situations have even though – despite continuous efforts at reform – they could be the opportunity to improve human rights. Pessimism predominates. It is true that it is possible to improve current conditions for humankind, but it seems likely that they are going to worsen overall. When faced with the future, many of our fellow citizens adopt an attitude of active disenchantment, much like Albert Camus when he accepted the Nobel Prize for literature in 1957. In his speech, he said: *"Each generation doubtless feels called upon to reform the world. Mine knows that it will not reform it, but its task is perhaps even greater. It consists in preventing the world from destroying itself."* Are they right? Before we join them in their nihilism, maybe we should focus on the rays of light that shine through the painting. Indeed, there are several:

- †Many scientific breakthroughs that are beneficial to humans;
- †Significant advances in healthcare and longevity;
- †The obligation to substitute the model of excess consumption (which is sending us into an abyss) with a model of what Jean-Baptiste de Foucauld refers to as "more frugal abundance";
- Cultural and economic contributions migrants make when they are properly welcomed;
- Steps towards a multi-polar approach to world governance after the single-sided domination of the US and the almighty dollar;
- European construction, on the condition that its impetus is based on each people contributing to the others so as to build a shared future together;
- And finally, it bears mentioning that the revolution of solidarity in civil society that has taken hold at the grassroots level in our countries; but especially in developing countries that live under the despotic hand of pillaging and wrongly elected leaders or are prone to conflict that we believe to be in dire straits.

Indeed, another world is sprouting – silently. There are signs that a new world is blossoming, one that welcomes, respects others, and shares. While public leaders are slow to act, many small-scale initiatives are being taken to humbly, modestly – yet tenaciously – take a stand against all sort of ills. Easy skepticism dismisses the positive signs that also make up the radical newness of these times that are burgeoning. They give reason for hope. Of these traits and signs of silent action taken by good-willed people, the great British economist Nicholas Stern said *"by managing these transformations, we can make the next 100 years the best of centuries. If we don't manage those transformations properly, the next 100 years will be the worst of centuries."*

### III ► Paths for the future

So if there is still an outlook to a better world, we must identify the paths that could lead us there. Following the experts of the EMF, we can identify five paths towards a more human world for which we could strive. They are:

- To eradicate extreme poverty;
- To reinstate finance in its role at the service of humanity;
- To design new governance for a multipolar world;
- To find wiser ways of dealing with the finite nature of the world's resources;
- To adapt our cultures commensurate with these challenges.

Like the 17 Sustainable Development Goals, which were almost unanimously adopted by the United Nations in 2017, the 5 “Paths of Humanity” (which are a sort of summary of the SDGs) call to a deep rethinking of civilization under threat from all sides. It will require sustained effort. Many hurdles will slow or stymie advances, but they should not discourage the men and women who are determined to stay on course, because of what is at stake – the prospect of a more worthy world for humankind.

#### 1. Eradicate extreme poverty

The first Sustainable Development Goal (SDG); it forces us Europeans to face the problems in Africa, a mere 16 miles from our coasts. We have to achieve this goal. Therefore, we must cease the current types of cooperative efforts with waning ambitions and enter into a renewed partnership with African countries, and accept to invest in all areas that are essential for their development – from education to rural jobs and large-scale urban infrastructure projects – so their cities become centres of civilisation rather than cesspools of misery<sup>4</sup>.

The need to adopt a new attitude as regards migration stems from the same rationale. It is a difficult challenge for Europe, but we mustn't forget that people do not migrate gladly. The real long-term solution is to gather all necessary resources to provide young Africans who are the promise of their countries with training and jobs.

To do this, much more funding than is currently allotted will have to be established, and considerable resources could be raised for that. A first source could come from Africa itself, if as much of the international community as possible mobilised to stop pillaging extractive resources. In recent years, the amount of resources extracted has surpassed

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4. A reminder of what the future has in store: half of African countries will see their population double by 2050. If we look further into the future, 6 of them (Angola, Burundi, Niger, Somalia, Tanzania, and Zambia), will increase their population more than fivefold by 2100. Niger, for example had a population of 2.5 million in 1950. In 2017, it reached 21.5 million. At that rate, it could be more than 68 million in 2050 and hit 192 million people in 2100! These figures are mind-boggling. Obviously, they are only estimates, but they are the most reliable ones.



the amount of public development aid<sup>5</sup>. Other significant financing could be gathered by using part of the huge pool of global savings that are mostly frozen in asset funds to invest in priority development projects in Africa. Some of the ideas are listed below:

Two other major, oft-mentioned issues need to be addressed directly: birth control policies and corruption. The former is an issue that many think can be solved with a snap of the fingers; but in fact, unchecked population growth is the reason for Africa's centuries-old stagnation. If we want to avoid the dual risks of unchecked fecundity and trivialised abortion, the wisest response would obviously be unfettered access to the safest contraceptive measures; but above all equal education for girls and boys at all levels (including secondary and university). To this should be added educating boys about sexual responsibility, a cause that Graça Machel (Nelson Mandela's second wife) has taken up, largely alone.

Corruption is often cited as being one of the main hurdles to sustainable development. It exists in the north as well as the south. It is widespread, so more drastic steps should be taken to fight corruption in Africa and our countries as well. One of the priorities in tackling corruption should be to counter advantages offered by offshore financial centers; as well as all of the measures – financial or otherwise – taken by industrialized countries who cover up this activity. This fight should be waged to the end; but the fear of corruption should not stop us from working together to create the many needed jobs for young people in Africa. Efforts to strengthen “governance” in poor nations should also be redoubled. Technical assistance still has a role to play in accelerating the path to the rule of law. This and peace are the primary ingredients in the recipe for development. One cannot eradicate poverty without banishing tax evasion, illicit transactions, crime, and war. African governments should be supported in their fight against these scourges. The cruel widening of the inequality gap is another obstacle to development that has been ignored for too long and must be addressed.

It is true that the wealth gap between nations is shrinking thanks to the positive impact of growth rates between developing and developed countries, which is something about which we should be happy. However, the scale and persistence of the inequality gap within nations led the UN to adopt SDD #10, which aims to “reduce inequality within countries”. The continuously widening divide accelerates social fragmentation and destines the poorest people to permanent exclusion. It also restricts growth rates

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5. Africa Progress Panel's 2013 report demonstrated that the fraudulent under-estimation of assets that were the object of a mere 5 concession contracts between 2010-2012 (including many others) led to estimated losses of \$1.6 billion for the Democratic Republic of Congo. That is or more than twice the health and education budgets combined (\$698 million) of a country where 17 % of children die before their fifth birthday and 7 million of 11.2 million school-age children are not enrolled. Plus, fake pricing of commercial exchanges cost Africa an average of \$38 billion per year between 2008-2010, or more than what the region received in Public Development Aid (PDA) from OCDE funders. In other words, Africa could double its resources from international aid by including transparency in operating contracts and eliminating fraudulent pricing schemes.

in countries that are the most affected. Thus, the eradication of extreme poverty can be achieved by aggressively implementing SDD #10.

The contributing factors differ so much from country to country that varied, rigorous, and sustained efforts will be needed to progressively bring these inequalities down to acceptable levels. The negative effects of their growth today are such that every country should concentrate their efforts on reaching the first target of SDD #10, and call upon governments to take the necessary measures so that income of the poorest 40 % of the population grows at a faster rate than the national average. Plus, they should increase inclusion policies (health, education, and priority on early childhood). The private sector should also play an active role in achieving this goal. Remuneration policies are the root of increased inequality. Countries should progressively attain a fairer income distribution growth and dynamic by concurrently correcting remuneration policies and increasing public sector efforts.

So said measures do not go unheeded, one suggestion would be for multilateral organizations (such as: the UN, IMF, World Bank, and the OECD) to help their member countries define the most relevant measures to that aim within their purview and commit to following up on them.

## **2. Restore finance to the service of the economy**

Over the last few decades, private finance has increasingly gained in prominence over public finance. It has even become predatory and have strayed from its core role, which is to serve the economy; much to its discredit. Bringing banks back to their original purpose of serving the economy means:

- Increasing or resuming work on rules and regulations. The slowness or lack of progress in this area is such that there are fears of a new crisis that would be harder to overcome than ten years ago.
- Learning the lessons of the 2007-2008 collapse of the financial system to renew an ethical code.
- Savers should have a better sense of their responsibilities when they invest their money. This new behavior should go hand in hand with a fundamental change in the way excessive private savings are invested. This is a decisive factor if poor countries are to confront their overwhelming needs for productive and urban investment. The fear of risk today forces those who manage those savings into looking for safe but sure investments, even if they don't bring a heavy return. Thus, it is essential for national or multinational institutions of long-term public financing to radically change their strategies. They also ought to make more room for guarantees that shift global savings to the aforementioned countries, where the lack of savings hinders needed investment. More should be done along the same lines to confront the tremendous needs linked to climate change around the world. Existing resources,

governments, and financial institutions would be guilty indeed if they are too slow to adapt financial channels accordingly.

- Beyond the essential change in the private sector and public-private partnerships, governments have to go back to the drawing board and come up with international initiatives that are designed to create an international monetary and financial system that guarantees global stability. This includes:
  - **In the short term** – Reforming the IMF, so as to give it the legal and financial wherewithal to be a “lender of last resort”;
  - **In the medium term** – Managing multipolar monetary policy so as to have better control of liquidity trends and take steps towards global currency by changing special drawing rights (SDR) into actual international currency.

### **3. New governance for a multipolar world**

The most serious threats we face – pollution, pandemics, climate risks, new kinds of violence, etc. – know no borders. They affect the whole world, so they will only be properly countered if our actions are part of global strategies. Instead, the global system is getting weaker. It is being questioned just when saving the essentials requires strategies of a worldwide scope that are jointly designed and implemented in an integrated manner. Multilateral organization is needed today if the international community takes on a shared vision and strives towards the universal common good.

A completely overhauled UN should be the primary means of achieving that goal. Despite its weaknesses, it has managed to make considerable inroads. To wit: SDDs and the COP21 are just two of the latest significant examples; but these advances would be tenuous if world, regional (like the EU), and national organizations were not redesigned and strengthened. The multilateral model is more needed than ever. It should be made more agile, given a long-term mandate, and resources on par with its responsibilities, for instance:

- adopting world economic policy strategies that are focused on including poor countries:
  - following up on the implementation of SDDs;
  - defining and adopting needed international regulations;
  - and obviously, continuing its original missions at the service of peace.

Such changes will require some first steps, such as:

- Reforming the G20 so it has the universal legitimacy that it currently lacks;
- Expanding the Security Council and its operating rules;
- Restricting veto power to the five winners of the Second World War.

#### **4. Promoting radical changes in consumption models to save the planet**

This requires being sensible about the response to the depletion that will likely accelerate with climate change and the middle class boom. The answers to the challenge affect all stakeholders.

Obviously, governments will have to rigorously respect the commitments taken at the COP21 but making up for lost time will force us to impose even more onerous efforts than initially planned.

Corporations are also going to have to change their attitudes towards their environmental responsibilities. It is no longer optional. Corporations can no longer shirk their responsibilities towards the environment, just like they have to play their role in the fight against inequality.

To avoid shortfalls and heated conflict, no country (except the poorest) can avoid radically changing their consumption practices. Public opinion is increasingly aware and many young people have evaluated the vanity and risks of excess consumption. The opinion of Dr. Ramgopal Agarwala of the Indian Academy of Sciences with regards to this matter is particularly significant and bears repeating. Referring to the tactic long used by emerging countries, he recommends taking a different approach. Developing countries have historically sought to demand that rich countries shoulder the burden of the changes that need to be made by pointing out northern countries' past negligence with regards to environmental discipline, thus washing their hands of the matter. Instead Dr. Argawala states "We should abandon our rhetorical position as victims. All of us, North and South, should adopt a truly responsible attitude and manage our consumption together... People in developing countries should be encouraged to see this as a blessing in disguise that will drive them to adopt a healthier lifestyle that is more in line with their traditional ethics of moderation, frugality, self-discipline, and life in harmony with nature." This recommendation also holds for developed countries. It is indeed, perfectly aligned with the last "path for humanity", which calls for changing our current cultures that are incompatible with those that should predominate in the world we need to build.

#### **5. Changing our cultures**

This is the "missing link" in a sustainable development strategy. As Pope Francis asks, it consists of finding a way to suffuse the new realities of the world with ethics that is people – and Earth – centred. A first condition must be met for that to happen. We must acknowledge the fact that – in Kafka's words – we are still in the grips of yesterday's culture. In all human realities, it leads to surreptitious sowing of desperation, division, fear, and even hate. It is radically opposed to the culture that is needed for a better future. Let us point out two of its drawbacks:

1. “Earn more to consume more” has become a dominant mantra. Greed is deemed to be politically correct, and surreptitiously implants itself the heart of collective culture.
2. Our narrow perception of the common good that goes no further than the edge of town, city limits, or national borders. If fact, it’s quite clear that a universalised world can only find the harmony it seeks in a widely diversified culture that draws from its universal sources.

A significant overhaul of UNESCO should contribute significantly to this goal. For that, it would need universal support that at the moment is only sparingly given. Nevertheless, there should be no impediment to preparatory work-albeit informal – to that end.

Indeed, all of our cultures – including political cultures – have to adapt to a new universal future that is getting clearer by the day. Starting at school, younger generations should be encouraged to think about what lies ahead. To look at it with simultaneous wonder and an appreciation for the universal dimension of their civil responsibility. In doing so, the young will be better prepared to tackle the big projects for the universal common good and thrive.

These issues call for a commitment that could be exciting for those who can introduce the universal nature of responsibilities and the new way of living needed in tomorrow’s world to public opinion; whether they be teachers or media leaders. The world’s scholars and spiritual or religious leaders should join them in this task. They should be active partners. Throughout history, they have often been at the root of world cultures, so they cannot be indifferent to the ethical and cultural rebirth we are discussing. One would have a hard time imagining the spread of a value system called for by and amongst the people of the world without the support of those who shape and support individuals in their spiritual lives. It is incumbent upon these spiritual leaders to remind people of the responsibilities that they share with their neighbors. It is part of today’s tremendous spiritual<sup>6</sup> fight between the forces of unity and the rejection of others.

This doesn’t require spectacular action. Simple gestures and coming together in a spirit of openness, dialogue, openness, and dialogue are enough. “... they (must) recognize, preserve and promote the good things, spiritual and moral, as well as the socio-cultural values found among these men.”

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6. From *Nostra aetate* declaration after the Catholic Church’s Second Vatican Council.

## ► Conclusion

Eradicating poverty, shrinking the inequality gap, putting finance at the service of the economy, changing overconsumption habits, forging new world governance, and rediscovering cultures. Dealing with a laundry list like that with such dark clouds looming overhead might seem like a fool's errand. Many men and women who have put great effort into doing just that and fighting unilateralism and individualism have serious doubts.

Others persevere come what may. They seek out what Dr. Agarwala, referred to as "hidden blessings" and the hope of a better future in these turbulent times.

We can agree that in this time of profound change, the generosity and intensity of young people preparing to carry the baton exhort us to choose. Rejecting the call would open the door to lethargy and decline, and eventually, to shortages, violence, and chaos. We are all faced with a kind of Pascal's Wager. Not, of course, between infinity and nothingness as the philosopher wrote in *"Pensées"*; rather between two possibilities that are confirmed every day: the risk of a world that has wandered off course and the opportunity to put our hearts into building a fairer and more just world for those who come after us. Pascal was right, indeed. *"One must wager,"* he wrote. It is up to us to bet on a universal common good. ■



# WORK AND COMMITMENT OF LEADERS

## A SPIRITUAL AND POLITICAL QUESTION

# 2

by Cécile Renouard & Xavier Becquey

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### ► Introduction – The problem

Average life expectancy for humans has never been so high, while infant mortality rates have never been so low. The percentage of violent deaths has dropped considerably<sup>1</sup>. Billions of people and entire regions have escaped misery, and education is making headway (almost) everywhere. Plus, economic resiliency and the ability to deal with natural and life disasters have progressed tremendously for much of humankind<sup>2</sup>.

The way the development that has paved the way for these successes has also created significant challenges, however. For instance:

- The environmental crisis (eg. climate change, the loss of biodiversity, and pollution) has reached unprecedented levels in the history of humanity and the survival of part of the human race is in danger<sup>3</sup>. It is directly linked to the mode of economic development that we have put in place<sup>4</sup>.
- Inequality is growing quickly in many societies<sup>5</sup>, leaving whole sections of the population and areas without resources or hope, which destroys any notion of community. Since 1980, the wealthiest percentile of the world's population has harnessed two times more growth than the poorest 50%<sup>6</sup>. There are growing disparities between a globalized elite that is comfortable on all continents and in globalized economic competition, and an increasing share of the population that is falling behind and is

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1. Azar Gat, *War in human civilization*, Oxford University Press, 2006.

2. Angus Maddison, *The World Economy: Historical Statistics*, OCDE, 2003. Thus, GDP in France increased by a factor of 20 between 1820 and 2000.

3. Pablo Servigne and Raphaël Stevens, *How Everything Can Collapse: A Manual for Our Times*, Polity Press, 2020.

4. According to the IEA, the remaining "proven" reserves of oil, gas and coal represent a potential emission of around 2 900 GtCO<sub>2</sub>, of which more than 1 000 GtCO<sub>2</sub> is from oil and gas alone. However, the 2°C imperative prohibits us from emitting more than 1,200 GtCO<sub>2</sub> by 2050.

5. Jason Hickel, *The Divide. A Brief Guide of Global Inequality and its Solutions*, Penguin Random House, 2017.

6. Facundo Alvaredo, Lucas Chancel, Thomas Piketty, Emmanuel Saez, Gabriel Zucman, *The World Inequality Report*, Harvard University Press, 2018.



left out of the world under construction and their future. These people often feel – or are perceived as – useless<sup>7</sup>, without hope or future.

- The commodification of living beings raises several ethical issues, including the risk of reducing humans to mere economic tools. This is to the detriment of social fabric, and relationships with others based on giving and gratitude<sup>8</sup>.
- The lack of meaning and feeling of not belonging feeds global terrorism that sometimes has its genesis in our own countries.

Beyond these challenges, and at the same time, some changes are underway. These changes are radically altering our way of working and relating to one another, as well as the way we create and distribute wealth. The digital revolution has paved the way for free-flowing knowledge sharing, and connected people so as to facilitate teamwork and intercultural dialogue. Artificial intelligence will allow us to take giant steps forward in understanding nature, deal with complex phenomena, and fine-tune medical diagnoses. Some studies show that at the same time, we can expect about 40% of jobs to disappear in the next 10 to 15 years<sup>9</sup> on top of the already high unemployment rates in some countries. Digitalization could mean that only a minority will be able to tap into wealth. Our smallest activities are followed, such as internet searches, credit card payments, and movement. This tracking is made possible with geo-location in our smartphones and computers, facial recognition with the millions of cameras in public spaces and “smart” technologies that are being introduced to our homes bit by bit. The huge databases that are a byproduct of this phenomenon are used by private companies that want to eke out as much profit as possible and states that now have the technical ability to oversee individuals.

With AI, there is also a risk that we spend more and more of our time interacting with robots and digital clones to the detriment of live relationships with other humans.

The digital transition is a veritable groundswell that brings with it risks and opportunities. We must make sure it serves development and helps us meet the challenges we face without forgetting its environmental impact, i.e. the ores and fossil fuels that go into its growth.

It's our job and that of past generations that built this world, begot cultural diversity, shaped our ways of life, and designed our cities and countryside's. By job we mean and paid or unpaid activity as an employee or self-employed worker that is carried out in a specific context for the production and trade of goods and services. Work done with one another is what forges our communities. It is a shared desire to build something

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7. Pierre-Noël Giraud, *The Useless Man: A Political Economy of Populism*, Odile Jacob, 2016.

8. Dorothee Browaeys, *L'urgence du vivant. Vers une nouvelle économie*, Editions François Bourin, 2018.

9. Carl Benedikt Frey and Michael A. Osborne, *The future of employment: how susceptible are jobs to computerisation?*, September 17, 2013, [https://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)

together that shapes our identity and creates a life together<sup>10</sup>. In the end, our collective endeavor fostered our material gains, but also has led to the challenges we now face.

When the meaning of our actions and the course humanity has taken are called into question, we use more resources to feed our activity than the planet can produce, community spirit disappears, and the nature of human relationships weakens, then it's time to rethink the nature and direction of our work.

We have tried to find a path and levers of change that promote economic models and ways of working that are respectful of people and ecosystems. These ideas are a result of the assessment of an uncertain future due to technical and financial capabilities and the dominant production and consumption models and related ambiguities. Our conclusions are supported by: scientific diagnoses and the work of economists and scholars who are committed to meet the challenges of climate change and inequality; 15 years of experience researching social ethics and qualitative and qualitative studies that investigated corporate responsibility towards sustainable and land development<sup>11</sup>; and 20 years of corporate operational management. We support the idea that there is leeway and a certain degree of freedom. It is incumbent on everyone, especially economic leaders (because of their capacity for action) to build a desirable future. It is our responsibility and a moral and political imperative; and in no way replaces the responsibility of political leaders and popular sovereignty. Taking responsibility means that economic leaders should actively consider the changes our society is undergoing and a desirable end together with other stakeholders. Their analysis should produce (including discussion that shine a light on different interpretations) ideas on how to achieve a desirable future. We would like to stress the importance of spiritual and philosophical resources to that end. We also believe that there is no way we will meet the major challenges we face if we do not set formal, binding, and monitored objectives at all official levels (national, local, corporate, NGO, and individual).

There is increasing awareness of the fact that we find ourselves in an environmental impasse. The Paris Climate Agreement of 2015 – which was decided at the UN Summit just after the adoption of Sustainable Development Goals (SDGs) – defined clear objectives. The scenario evoked by institutions like the IPCC<sup>12</sup> show that the necessary technical and financial capacities exist<sup>13</sup>, but there is a lack of collective impetus and

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10. Pierre-Yves Gomez, *Intelligence du travail*, DDB, 2016.

11. Cécile Renouard, *La Responsabilité éthique des multinationales*, PUF, 2007 ; Ethique et entreprise, Ed. Atelier, 2013 ; Frédéric Baule, Xavier Becquey and Cécile Renouard, *L'entreprise au défi du climat*, Ed. Atelier, 2015.

12. IPCC report, October 2018: <http://www.ipcc.ch/report/sr15/> accessed on 9 October 2018.

13. Studies show that in purely financial terms, the actions to be taken now to limit global warming are out of all proportion to the costs of the impact of climate change if we do nothing. E.g. Risky Business Initiative, Stern Report, etc.: [www.theguardian.com/environment/2016/nov/06/nicholas-stern-climate-change-review-10-years-on-interview-decisive-years-humanity](http://www.theguardian.com/environment/2016/nov/06/nicholas-stern-climate-change-review-10-years-on-interview-decisive-years-humanity); Emmanuel Bovari, Gaël Giraud, and Florent Mc Isaac, "Coping with Collapse: A Stock-Flow Consistent Monetary Macrodynamics of Global Warming", *Ecological economics*, 2018.

political will to make decisions that will create radically different (less reliant on fossil-fuels and natural resources such as water and metals) production models and lifestyle changes. There is a need to share, sell, and implement a vision. In other words, there is a need for responsibility and leadership<sup>14</sup>.

The fact that there are ways forward and leeway in the current state of the world doesn't mean that nothing has to change, or that we don't need a total transformation. That is why it is dangerous for businesses to showcase marginal modifications so that they can go about business as usual, and that it will be accepted. The win-win approach has its limits, because that would mean that climate and social issues are only considered if they lead to financial gain. Regarding "environmental and social issues are our battle and we must find an economic way to wage it" is a radically different way of thinking. A perspective that recognizes that some current practices lead to a dead-end and is willing to change is the only way we are going to reach our goals. This response involves a paradigm shift. Business as usual is dead!<sup>15</sup>

This essay is divided into four parts: The first criticizes the idea that GDP growth is ultimate economic goal and insists on a paradigm and matrix shift with regards to the economy. It refers to the encyclical *Laudato si'* for support. The second contrasts this perspective with changes in work. We analyze these changes according to their objective, subjective, and collective dimensions. The penultimate part demonstrates how leadership at the service of the new paradigm can be carried out in a context of profound changes in existence by accounting for the relationship between people and their environment. This type of leadership requires new types of managerial skills. The last section assesses the possible levers needed for ethically and politically responsible leadership.

## **I ► From SDGs to Laudato si' – A paradigm shift**

In 2015, the nations of the world agreed on 17 Sustainable Development Goals (SDGs) to eradicate widespread poverty, protect the planet, and guarantee that all people could live in peace and prosperity. These goals are a continuation of the eight Millennium Development Goals (MDGs), which were established in 2000 as a way to end misery. It set clear objectives with regards to improving access to healthcare, education, and basic goods and services for the poor. The SDGs focus more on the steps (and not just quantitative objectives) that every country needs to take to achieve a fairer and more viable world. They convey a systemic ambition. Nevertheless, no mention is made of possible tension between the different objectives or the compatibility of their simultaneous pursuit.

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14. Philippe de Woot, *Should Prometheus be Bound?: Corporate Global Responsibility*, Palgrave Macmillan, 2005.

15. Philippe Joubert, Special Advisor for Energy and Climate at the World Business Council for Sustainable Development (WBCSD) commenting on the conclusions of the Paris Agreement.

SDG 8 states: “Promote inclusive and sustainable economic growth, employment and decent work for all.”

This wording implies two troublesome shortcuts. They are:

- Linking full employment with economic growth when GDP growth has been slowing in the last few decades, especially in developed countries. Thus, creating conditions for full employment (or activity) in situations of weak or 0 GDP growth is a concern<sup>16</sup>.
- Promoting an objective of sustained economic growth without defining what that means. Is it improved quality of life for everyone, access to basic goods and services and economic resilience for those who lack it, and more jobs and activities? Certainly. Does it also entail consuming greenhouse gas emissions, using energy, and creating waste? Quite the contrary. Does it call for producing more? Obviously not.

By not addressing these points, the wording of SDG8 conflates economic growth and GDP growth as the basis for all prosperity. It especially does not question the ways we generate economic development. Social and environmental responsibility is evolving in our societies and businesses. We speak more about green products, treating waste, recycling raw materials, and limiting water, energy, and paper use; but there is little talk of overhauling business models. The aim of our economies as they are is to constantly produce more. Goods are not produced for their usefulness, but according to opportunity. These goods have to be destroyed faster and faster so that they can be repurchased, in an ever-accelerating process: extract, transform, discard<sup>17</sup>. Many economists and scholars from varying fields (eg. Keen, Turner, Basu, and Giraud<sup>18</sup>) have drawn links between GDP growth and fossil fuel consumption. In OECD countries, two-thirds of the growth in GDP per head over the past 70 years has been driven by the growth in fossil fuel consumption per head<sup>19</sup>.

We must, therefore, change our matrix and the way we understand wealth creation. Kate Raworth, an English economist popularized the idea of double doughnut economics<sup>20</sup> to explain the two-pronged challenge our economy faces. The economy’s aim is to bring all of humanity within the confines of a “doughnut”. The inner circle of the doughnut represents the minimum of human needs to be ensured for all (food, mobility, education, economic resilience, etc.) and the outer circle the environmental limits not to be exceeded (GHG emissions, soil and water pollution, depletion of natural resources,

16. Tim Jackson, *Prosperity without growth. Economics for a finite planet*, Earthscan, 2010.

17. Frédéric Baule, Xavier Becquey, Cécile Renouard, *L'entreprise au défi du climat*, Ed. Atelier, 2015.

18. Steve Keen, *L'impoture économique*, Ed Atelier 2015 ; Kaushik Basu, *Beyond the Invisible Hand. Groundwork for a New Economics*, Princeton University Press 2010 ; Adair Turner, *Between Debt and the Devil : Money, Credit, and Fixing Global Finance*, Princeton University Press, 2015; Gaël Giraud, *Illusion financière*, Ed. Atelier, 2013.

19. Gaël Giraud et Z. Kahraman., (2014), “How Dependent is Growth from Primary Energy? The Dependency Ratio of Energy in 33 Countries(1970-2011)”, Working papers of the Centre d’Economie de la Sorbonne 2014.97.

20. Kate Raworth, *Doughnut economics*, Penguin Books, 2017.

decrease in biodiversity, waste absorption capacity, etc.)<sup>21</sup>. The idea is to promote economic activity that is compatible with a safe living space<sup>22</sup>. Other scholars, such as Wackernagel et al.<sup>23</sup> support similar ideas and underscore the unsustainable man-made pressure our economies are placing on the Earth's ecosystem. They use a human development index as a point of comparison (set on the basis of SDG quantification criteria) with each country's environmental footprint. "The average load (per country) of the planet in 2012 equals a global footprint that is twice its biological capacity. Said biological capacity is shrinking considerably. We have overshoot the limits of what our ecosystems can reproduce for several decades, which accelerate their deterioration and render them even less capable of "supporting" human activity. According to the authors, truly "sustainable" human development should combine a HDI above 0.8 and a footprint less than the planet's load capacity. No country currently meets both criteria. All of the countries that boast a high HDI today have an unacceptably high environmental footprint"<sup>24</sup>. Our current modes of development are incompatible with the planet's capacity.

*Laudato si'* encyclical calls upon economic stakeholders, decision-makers, and citizens to look at their effect in the world differently than traditional reasoning that justify collateral damage as inherent to any transformative activity(123). Pope Francis underscores the feeble reactions that many people and groups have to the alarming situation we are facing. Despite some positive examples (58), he is worried about "complacency and a cheerful recklessness" (59). He calls people to reconsider "our unique place as human beings in this world and our relationship to our surroundings" (15) by developing an approach he calls "integral ecology". "The analysis of environmental problems cannot be separated from the analysis of human, family, work-related and urban contexts, nor from how individuals relate to themselves"(141). People should rethink the meaning of what they want from work. The current situation requires economic development that is at the service of a quality life for current and future generations. Concomitantly, attention should be paid to the cry of the Earth and the cry of the poor. Development should be understood in terms of "quality of life" in a relational approach that gets us away from the dead-end disaster-based or binding approach. We need to consider the roots of the environmental crisis and the challenge it is (for people who participate in

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21. Gaël Giraud and Cécile Renouard, *20 Propositions pour réformer le capitalisme*, Proposition 20, Champs Flammarion, 2012.

22. Johan Rockström, Will Steffen et al., "A safe operating space for humanity", *Nature*, volume 461, pages 472–475 (24 September 2009).

23. M. Wackernagel, Hanscom L., Lin D., *Are the Sustainable Development Goals (SDGs) consistent with sustainability?*, Working papers of the Global Footprint Network, 2016.

24. Gaël Giraud, « *L'accès de tous à l'énergie est-il un objectif durable compatible avec l'accord de Paris sur le climat?* » in Patrick Caron and Jean-Marc Chataigner (dir.), *Un défi pour la planète: Les Objectifs de développement durable en débat*, Quae, 2017.

the aforementioned unsustainable lifestyles) to picture new, more favourable lifestyles before we decide on what measurement and evaluation tools are needed.

In this context of rethinking the quality of life, Pope Francis brings up the importance of work for a person. Parts 124-129 of the encyclical specifically focus on this issue. After providing a critical analysis of the effects of automation on job loss for many, the Pope stresses the importance of quality work as essential to the human condition; and connected to a non-possessive attitude towards the earth and fellow humans. “Nonetheless, once our human capacity for contemplation and reverence is impaired, it becomes easy for the meaning of work to be misunderstood.”(127). He has spoken of the conditions needed to promote “free, creative, participative, and mutually supportive work” (especially during his visit to several Latin American countries in 2015<sup>25</sup>). It means being equally concerned with subjective working conditions and the meaning work provides people as its community aspect. The usefulness and richness of work for individuals should be connected to its use and productivity for the human and natural ecosystems around it. Questioning the objective content of work hinges on the ultimate goal of maintaining quality of life on our planet today and in the future<sup>26</sup>.

## II ► Work in work

If we build the world of tomorrow through work, we must examine how work help humanity give rise to a more favourable future. We will discuss the three main dimensions of work: 1) The objective dimension, which takes the nature of what it produces and its impact on the world outside of the worker's sphere; 2) the subjective aspect, which studies how work is experienced and contributes to “more life” for the worker; and 3) the collective angle, which analyses how work fosters community.

### 1. The objective dimension of work

Over the course of the last decades, our societies have converged to make maximized profits the only recognized objective of companies. Sometimes, a more managerial and less financialized version of companies also exists sometimes, in which maximizing profit is replaced by long-lasting activity. People who are employed in companies will generally measure they objective quality of their work to the quality of the finished product or service. Often, though, they do not structurally consider the effects on people and nature.

From that point of view, the goals that businesses traditionally set do not contribute to solving the major issues we face; because they simply don't aim for those targets.

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25. Cf. Apostolic Journeys of Pope Francis to Ecuador, Bolivia and Paraguay, 5-13 July 2015, *La documentation catholique* n°2520, p.71-103.

26. Cécile Renouard, « *Le travail au service du lien social et écologique* », *Constructif*, June 2016, [http://www.constructif.fr/bibliotheque/2016-6/le-travail-au-service-du-lien-social-et-ecologique.html?item\\_id=3528](http://www.constructif.fr/bibliotheque/2016-6/le-travail-au-service-du-lien-social-et-ecologique.html?item_id=3528)

What purpose does the economy serve if it doesn't deal with those issues? And what are businesses for if they don't deal with economic issues?

Therefore, it is necessary to give business new meaning in the face of the challenges humanity must meet, in a logical, structured story that puts business to the service of this goal (and not the reverse). What purpose does our collective work serve? How does it contribute to building a desirable world? Where does it fit in an industrial ecosystem, countries, and society? Since work in businesses is divided up, workers can quickly lose sight of the whole to which they are contributing. Recent attempts to favour “freer” management styles<sup>27</sup> – which can be interpreted in different ways – show the effort to create impetus and establish conditions for organization and sharing that allow everyone to contribute to the company and take away their fair share. It is also crucial specify where, how, and with whom that meaning is created. How will employees participate in this project, and what stakeholders should be included more or less informally or deeply (e.g. clients, suppliers, contractors, communities, and NGOs).

This imperative of meaning can only come from a collective and personal demand. A change of culture. Laws and rules can help because they set the boundaries for what is considered “normal”, but laws and rules will never establish meaning. Civil society (consumers, the media, NGOs, and public opinion) also play a key role in setting their standards. Generally speaking, it is up to each economic stakeholder to recognize their responsibilities.

That is why businesses must communicate and formalize. They must share and be questioned about their project and the contradictions that invariably arise between stated ambitions and reality. Doing so allows companies to always go further towards their ambitions than they advertise. For example, Danone showcases its company mission “One Planet. One Health.” Its President, Emmanuel Faber, is known for making speeches that go against the grain of standard economic speeches by encouraging social justice<sup>28</sup>. As a result, some scientists and NGOs criticize their “healthy” products like Activia and Actimel<sup>29</sup>, so the company is better able to enter into a virtuous logic of constant improvement.

The debates that centered on the so-called “Pacte” Law (Action Plan for Business Growth and Transformation” in France in 2018 are a good example of the fact that the notion of the commercial business at the exclusive service of stakeholder interests<sup>30</sup> is being increasingly questioned. That said, the French government and Council of State

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27. Isaac Getz, *L'entreprise libérée*, Liberté & Cie, 2016.

28. See for example Emmanuel Faber's speech at the HEC Paris graduation ceremony in June 2016.

29. *Danone, le boniment des alicaments*, Libération, 16 April 2010, *Danone suspend les allégations santé de ses produits Activia et Actimel*, Les Echos, 15 April 2010.

30. Cf. Jean-Philippe Robé, *Qu'est-ce que l'entreprise*, Que sais-je, PUF. Daniel Hurstel, Proposition 2 in G. Giraud and C. Renouard (dir.), *20 Propositions...*, op.cit., Work by the Bernardins on the company's property.

have been debating and interpreting the social interest of businesses with the aim of studying the possible impact of said law. This demonstrates that business interests still take precedence over social and environmental stakes. The fact that the status of business with a mission<sup>31</sup> is reserved for certain companies that want to further tackle social and environmental challenges; and that they are the only ones being held accountable to results shows just how far aforementioned paradigm shift is from consensus. Sustainability and social equity for all stakeholders, countries, and the ecosphere have not yet been included when determining the objective value of work. The objective value of work is therefore not yet subject to criteria of sustainability and social equity towards all stakeholders, territories and the ecosphere.

## 2. The subjective dimension of work

Many factors contribute to the subjectiveness of work. Bénédicte Zimmerman brings up different purposes that human beings can give to work, such as: creating economic value, creative activity, and confirmation of one's social position<sup>32</sup>.

Much of the subjectiveness is connected to the feeling of usefulness. This is why salaried workers can suffer greatly when they are prevented from providing a quality product or service because of deadlines, financial objectives, or other reasons. As a reaction to this, many people – including young workers – are protesting so-called “bullshit jobs”<sup>33</sup>. These types of jobs are very well-paid and require long hours, but provide no service to society. They don't allow workers to express themselves, develop their talents, or grow from the fruits of their work.

Work can also alienate when people merely work to survive, are slaves to its rhythm, or when they work beyond their capacities and question why they keep doing it<sup>34</sup>. In the last few years, there have been several anti-modern slavery laws and human rights violations throughout the outsourcing chain. These laws seek to hold businesses accountable beyond their direct scope. We will therefore try to make the company accountable beyond its direct control perimeter. In the UK, the Modern Slavery Act<sup>35</sup> of 2015 and the French Corporate Duty of Vigilance Law<sup>36</sup> of 2017 aim to counter all forms of slavery, forced work, human trafficking, and to hold contracting companies more accountable for the effects of their activity, respectively. This is in line with the

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31. Cf. Report by Jean-Dominique Sénard and Nicole Notat, *L'entreprise, objet d'intérêt collectif*, March 2018.

32. Bénédicte Zimmerman, *Ce que travailler veut dire. Une sociologie des capacités et des parcours professionnels*, Economica, Paris, 2014.

33. David Graeber, *Bullshit Jobs: A Theory*, Simon & Schuster, 2018.

34. Simone Weil, *Expérience de la vie d'usine*, Œuvres, Quarto Gallimard, 1999, p.195-210.

35. *Modern slavery act*, <http://www.legislation.gov.uk/ukpga/2015/30/contents/enacted>, accessed on 10 October 2018.

36. LAW No. 2017-399 of 27 March 2017 on the duty of care of parent companies and ordering companies, <https://www.legifrance.gouv.fr/eli/loi/2017/3/27/2017-399/jo/texte>, accessed on 10 October 2018.



EU's new definition of Corporate Social Responsibility (CSR) as a way for companies to control their impact.<sup>37</sup> Nevertheless, the regulatory framework is still quite modest when compared with the scope of the issue worldwide. The French law, for instance, is a best endeavours obligation and does not come with penalties.

Thinking about the subjective value of work also needs to account for those who are alienated from any kind of productive activity, or contributing to society in any way. It is a huge waste for society and those individuals. Useless people are the 21<sup>st</sup> century proletariat<sup>38</sup>. These people have two faces. On one side, a person feels useless to themselves, incapable of advancing or improving their lot, no matter what they do. On the other side, a person feels useless to others and is only seen by others as a burden. Others may feel that if that person weren't there, it would be no great loss, either of income, or for society.

A useless person is one who – beyond financial matters – is prevented from contributing to society. This feeling of uselessness and this relegation to the margins, to the peripheries, of a part of the world's population, sharpens the problem of mass and long-term unemployment; it is underlies the distribution of sedentary or nomadic jobs and is endemic to countries that are stagnant, emerging, or falling behind. Adopting a minimum living wage is not a panacea for this problem because it does not solve the issue of self-esteem that comes with a recognized job (paid or not).

Furthermore, the effects of digitalization that we have already mentioned only worsen the gap between the haves and have not; those who perform, and those who don't. Every country must confront the issue of integration and social cohesion. Can our societies develop if they are based on uprooting globalized elite? As Harari<sup>39</sup>, explains, the risk is creating economic models that are connected to a conception of all living beings (including humans) as algorithms that favour developing a few and leaving a multitude of now useless people behind.

The subjective value of work is also linked to the obligations and compensation that we collectively feel as acceptable to live a decent life; especially in the context of salaried employment. These points can be the basis for establishing minimum quality of life thresholds<sup>40</sup>, but they also contribute to an individual's subjective perceptions of and comparisons to others. One of the challenges in favour of decent and meaningful work for every worker is precisely to go beyond adaptive preferences – i.e. the situation of poor people who may internalize their disadvantaged condition – to broaden the

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37. [https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-social-responsibility-csr\\_fr](https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-social-responsibility-csr_fr), accessed on 10 October 2018.

38. Pierre-Noël Giraud, *The Useless Man: A Political Economy of Populism*, op.cit., p. 16, 18.

39. Yuval Noah Harari, *Homo deus*, Penguin Random House, 2016.

40. Martha Nussbaum, *Women and Human Development: The Capabilities Approach*, Cambridge University Press, 2001.

power to act of these people<sup>41</sup>. Within the formal context of a capability approach, the idea is to define the main abilities that each person contributes to work. This, in turn influences their subjective quality. The capability approach makes it possible for people to freely choose how to develop their skills effectively and not stopped from doing so. Cécile Ezvan took Martha Nussbaum's key skills that are being essential to human development and adapted them for work. They are: 1) bodily health 2) bodily integrity 3) senses, imagination, and thought 4) emotions 5) practical reason 6) affiliation and the social bases of self-respect 7) quality relationship with the environment 8) free time 9) movement as regards (the place of) work 10) protection of human rights at work<sup>42</sup>.

Being able to allow those capacities to fully flourish at work proves how its value is not felt individually or independently, rather within an interdependent experience. Such an approach also makes it possible to distinguish this creative and related, nourishing activity from the condition of the person whose subsistence depends on what others are willing to give him.

Consequently, work's subjective value is also the feeling of belonging to a community. Making a contribution to the world and the community is what provides people with dignity, and goes way beyond the mere question of remuneration.

### 3. The collective dimension of work

Until the interwar period in Europe, it was common practice for companies to call upon day workers who were paid by the piece. This fell out of favour, mainly because business leaders realised that a businesses' value and development were linked to its capacity to innovate and create things that didn't yet exist<sup>43</sup>. This required long-term employees.

In the last 30 years, a more free-market and individual vision of work has flourished along with the financialization of economic life and the shrinking of companies to a singular goal of maximising profit<sup>44</sup>. If we work on the assumption that workers no longer contribute to collective progress and only want to maximise their personal interests, we established a collection of individual awards and bonuses to make sure that every salaried worker gives their maximum input. At the same time, the pay gap within companies has exploded<sup>45</sup>. In a world where the complexity and scattering of tasks is on the rise, there is a growing risk that individual contributions are not recognised. Mercenary attitudes prevail instead, to the detriment of team-oriented, long-term behaviour. An excessive pay gap in companies (and more generally in society)

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41. Amartya Sen, *Development as freedom*, Oxford University Press, 1999.

42. Cécile Ezvan, *Valeurs du travail et capacités relationnelles. Réflexion éthique et managériale à partir de la pensée de Martha Nussbaum*, PhD thesis in philosophy, Université Jean Moulin Lyon III, October 2018, p.157.

43. Blanche Segrestain and Armand Hatchuel, *Refonder l'entreprise*, Seuil, 2012.

44. Gaël Giraud and Cécile Renouard (dir.), *20 Propositions pour réformer le capitalisme*, Champs-Flammarion, 2012.

45. Gaël Giraud and Cécile Renouard, *Le Facteur 12. Pourquoi il faut plafonner les revenus*, Editions Carnets Nord, 2012, 2017.

also reinforces a breakdown in communication and destroys the feeling of belonging to a same community between groups that live in worlds that are just too different<sup>46</sup>.

The individualisation of the approach is accentuated by the boom in digital tools give people the ability to provide goods and services without passing through an intermediary. What generates wealth is no longer the importance of capital. Instead, each person earns income from their own assets. To wit: AirBnB, Blablacar, Uber, and Craigslist. It should be noted that this makes better use of existing capital, therefore fewer production, energy consumption, and material needs. Since most of the time capital is not acquired for production needs, it is usually already amortized and its use is more or less applied to marginal costs. This is also possible because there are no employee contributions, or the worker is simply not paid (eg. in the case of a homeowner who gets their property ready to host on AirBnB). Subsequently, no firm can compete with that type of offer. This also lowers service costs for the user.

This change poses a whole series of questions, like:

- Employment in our societies is a passport for life. With it, we can justify income that allow us to have for a roof over our head (either with pay stubs presented to landlords or proof of employment needed to secure a home loan at the bank); get health care coverage (social security and mutual insurance); or buy unemployment insurance, or pension and LTC coverage. If salaried employment becomes marginal, or just one of many ways of working<sup>47</sup>, we will have to change the foundations upon which “everyday accident coverage” and solidarity are based.
- What kind of regulation should be put in place to prevent each individual from becoming a prisoner of the companies producing the algorithms, which can capture the value of all the data they have at their disposal, to the point of putting all those who need these platforms to access work under total domination? Harari points out how one can imagine the small management of Uber managing millions of driverless taxis... *“As algorithms push humans out of the job market, wealth and power might become concentrated in the hands of the tiny elite that owns the all-powerful algorithms creating unprecedented social and political inequality.”*<sup>48</sup>
- This development also has another dimension: the reduction of social relations to interaction between individuals acting according to their desires and interests. We

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46. Analyses by Kate Pickett and Richard Wilkinson, British epidemiologists, show the negative effects of high income inequality on social cohesion and on the well-being of the whole population (not just the poorest). Kate Pickett and Richard Wilkinson, *The Spirit Level. Why greater equality makes societies stronger*, Bloomsbury Publishing, 2011.

47. François-Xavier Oliveau, *Microcapitalisme*, PUF, 2018, p56, p87.

48. Harari, Homo deus, op.cit. 2017, p. 376: *“As algorithms push humans out of the job market, wealth and power might become concentrated in the hands of the tiny elite that owns the all-powerful algorithms creating unprecedented social and political inequality.”*

are moving further away from any idea of working together to build the city together. It is therefore necessary to think about and implement what can make society in this case. Therefore, even beyond the number of people working in this way, this approach is indicative of the change in the way the younger generations look at the world of work and their type of collaboration with the company.

The latter is therefore called upon to question itself: in what way do these new models threaten it, how can it incorporate them, what form of link does it intend to maintain or develop with those who collaborate in its activity? Clearly, the pyramidal hierarchical model has reached its limit in a networked world and will be replaced by much more horizontal forms of work<sup>49</sup>, modes of attachment to the company which simultaneously take very different forms. The idea of a job for life in a company, or even just the idea of a commitment for a fairly long term, is disappearing in favour of something much more cyclical. It is also the end of the linearity of training, employment, and retirement. As in any major transformation, all this is rich in both risks and opportunities.

Consequently, the company is led to reflect on the forms of attachment, of the collective that it promotes, and therefore on its mode of management. An important advance at the social level would be to bridge the gap that is widening between an increasingly rare royal status (such as the permanent contract in France today) and increasingly numerous precarious statuses for the less fortunate (such as fixed-term contracts or temporary work in France today). Companies and legislators have to define new modes of collaboration and interdependence that are crucial for the future of our living together. In this context, the great challenge is to offer meaning to collective actions, by putting in place modes of collaboration capable of recognising the work carried out by each person (in all senses of the word recognise<sup>50</sup>) and legal and managerial modes of regulation that ensure decent working conditions for each worker as well as allowing a dignified life (financially, but also in terms of working hours and time off work, less pressure, the right to disconnect, etc.)<sup>51</sup>.

#### **4. Reconciling the objective, subjective and collective dimensions of work**

From the perspective just mentioned, the changes in the dimensions of work could be summarised as follows: the subjective quality of work has been the subject of greater attention for certain categories of the population – the most highly qualified – and the challenge is to create the cultural and institutional conditions that will enable each worker to develop his skills and creativity and to develop a positive perception of the

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49. Luc Boltanski & Eve Chiapello, *The New Spirit of Capitalism*, Verso, 2007.

50. Paul Ricoeur, *The Course of Recognition*, Harvard University Press, 2005; Cécile Renouard, « *Parcours de la reconnaissance dans l'entreprise* », in Olivier Abel and Alain Thomasset (dir.), *L'amplitude de la reconnaissance*, Revue d'éthique et de théologie morale, 281, Special-issue n°11, Cerf, 2014, p.131-147.

51. Alain Supiot and Mireille Delmas-Marty (dir.), *Prendre la responsabilité au sérieux*, PUF, 2015.

usefulness of his work. The objective quality of work has undoubtedly been focused on the quality of the good produced or service rendered without taking into account the overall effects on people and nature. The objective quality of work must therefore be subordinated to the increase in the quality of life that it fosters, including for those who are far away in space and time. This perspective presupposes that the collective dimension of work is brought to the forefront, both from the point of view of the quality of relations between workers and the quality of the relations of each economic entity with the human and natural environments. It could be hypothesised that the subjective dimension was largely subordinated to the objective dimension of work. The challenge of sustainable work in solidarity consists in conditioning the objective dimension to the subjective and collective quality, more precisely, to the relational quality that it promotes: the quality of relationships would then be constitutive of the triple value of work, with respect to ecosystems, with respect to oneself and with respect to others. My work is worthwhile insofar as it is useful and makes me useful, that it does not alienate me, that it respects the dignity of others and the planet.

### III ► The necessary transformation of leadership

The relational perspective of the value of work, which has just been proposed, has consequences for the understanding of the responsibility of leaders. Among the approaches sensitive to a relational understanding of the universe and attentive to the transformations of the modes of leadership, we present here a synthesis provided by two Norwegian authors, Storsletten and Jakobsen, from a perspective inspired by the three modes of existence in Kierkegaard (aesthetic, ethical and religious). This distinction leads them to formulate a typology of positions in terms of leadership (instrumental, responsible and spiritual), consistent with different epistemological, ontological, and other conceptions.<sup>52</sup>

**Mode of existence in leadership theory**

	<b>INSTRUMENTAL</b>	<b>RESPONSIBLE</b>	<b>SPIRITUAL</b>
<b>Ontology</b>	Mechanistic	Cultural	Organic
<b>Epistemology</b>	Instinct	Intellect	Intuition
<b>Ethics</b>	Consequentialist	Deontological	Virtues
<b>Image of the human person</b>	Economic man	Social man	Cosmic man
<b>Organisational purposes</b>	Shareholders	Stakeholders	Gaia

52. Vivi M. L. Storsletten and Ove D. Jakobsen, "Development of Leadership Theory in the Perspective of Kierkegaard's Philosophy", *Journal of Business Ethics* (2015) 128:337–349, p.347.

The instrumental perspective, for the authors, corresponds to the attitude described by Kierkegaard as aesthetic, linked to a conjunctural appreciation of what should be done, centred – for the leader – on the short-term success of his company, with little inclination to lasting commitments. The leader's responsible mode takes into account the duties and obligations he or she faces in his social environment and according to the shared norms in the societies where the company operates. The spiritual mode is based on a much more systemic approach to human activity in nature, which includes a systematic consideration of the long-term social and environmental dimensions in the implementation of a business strategy. This table deserves to be discussed in greater detail, but it has the advantage of highlighting different predominant attitudes towards the exercise of responsibility in business, by linking it to a privileged way of relating to the world, of knowing it, of valuing a dimension of the person. We support the perspective proposed here by inviting further debate on certain categories. It is not at all certain, for example, that the epistemology proposed here concerning an instrumental mode of existence, of the company director, is to be understood essentially in the mode of instinct, and of concern for the very short term only, as opposed to a way of proceeding with the responsible mode of existence which would be based on the intellect: Moreover, we should probably speak of practical reason instead of intellect, to better emphasise the concern to integrate into the reasoning criteria of ethical discernment, relating to the norms and values shared in society, or even to universal values.

Moreover, other graphic representations proposed by the authors indicate in a suggestive way that the spiritual perspective includes in itself the responsible attitude, which includes in itself the instrumental attitude. It is as if the spiritual dimension, understood as involving a mode of relationship with all that is, were the most encompassing, the most complete, the most integrative. The perspective that is still dominant today in the Western conception of an objectifying rationality, based on the separation of subject and object, on the mastery and possible transformation of matter situated at a distance and above all understood as a calculable expanse, is only a limited way of being with regard to an approach that recognises the human being as immersed in a reality that mobilises all his potentialities and is sensitive to the rooting in an environment that interacts and cannot be approached only by an abstract rationality. One may ask whether it is not also necessary to indicate how these perspectives, taken to extremes, become incompatible and mutually exclusive.

Such an approach, in any case, has the merit of presenting the necessary transformations in terms of leadership not only as managerial and organisational processes and tools to be changed, but also in terms of transformations of ways of thinking, existing and acting. These are cultural transformations, both ethical and spiritual.

An example of a proposal for the profound cultural change needed is provided by Throop and Mayberry (2017)<sup>53</sup> based on the Aristotelian notion of virtue, applied to the art of management. This perspective is an interesting extension of the scheme presented above, which links the ethical attitude of the spiritual way of life to the ethics of virtues. The authors emphasise cognitive skills and attitudes rooted in a deep understanding of a given practice. They detail the transitions from one type of managerial virtues to another, highlighting five main virtues.

From a now dominant managerial virtue...	...to a new managerial virtue adapted to leadership for transition
Abundance	Frugality
Control	Adaptation
Belief	Humility
Competition	Collaboration
Individualism	Systemic perspective

Figure 2<sup>54</sup>

The perspective that we have developed above, concerning the necessary paradigm shift, with particular reference to *Laudato si'*, seems very much in line with this analysis. We propose to add two elements particularly highlighted by the Pope, linked to the question of the aims of integral ecology, and which he applies in particular to the economy: justice (or equity) in the use and sharing of resources (both financial and material) with regard to those affected by the activity and its consequences, and the concern for management not primarily linked to private or public property but to management/administration in common with a view to the common good and the preservation of global common goods (such as the quality of the social and ecological bond).

We therefore complete Throop and Mayberry's table by adding these two dimensions.

From a now dominant managerial virtue...	...to a new managerial virtue adapted to leadership for transition
Abundance	Frugality
Control	Adaptation
Belief	Humility

53. William Throop and Matt Mayberry, “Leadership for the Sustainability Transition”, *Business and Society Review* 122:2 221–250.

54. Throop and Mayberry, 2017, p.229.

Competition	Collaboration
Individualism	Systemic perspective
Performance and maximisation of wealth created	Sustainable and equitable creation and sharing
Private (or public) ownership	Joint management/administration (multi-stakeholder)

The authors use the example of an electricity company in Vermont to support the relevance of their analysis. The managers of this major company – the largest in the state – faced with near-bankruptcy, took advantage of the vulnerability of their model to transform it by developing renewable energies and a concern for a sober economy, closer to local communities and more resilient. The culture of the company has been transformed, in particular thanks to the participation of all, and to a modest, collaborative and innovative posture on the part of the management team. However, this transformation in leadership appears to be facing multiple challenges. The next section of this paper is devoted to clarifying the tensions in the implementation of these virtues by business leaders, in a context of constrained resources and digital deployment.

#### IV ► Implementing new managerial virtues

The aim is to see how the exercise of these managerial virtues can promote a transformation of work practices in the service of the ecological paradigm. Should we attempt to define rules or propose attitudes, the exercise of ‘virtues’? The difficulty of implementing the transition and the gap between the stated intentions and the reality of countries’ trajectories in terms of carbon emissions, for example, leads us to speak of a reality schism<sup>55</sup>. Certainly, it is necessary to transform certain rules of the game, social and environmental standards, and the metrics by which we operate. But to achieve this, in the face of bypassing and free rider behaviour, nurturing management attitudes consistent with the systemic perspective, with the ‘spiritual’ way of life, can contribute to a profound change in practices. We try to show how the exercise of these repeated attitudes, these virtues, goes hand in hand with a discernment that is both ethical and political, concerning individual and collective decisions within companies in particular and institutions in general.

We take up the seven attitudes/virtues described above in turn, in a different order, highlighting the issues at stake for decision-makers and choosing a case that reveals the transformative potential of each of these virtues for the future of work.

55. Amy Dahan and Stefan Aykut, *Gouverner le climat ? 20 ans de négociations internationales*, Presses de Sciences Po, 2015.



## 1. Individualism/Systemic perspective

The ecological transition will not be achieved by the mere addition of dispersed individual efforts, and by the sole consideration of the development of an organisation without taking into account its interrelationships. This raises questions about collective, shared responsibility for the systemic effects of an activity. The example of global value chains, in different sectors, is emblematic of the need to think not only in terms of imputation of individual wrongs but also in terms of a shared mission<sup>56</sup>. Iris Young has contributed to extending Hannah Arendt's analyses of the distinction between moral and political responsibility: she proposes to distinguish between individual moral (and criminal) responsibility, linked to faults committed in the past, and collective political responsibility, linked to the concern to prevent future disasters and to strengthen the protection and compensation of victims. It underlines the interweaving of the responsibilities of the agents, which makes it very difficult to determine the culprits, those to whom faults can be attributed. It also shows that the desire to find culprits tends to provoke inertia and to avoid collective, multi-actor mobilisation to prevent the repetition of past tragedies and to change the structures of injustice<sup>57</sup>.

This perspective avoids dealing with any issue solely in terms of legal or moral imputation and considers the collective dimension of responsibilities to be assumed by looking to the future and envisaging appropriate social or political action. It raises several difficulties, which deserve to be named. It is undoubtedly necessary to consider, more than Young does, certain dimensions of our human experience, of the context in which we evolve, which are not brought to light and discussed by the philosopher. In this respect, Schiff mentions the notion of thoughtlessness in Arendt, bad faith in Sartre and misrecognition in Bourdieu, which could complement Young's approach<sup>58</sup>. How can we encourage the leader to open up beyond the posture in which he may be trapped, leading him to look at situations at work in a different way than with his usual 'glasses'?

Furthermore, it is problematic to separate, as Young does, the retrospective and prospective dimensions. Responsibility for the future cannot be exempted from an analysis of responsibilities for past actions and institutions. It is necessary to be able to define the modalities of collective action in a more precise way than Young suggests<sup>59</sup>.

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56. François Vallaeys, *Pour une vraie responsabilité sociale*, PUF, 2013 ; Cécile Renouard, *Ethique et entreprise*, Ed. Atelier, 2015.

57. Iris Marion Young, *Responsibility for justice*, Oxford University Press, 2011.

58. Jacob Schiff, "Confronting Political Responsibility: The Problem of Acknowledgment", *Hypatia*, vol. 23, no. 3, July-September 2008, p.99-117.

59. Christian Neuhäuser, "Structural Injustice and the Distribution of Forward-Looking Responsibility", *Midwest Studies In Philosophy*, XXXVIII, 2014, p232-251.

In this sense, we propose to link moral and political responsibilities, by attempting to individualise collective responsibilities<sup>60</sup>, which means underlining that moral and political responsibility must be specified according to the place that each person occupies in the chains of social connection. The distinctions made by Mathias Nebel<sup>61</sup> between different forms of responsibility can be mobilised: by omission, collusion, or collaboration, by instigation. For our purposes, concerning company directors, we need to question their responsibilities as instigators of a new virtuous model, or on the contrary as collaborators regarding what contributes to the perpetuation of structural injustices, what harms the quality of the social and ecological link. In the concrete example of the textile-clothing sector, the responsibility of the managers of the ordering companies clearly appears to relate not only to the situations experienced by their direct subcontractors, but also to the situations experienced in the factories of indirect subcontractors, regarding which shared actions must be taken to improve working, safety and living conditions. The case of Bangladesh, and the tripartite agreements signed after the Rana Plaza tragedy (2013), illustrates both the interest of such agreements to better protect the most vulnerable workers, the slowness of the processes<sup>62</sup>, and the need for leaders who are more determined than in the past to carry out measures in favour of the dignity of workers along the value chain.

## 2. Abundance/Frugality

Frugality, with a view to reducing our carbon footprints and respecting planetary limits, has been defined, together with the development of renewable energies and energy efficiency, as one of the pillars of the transition – for example in the scenarios discussed in France in 2013 during the national debate on the energy transition. But frugality is probably the most alien concept possible to our mode of development. On the contrary, all our efforts since the beginning of the industrial revolution and our market civilisation have been directed towards developing a civilisation of abundance, to make rarity disappear. All our projections have been made within the framework of a world of un(der)finite capacities. All our companies only dream of increasing their production, not – generally – because it is a question of being able to supply enough quantities for unmet needs, but for a question of purely internal dynamics. We are not in a world where goods and services are demand-driven, but where goods and services are production-driven; and it is a question of finding outlets. In many cases, this requires creating needs that did not exist, investing in advertising to convince people to buy, etc. This means that, quite logically, almost no economic or political leader talks about sobriety.

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60. Pierpaolo Donati, “The Morality of Action, Reflexivity, and the Relational Subject”, In Finn D. K. (ed.), *Distant markets, distant harms. Economic complicity and Christian Ethics*, Oxford University Press, 2014.

61. Mathias Nebel, *La catégorie morale de péché structurel*, Cerf, 2006.

62. Bommier and Renouard, op.cit. 2018.

Apple, for example, communicates its commitment to the climate by reducing emissions, innovating in recycling and producing safer materials<sup>63</sup>. And yet, Apple is well known for having an “ambitious” policy of renewing its models to encourage regular purchases (and the scrapping of outdated models after a few months of life), as well as a design making the device very difficult to repair. Even more, Apple is accused of programming the obsolescence of its iPhones at the time of the release of new models via an update of the operating systems organising the slowing down of the previous models (“to save aging batteries” defended Apple... for devices where it is effectively impossible by design to change the battery). A few months earlier, it was printer and ink cartridge manufacturer Epson that was targeted by a complaint accusing it of knowingly shortening the life of its printers and cartridges. And they are far from being the only ones: when it is more expensive to repair a small household appliance than to buy a new one, etc. The circular economy, the collaborative economy, the economy of functionality, frugal innovation, are drawing up new economic models<sup>64</sup>, whose developments must be analysed in the light of our planetary limits. Various studies, including the recent book by Guillaume Pitron<sup>65</sup>, describing the current conditions of production of rare metals, a large part of which is currently extracted in China and in a small number of countries, underline the geopolitical as well as the ecological stakes of digital and so-called “green” technologies: unsustainability of the models of exchange and storage of data via the Internet, etc. Business leaders cannot exempt themselves from the search for more sober models.

In the classical economy, each element has only one use. The Serge Ferrari Group, a world leader in flexible composite materials and a consumer of antimony for its fabric production, became aware in the 1990s of the combined challenges of the finite nature of the mineral and the risks of complicity with human rights abuses by its Chinese supplier. The group’s management commissioned a supply chain study and decided to take steps to increase the proportion of recycled antimony in their manufacturing processes<sup>66</sup>. More broadly, the group realised that 70% to 80% of its impact on the ecosystem came from the supply of raw materials, and that the positive impact of recycling was far greater than that of using bio-based materials. Serge Ferrari then launched a joint venture with Solvay to develop a circular economy on an industrial scale in a recycling plant in Ferrara (Italy). They recycle two million composite fabrics and are

63. Apple’s presentation website – <https://www.apple.com/environment> October 2018.

64. Frédéric Baule, Xavier Becquey, Cécile Renouard, *L’entreprise au défi du climat*, Editions de l’atelier, 2015.

65. Guillaume Pitron, *The Rare Metals War: the dark side of clean energy and digital technologies*, Scribe, 2018 : “The French Agency for the Environment (Ademe) has calculated that every 60 minutes 10,000 million emails are sent worldwide, which requires the equivalent to the electrical production of 15 nuclear power plants for one hour.” p. 67.

66. Source: interview with Romain Ferrari, group manager, in 2016. The 2016 social and environmental report mentions a target of over 50% recycled antimony trioxide.

looking to increase their collection volume. The resolute and constant choice for the value of frugality/sobriety is an anchor point for this group, which is transforming its corporate strategy, its economic model and the orientation of its employees' work in a way that is consistent with energy and mineral finiteness, while being attentive to having positive social impacts both within the company and along the manufacturing chain.

### **3. Performance and maximisation of wealth created for the few/ Sustainable and equitable creation and sharing**

The issue of frugality, which affects economic choices, leads to the promotion of a managerial virtue of value creation and sharing. While liberal and utilitarian thinking insists on the need to create wealth in order to distribute it, by maximising the return on investment, systemic thinking, which is attentive to limits, invites an *ex ante* questioning<sup>67</sup>: refusing the development or perpetuation of an activity which is harmful in the long term. For the manager, the concern for the conditions of a fair and sustainable sharing is at odds with the developments of financialised capitalism. It should be noted that some, such as Emmanuel Faber in 2012, have already warned of the excesses of inequitable sharing within the company (the deputy CEO of Danone, at the time, had calculated that withdrawing 30% of the remuneration of the best paid percentile of the group would make it possible to double the salaries of the 20% least well paid)<sup>68</sup>.

This type of calculation must also be carried out regarding the assessment of the social usefulness of the economic activity over time. In this perspective, the leader can assume a shared responsibility towards the global commons by deciding to advocate for different transformations of the rules of the game, from the regulation of remuneration to certain disinvestment choices (from coal, shale gas, etc.) or barriers to the export of certain goods (to stop the export of bottled water, for example, to countries with their own resources)...

This concern for the sustainable and equitable sharing of the value created by human labour also implies attention to tax practices and the various measurement instruments, such as accounting standards: tax evasion and aggressive tax optimisation practices – harmful to the countries in which the economic activity is carried out – linked to the possibility of transferring part of the profit to tax havens, via various mechanisms (particularly accounting), must be combated: In this respect, some business leaders play an important political role when they stress the need to review the international architecture in order to harmonise the rules of the game, for example by advocating a common consolidated corporate tax base on a global scale.<sup>69</sup>

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67. Frédéric-Paul Piguet, « *Quelle justice climatique. Les droits et permis d'émission en question* », *Fururibles*, n°405, 2015, p.5-19.

68. Emmanuel Faber, *Chemins de traverse*, Albin Michel, 2011.

69. Gianmarco Monsellato & Cécile Renouard, « *Éthique et fiscalité* », *Géoeconomie* 2016/4 (N° 81), p. 33-46.

## 4. Competition/Collaboration

Such an attitude of responsible production and commercialisation puts economic actors and their managers in a different dynamic than that of creative destruction, competition for market share, or internal competition for promotion or bonus. These various forms cannot be denied, of course, but many examples show how multi-actor cooperation strategies are necessary to achieve real empowerment of people, in the company and in the territories. BOP projects, at the bottom of the pyramid<sup>70</sup>, developed over the last fifteen years to promote access to branded goods and services for consumers in the South, can ultimately contribute to the death of small local producers<sup>71</sup>... Conversely, a collaboration between a (large) company and various public and private actors can, under certain conditions, contribute to finding ways of improving access to work for the most vulnerable – for example in the field of recycling<sup>72</sup>. The state of mind in which a manager develops relations with his environment, his partners and considers his competitors, has effects on internal and external labour relations, along the production lines. It is therefore important to reflect on the modes of organisation, rules and counter-powers that will prevent authority from degenerating into power and interpersonal relations from becoming generalised individualism<sup>73</sup>.

## 5. Private (or public) ownership/joint management/administration (multi-stakeholder)

The systemic model leads to the recognition of the relative character of all private property. In this respect, it converges with the principle of the universal destination of goods in the Catholic Social Teaching and with studies on the commons, those resources (land, fish, etc.) shared within diverse communities that organise themselves to distribute different rights of use and access, and to manage them in a sustainable manner<sup>74</sup>. Beyond the categories of private and public, it is a question of highlighting the importance of participatory processes, through which people organise themselves and define rules of governance adapted to the promotion of social links and resources. This perspective refers to the role of economic actors in relation to collective decision-making processes and to appropriate legal models.

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70. C.K. Prahalad, *The fortune at the bottom of the pyramid*. PA: Wharton School Publishing, 2005.

71. D.G. Arnold, and A. Valentin (2013) *Corporate Social Responsibility at the Base of the Pyramid*, *Journal of Business Research*, 66 (10):1904-14.

72. Hélène Lhuillier and Cécile Renouard "Corporate responsibility toward social transformation. The case of a waste picker empowerment project in Mexico", *Mondes en Développement* Vol.45-2017/4-n°180, p87-104.

73. Olivier Favereau and Baudoin Roger, *Penser l'entreprise*, Editions Paroles et Silence, 2015.

74. Elinor Ostrom, *Governing the commons. The evolution of institutions for collective action*, Cambridge University Press, 1991.

The debates on the ownership of the company<sup>75</sup> highlight the limits of a conception that has prevailed for two centuries of the legal autonomy of the legal person, and the inappropriateness of the idea that the shareholders are the owners of the company<sup>76</sup>. They are the holders of shares in the commercial company. In this sense, the company can be defined as a process, as a collective dynamic oriented by a project which must be checked to see whether or not it is consistent with the general interest, with the preservation of the social and ecological link. It can also lead to a consideration of the company as a common, to be understood in a double way: the company is *de facto* crossed by a plurality of norms that relate to the different types of interactions that constitute it, with respect to different stakeholders<sup>77</sup>. In different ways, the stakeholders affected by the activity have a right to the development of the company's strategy and its hold on territories and people. This opens up the possibility of taking into account "joint" dynamics, whereby the very legal structure of the company favours the participation of these different groups<sup>78</sup>.

## 6. Control/Adaptation

Our modern societies are marked by a concern for control: for Descartes, becoming "*masters and possessors of nature*"<sup>79</sup> meant the possible contribution of mankind, through the use of science and technology, to a better quality of life for all, but at the price of a dissociation between subjects and controllable objects, and with a large degree of forgetfulness of our interdependencies. Managers are today confronted with external transformations that they do not control – or not alone – and which force them to accept a different rationality from the one that asserts a linear causality, a control of risks, of the direct effects of their activity; indeed, the emerging effects linked to retroactive loops do not allow us to predict with certainty the evolutions of our societies and our ecosystems. The necessary adaptation consists of seeking coherence between practices and the targeted goals. In this perspective, leaders can seek to develop regenerative businesses<sup>80</sup>. For example, Günter Pauli, an entrepreneur of Belgian origin, developed and popularised the concept of the blue economy (regenerating the earth), to differentiate it from the green economy (just doing less harm to the earth). The aim is to develop economic models that regenerate the environment while developing employment at price levels in line with current market prices<sup>81</sup>. In 1994, he founded the

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75. Baudoin Roger (éd.), *L'entreprise, formes de la propriété et responsabilités sociales*, éditions Lethielleux, 2012.

76. Jean-Philippe Robé, « *The legal structure of the firm* », *Accounting, Economics and Law* 1 (1), 2011.

77. Simon Deakin, « *The Corporation as Commons: Rethinking Property Rights, Governance and Sustainability in the Business Enterprise* », *Queen's Law Journal*, 2012, 37:2, p.339-381.

78. Swann Bommier and Cécile Renouard, *L'entreprise comme commun*, Editions Charles-Leopold Mayer, 2018.

79. René Descartes, *Discourse on the Method*, 1637.

80. Daniel Christian Wahl, *Designing regenerative cultures*, Triarchy Press, 2016.

81. Günter Pauli, *Blue Economy*, Paradigm Pubns, 2010.

ZERI foundation to promote and assist the development of blue economy businesses. He proposes to change the model by trying to adapt to the way of nature, noting that in nature everything is used, that there is no unemployment - everyone contributes according to their abilities, nothing is fixed, everything is innovating and always trying to do better. Ultimately, it is about relying on proximity by using what is locally available<sup>82</sup>.

## **7. Conviction/Humility**

The managerial virtues described above are linked to a questioning of the models that leaders are imbued with. It is a question of changing the narrative, the great collective story, and of practising, personally and together, these new paths. From then on, the virtue of humility, not only individual but also collective, is exercised in organisations. Humility, which is also etymologically the ability to stick to the humus, the earth, is what allows us to re-root ourselves in our natural and cultural environments and to rethink our economic projects based on the quality of the link.

For leaders, it is not a question of no longer exercising any authority. But it can be seen as a service to the common good, a service to the growth of others, and with its own end in view – the transmission to others of the service of authority<sup>83</sup>.

## **► Conclusion**

The preceding pages have illustrated the increased responsibilities of managers regarding the implementation of the ecological and social transition by companies. The seriousness and urgency of climate action, as well as the challenge of reducing global inequalities, make it untenable to reduce the responsibility of companies to their ability to promote growth and employment. The aim of an economy that is compatible with the Paris Agreement alone requires uncompromising discernment of the forms of work that are compatible or not with the reduction of carbon emissions, and that favour the recognition of people and the quality of social ties. Consequently, the exercise of new managerial virtues can be linked to the various subjective, objective, and collective forms of work detailed above. The virtue of humility is the one that can directly contribute to a preferential consideration of the working and living conditions of the most vulnerable, the concern for their social utility and the deployment of their power to act. The virtues of frugality, adaptation, and the creation and sustainable and equitable sharing of value, outline a substantial evolution of work from the point of view of its “objective” dimension: work must be appreciated in terms of its capacity to produce goods and services that are sustainably useful and not vectors of destruction of people and ecosystems. Finally, the virtues of collaboration, joint administration and systemic openness invite us to nurture the collective dimension of work, its capacity

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82. Günter Pauli, interview on 6 July 2017 in French magazine *La Vie*.

83. Gaston Fessard, *Autorité et bien commun*, 1941, Ad Solem, 2015.

to create social links, at different scales. Ecological, climatic, and social issues highlight the unsustainable and mortifying nature of maintaining business as usual and the usual managerial virtues that accompany it.

In this context, the analyses show how the obstacles to be removed are cultural, ethical, and political, and ultimately spiritual. Working on the shared representations of the actors, particularly the leaders, on the transformation of their ways of looking at the world and the life of their companies, is undoubtedly a powerful lever for personal, collective, and institutional transformation. Managers have a particular responsibility to assume, linked to their position in the chains of social connection. It is a matter of stepping out of the box to escape from the banality of evil<sup>84</sup>, and to draw the new contours of a responsibility that is both individual and collective. ■

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84. Hannah Arendt, *Eichmann in Jerusalem: A Report on the Banality of Evil*, Penguin Classics, 2006.





# TOWARDS AN INCLUSIVE AND PARTICIPATORY BUSINESS MODEL

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by Juan Manuel Sinde

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## I ► Background

### 1. The “Arizmendiarietaren Lagunak-Friends of Arizmendiarieta” (ALE) Organization

The ALE is a non-profit organization created in 2007 by members of the MONDRAGON Co-operative Experience (ECM). Its founding mission is to *“promote and put into practice Jose Maria Arizmendiarieta’s ideas and life’s work while continuing to develop and modernize them.”*

Among other activities, it seeks to *“promote the analysis of new business models or viable improvements to cooperative models.”*

Arizmendiarieta’s humanist values have been the foundation of ECM’s business success. The primary vision of ECM is to apply these values to “conventional” (i.e., non-cooperative) businesses. As such, it seeks to transfer the knowledge it has gained to other businesses and social models, bringing some of its best practices to different spheres of the economy and society.

Taking into account the origin of its members and the current administrative conditions, the organization is proactively working in the Basque Autonomous Community (BAC) and Navarre, and reactively in the rest of Spain (Madrid, Barcelona, Castile-León, Canary Islands, Andalusia, etc.) and other places of the world (France, England, Italy, Switzerland, Peru, etc.) where support has been requested.

In the BAC, in addition to other educational activities, the organization, along with the Universities of Deusto, UPV and Mondragon, created the Pasuen Foroa in 2009 to promote research and experiences related to people’s participation in business.

As a result, the *Pasuen Foroa* Legal Committee prepared its first work, published in 2011 by the University of Deusto under the title “La participación de las personas en la empresa. Algunas reflexiones y propuestas para su desarrollo (*People’s participation in business: considerations and proposals for its development*).” This document presents several success stories and identifies 24 fiscal proposals to eliminate obstacles and favor initiatives that encourage employees’ participation in the share capital of businesses. Subsequently, the *Pasuen Foroa Legal Committee* published another study entitled “*La participación de los trabajadores en el capital social. Algunas soluciones jurídicas*

*(Workers' participation in share capital: some legal solutions.*" This paper offers several practical options, within the framework of existing legislation, statutes, agreements among partners, etc. both directly or through a general partnership (*sociedad civil particular*) in order to facilitate participation projects.

Given that the abovementioned documents were favorably welcomed by political, union and business groups, a more ambitious project was set to be developed starting in 2014.

## **2. The Arizmendiarieta Kristau Fundazioa (AKF) Foundation**

The AKF Foundation is based on the idea that a sense of transcendence provides people with a vision for life that encourages them to act accordingly while giving their best. The foundation attempts to channel these longings into a joint mission inspired by Arizmendiarieta's teachings. It is a call for action to those who would like to be more congruous with their deep-rooted feelings, sharing them with others and presenting them to society from a united platform.

The AKF Foundation provides a space for discussing, guiding and promoting the latent feelings of many people who share a vision for life and society and who have been unable to find ways of expression that allow them to participate in a joint mission.

In general terms, its mission is to promote:

- Cooperation towards social evangelization, especially in socio-economic and business spheres;
- Participation in civil society in order to achieve a socio-economic transformation inspired on the Gospel and the principles of the Social Doctrine of the Church (SDC);
- International contribution to social evangelization based on Arizmendiarieta's ideas, teachings and work, in cooperation with global catholic institutions; and
- The continued support of the Nominating Committee for the Canonization of Jose Maria Arizmendiarieta, while it is in place.

Its vision focuses on activating and promoting Arizmendiarieta's symbolic and social capital, which has grown larger thanks to the canonization process, to support the transformative role played by Christianity and our local churches in business and society based on the values of Christian humanism.

The foundation's work is based on the principles and values of Christian humanism and the social doctrine of the Church and is centered on the following guidelines:

- Disseminate the life and work of Jose Maria Arizmendiarieta.
- Promote social evangelization in cooperation with the local churches.
- Participate in socio-economic transformation processes in the Basque Country.
- Take part in the international catholic arena.
- Cooperate with Arizmendiarietaren Lagunak Elkartea.

The ultimate goal is to disseminate the life and work of Jose Maria Arizmendiarieta, as a way to apply the social doctrine of the Church through actions that help keep his legacy alive, while expanding it internationally and to new environments. The foundation aims to promote his work so it could serve as a reference for any person, organization or business that would like to apply the principles set out in the Social Doctrine of the Church in their work.

Some courses of action would include:

- promoting studies focusing on his life,
- creating audio-visual material that facilitates the dissemination of his life and work,
- using social networks and other activities to expose younger generations to his ideas, and
- fostering studies and dissertations about the impact of Arizmendiarieta's life and work on past, present and future society.

## **II ► General framework**

Many economic, business, social and political changes have taken place since the 1950s when Arizmendiarieta first decided to promote the first cooperatives after he was unable to alter the rules of the game of the Autonomous Societies.

This is not the place to speak in detail about these changes. However, it might be relevant to highlight some of the data presented in the 2013 *Human Development Report*, which the UN publishes every year measuring diverse factors in each country. These are not limited to the economy but also include indicators such as education, health and life expectancy, all included in its Human Development Index (HDI).

The report highlights the rise of the South, confirming the striking progress made over the past 12 years by the citizens of many of the poorest nations. Even though they still have a low average purchasing power, hundreds of millions of people from China, Brazil, India and African countries, are emerging out of poverty and show a significant improvement in terms of HDI.

It is interesting to outline that this situation also coincides with very relevant changes at a world economic level. For the first time in 150 years, the combined output of the developing world's three leading economies – Brazil, China and India – is about equal to the combined GDP of the long-standing industrial powers of the North – Canada, France, Germany, Italy, the United Kingdom and the United States.

In 1950, Brazil, China and India together accounted for only 10% of the world economy, while the six traditional economic leaders of the North accounted for roughly half. According to projections in this Report, by 2050 Brazil, China and India will together account for 40% of global output, far surpassing the projected combined production of today's Group of Seven bloc.

The improvement in terms of HDI of the poor countries also coincides with a remarkable increase in international trade, which, by 2011, accounted for nearly 60% of global output. Developing countries have played a big part: between 1980 and 2010, they increased their share of world merchandise trade from 25% to 47%. Developing regions have also been strengthening links with each other. Between 1980 and 2011, South–South trade as a share of world merchandise trade rose from 8.1% to 26.7%.

Results have been analyzed by the UN, which was able to identify some development drivers that, in fact, challenge preconceived and prescriptive approaches: on the one hand, they set aside a number of collectivist, centrally managed precepts; on the other hand, they diverge from the unfettered liberalization espoused by the Washington Consensus.

In any case, they have concluded that there is not a single model of development, but multiple alternatives for success. The report highlights the case of South Korea, which 40 years ago had the same purchasing power per-capita as Ghana.

All in all, profound changes have been noted in the world economy, with positive trends for the inhabitants of the poorest countries that appear to be confirmed. However, these changes do pose formidable challenges for developed countries in terms of maintaining their levels of wellbeing.

At a business level, this new situation significantly changes the competitive framework, which poses the challenge of a business' survival in a globalized environment, unknown until recent years.

On the other hand, it is important to mention that, despite an environment where businesses and countries compete with counterparts with very low living standards and labour costs, European countries with the higher salaries are not the ones suffering most acutely from external competition.

According to Eurostat data on unemployment in the EU<sup>1</sup>, there are low unemployment rates in countries such as Austria (4.80%), Germany (3.2%), Norway (3.7%) and Great Britain (4.0%).

In this context, Michael Porter's traditional classification of strategies according to price differentiation and strategies based on quality differentiation poses no challenge to European businesses that pay higher wages.

Likewise, according to a research by Harvard University on the correlation between multiple strategic alternatives and return on equity (ROE), the quality perceived by the client is the option that has a clear advantage over the rest.

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1. Eurostat, January 2019.

### III ► Forming alliances to define and implement a business model

A series of seminars were proposed to gather ideas for the new business model that Arizmendiarieta established during the Mondragon cooperative experience and to discuss further concerns stemming from business and union sectors. These meetings gathered individuals from diverse political, business and social backgrounds with a shared desire to propose a new business model adapted to this new reality.

The debates were held independently in the BAC and Navarre.

The participants were individuals who did not represent the organizations they belong to.

The meetings fully respected the criteria and priorities of the involved political, business and social agents, and promoted discussion based on the same humanist values that were responsible for the success of the first business group of the BAC and second business group in Navarre.

As such, the discussion aimed to consolidate the following proposals:

- 1 ► **A HUMANIST BUSINESS MODEL** that takes into consideration the equal human dignity of all the participants in a business project, regardless of their professional knowledge and responsibilities.

At the same time, a business model that promotes more equitable wealth distribution in order to promote a more stable and cohesive society with fewer conflicts.

- 2 ► **AN ADVANCED BUSINESS MODEL** that fosters and takes advantage of the knowledge, skills and capacities of those involved (including emotional, relational, creative abilities) to make the business competitive and, as a result, sustainable in today's competitive environment.

- 3 ► **A NAVARRE/BASQUE BUSINESS MODEL** that, in its design and function, allows for the strengths and weaknesses of the local culture and its people, and their existing unique experiences; a model that can be promoted by the Chartered Community of Navarre or the Basque Autonomous Community within the framework of its current (or foreseeable close future) jurisdiction.

At the same time, the meetings took into consideration international examples of success that could help formulate an adequate business model for the present and future.

Each seminar aimed to propose precise recommendations that could be implemented into current Basque/Navarre businesses.

Participants included individuals from political parties represented in the Basque and Navarre Parliament, the majority of the current trade union organizations from both communities and key businesspeople who support the aforementioned values. All of the above took part in the seminars in their individual and not institutional capacity.

Logically, the conclusions are convergent, although there are distinct emphases in each of the different regions. The following sections highlight the most relevant conclusions compiled by the sessions' organizers:

**1► Change must be built on the cornerstone of confidence; firmly supported by systematic, truthful and transparent information; and administered using a model that fosters “day-to-day” participation**

This means providing not only economic data, but also informing about future plans and projects following the minimum standards set out in Article 64 of the Workers' Statute<sup>2</sup>, with the obvious exception of confidential material.

The responsibility of bringing forth this information lies with management, who must ensure that it is relevant, coherent and understandable. This must also include complementary access to the works council, via regular meetings between management and workers, in order to be understood by the greatest number of workers possible. As opposed to classic Taylorist models, change also implies implementing participatory management with suitable procedures, tools and indicators to foster worker creativity and contributions and thus, innovation.

This would allow businesses to make better use of human capital while fostering a greater growth of workers' professional and personal competencies and capacities, providing them with greater human wealth and personal wellbeing

It was concluded that unions and entrepreneurs should give more importance to these factors. They should also avoid the tendency to only provide or demand information during hard times while ignoring its provision during good times.

**2► Change in businesses must be real and not just “cosmetic”**

This means changing the traditional relationship between workers and managers; and fundamentally rethinking power relationships within businesses and the consequential wealth distribution.

This requires being realistic rather than idealistic, acknowledging that at the heart of businesses lay conflicts of interest that must be tackled using a wide variety of measures.

This change could also be supported in schools and by public opinion by highlighting the importance of humanist values in companies and by recognizing those businesses that best apply these values.

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2. This article states that *“the works council must be informed and consulted by the entrepreneur with regard to those matters that can affect the workers, the company's situation and the evolution of employment within, as per the terms laid out in this article”*. It defines the information that must be received, according to a pre-established timetable, quarterly or annually, as well as those cases where the right is not only to receive information but also to be consulted.

This change would seek to modify the way businesses operate, which frequently results in workers suffering the negative consequences when things go poorly, while never benefitting when things go well.

The practical consequences of this are:

- Business leaders adopt an attitude of service to the project.
- Steps are taken towards overcoming, in practice, the spiral confrontation between capital and labour.
- The search to find more effective ways for workers to participate, in a progressive and well-informed manner, in the administration of business, including profit and ownership distribution.

Profit sharing was highlighted as a form of variable remuneration, complimentary in all instances, to fixed salary, which must not be less than what is set out in the corresponding agreement.

When this profit sharing is reinvested it can form the basis of an equity participation that would be part of a process of overall involvement.

Adequate financing must be found and negotiated in order to facilitate the monetary contribution to be contributed by all workers who wish to participate. This would avoid creating a limited group of elite workers who could even act out against the rest of workers of a business under certain circumstances.

The proposal does not aim to hand over the final control of the company from the owner, unless, for whatever reason, there was unanimous agreement to do so.

### **3 ► Change must be built on the understanding that today's competitive environment means that in business, wealth creation and sustainability lie in innovation and the people responsible for it**

This means ensuring that these people: have a decent wage, have a good education (which implies a certain distribution of intellectual wealth), support the business project, are satisfied with their work, have a good social environment that favors teamwork, are treated fairly in terms of gender, and have a decent work-life balance.

Adapting to the new competitive environment cannot be limited merely to incorporating new technologies. It also requires organizational and administrative changes to improve the overall satisfaction, internal cooperation and the better utilization of the employees.

In addition, it is important to pursue high value-added activities employing business strategies based on quality and innovation. While avoiding, as much as possible, those based on cost differentials, a practice that is unsustainable when competing on an international level. Another ongoing focus is on talent retention and recruitment.



#### **4 ► Change implies rethinking the objectives of businesses to go beyond solely focusing on maximising short-term profits**

As such, the business should be seen as an organism that equitably satisfies a constellation of ideas, while taking into account environmental and Human Rights issues among others.

Business stakeholders should all feel committed to its long-term success and sustainability. This commitment should be held above individual interests, and implies that all parties see it as a way of improving their respective interests when compared to a business model based on a culture of confrontation and mistrust.

The business should be a place where people experience a wholesome development, balancing their personal and family life while pursuing the social good.

#### **5 ► Change is everyone's responsibility, but it especially falls to those who are in power in a company**

This point underlines the importance of business leaders and executives setting good examples and of progress towards a cultural change that emphasises teamwork, honesty and openness to accept the changes needed to make businesses sustainable.

For businesspeople there is a need to overcome near-sighted selfishness while workers need to get over the tendency towards non-participation.

#### **6 ► The new model will not work while there are inadequate salaries and poor job security**

This is a situation that many workers find themselves in, especially those in the service sector. A decent wage is paramount to lead a decent life as well as to guarantee a business' stability and cohesion. If the worker does not have a living salary or cannot envision a future in the company then they will not participate.

It is harder to get manual laborers to participate, although there are some success stories where some of us succeeded in attaining their participation and involvement.

On the other hand, there are divergent opinions on how to come up with the criteria for salary allocation for different roles.

Another challenge faced by this new model is that it must also incorporate a day-to-day organizational management model that is more inclusive and participatory. A model that includes organizational methods that are more horizontal and less hierarchal to foster the creativity and contribution of the workers that leads to innovative products and processes.

## **7 ► Change must be supported by public authorities and by the society in general**

There is a diverse range of businesses and business leaders as well as moral standards. Although it is always possible for business leaders and workers to reach agreements outside of legislation, there may be a need for public authorities to get involved by way of mandatory laws or by incentivizing businesses to follow certain organizational models and ownership options.

Public administration should play a key role in promoting the reinvestment of a significant portion of the gains obtained while fostering innovation through public policies and budgets that are in step with the entire production network.

Economic measures should be introduced to eliminate barriers and to foster this new business model, while the current legal-political framework should be improved to enable it to adjudicate other measures that would support this model.

University education is also key in shaping future business leaders, providing them with the relevant skills and values, along with other public-private policy cooperation initiatives (for example, the Programa Innovarse in Navarre, management training courses, which are crucial for the effective implementation of the envisioned changes).

In any case, more extensive debate is needed in terms of the opportunities and limits of universal basic income for workers who are excluded from the system. Pertaining to this issue, there is a wide range of positions of principle and opinions regarding the priority of values that must be considered, while there is an absence of the relevant economic data needed to make adequate recommendations.

## **8 ► Business is not without its share of social problems, which should be addressed through public-private cooperation**

The predictable asynchronicity that will stem from the training required by advanced technologies (robotization, digitalization, industry 4.0) in the context of the globalization of markets and rapid technological advances on one hand, and the specific training needed for workers on the other, presents the following challenges:

The specific training that workers will require in the future context of advanced technologies (robotization, digitalization, industry 4.0), the globalization of markets and rapid technological advances present challenges that necessitate:

- Modifying vocational education, university education and continuing education to meet the new requirements of businesses, especially the industries that compete in the global market, as well as the production sector in general.
- Making a systematic effort to improve the qualification of employed workers who must also be equipped with a functional versatility, the ability to work in teams, etc.
- Providing continuing education for workers who lack continuity in their work due to technological changes in order to maintain social cohesion in society.

The governments of each community are primarily responsible for these challenges, and businesses must establish a cooperative relationship with them (as well as with the municipalities and the regional development agencies in the regions where they operate).

However, they must never forget that technology is potentially a positive development that can foster social changes that lead to a better quality of life, such as reducing working hours (as has happened in the past as evidenced by analysing prolonged time periods).

Businesses must also engage in discussion with other social agents to come up with environmental strategies and energy models. These are examples of other areas that are part of a business' responsibility towards their community.

These efforts will promote progress towards a unique societal model in BAC and Navarre that is based on more humane values and that acknowledges the contributions of businesses that implement this model.

On the other hand, experience has taught us that in order to improve participation it is necessary to create favorable environmental conditions. Public institutions, social agents and unions must create these conditions to favor a socio-productive model that prioritizes social, economic and environmental sustainability and the collective interest over individual interests.

Nevertheless, to change to this type of inclusive-participatory model is not just a simple case of changing regulations; rather, it requires negotiating with and transforming business culture itself. This requires a commitment on behalf of business leaders since business culture is transmitted by the daily examples set by its leaders through their conduct in line with the aforementioned values.

This means that business leaders or entrepreneurs are responsible to initiate change. However, effective implementation of a participatory model also requires gaining the support of the people who belong to the business along with the unions, taking advantage of the information and consultation provided by the works council as set out in Article 64 of the Workers' Statute or by the regulations that create it.

#### **IV ► Characteristics of an inclusive-participatory business model**

The framework for this model represents a specific proposal that acknowledges the different interests that exist between capital and labor. As such, it seeks new methods to resolve this conflict that encourage workers' participation in the business.

This begins by recognizing the significant potential contribution of business to the common good, based on the creation of wealth and employment.

This is not a rigid or well-defined model. Therefore, it is open to new contributions from economic and social stakeholders and agents. Likewise, it can be implemented as a module or partially, and not necessarily in its entirety.

The model could be supported by the following guidelines:

- ▀ **GUIDELINE 1** ► To modify the management practices and business culture, basing them on trust, transparency and cooperation, to bolster business competitiveness and sustainability.
- ▀ **GUIDELINE 2** ► To devise a project shared by the business owners, managers, and professionals/workers.
- ▀ **GUIDELINE 3** ► To reconcile the conflict between capital and labor through increased workers' participation in business management, profits and ownership, while implementing the abovementioned guidelines.
- ▀ **GUIDELINE 4** ► To consider the social impact of business activities and address some of the local social concerns.

The implementation of the model should be spearheaded by businesspeople, while counting with the support of representatives from workers and public institutions, such as governments and universities.

It could include the following specific policies:

- ▀ **GUIDELINE 1** ► **To modify the management practices and business culture, basing them on trust, transparency and cooperation, to bolster business competitiveness and sustainability.**

Focusing on:

- a-** Creating an environment of trust through a policy of information transparency, regularly notifying workers about the most significant business activities and policies.

A minimum requirement would be to meet Art. 64 of the Workers' Statute regarding the right to information and consultation with workers' representatives.

A relevant example would be to provide workers with the information that businesses that trade in the stock market are legally required to provide to their investors (understandably adapting the information to each company).

This would entail having a criterion for informing workers, just like with investors, even providing them with additional qualified information on qualitative aspects of the business (future investments, the business positioning in the market, etc), while respecting confidentiality.

- b-** Establishing a participatory organization and management model, that surpasses Taylorist form and promotes the participation of multifunctional workers in the business day-to-day through autonomous groups, thus also boosting business innovation.

- c- Programming and developing systematic training plans tailored to each worker, including both technical and management skills.**

For example, there could be a plan to provide a week of training to each worker, reaching a minimum of 80% of the workers in the roster per year.

It would also be convenient to plan internal training needs in terms of obsolescence, technological innovations, and professional careers.

Likewise, it would be appropriate to agree on the training plans with the workers in terms of objectives, content and instructors.

- d- Promoting pay policies that favor social cohesion and that prevent large inequalities, while boosting the loyalty of skilled workers to the business project.**

A relevant example would be to use a pay scale not higher than 1:6 for SMEs, except for special circumstances.

On the other hand, it would be advisable that salaries include some participation in profit sharing that could be extended to the entire staff.

- e- Establishing regular systems to continuously evaluate and improve workers' satisfaction and to meet their needs.**

An example could be to carry out a biennial systematic study, preferably comparing the results with an external sample.

Management and professionals at all levels, as well as the works council, should be involved in the development of such a study.

- f- Prioritizing (without any exceptions) internal promotions to assign higher responsibilities and using objective criteria to assess merit and potential contributions during candidate selection.**

- g- Moving towards wage equality between men and women in the Chartered Community of Navarre.**

- h- Searching for ways to balance the professional and family life of everyone, without affecting business efficiency.**

- GUIDELINE 2 ► To devise a project shared by the business owners, managers, and professionals/workers.**

This would entail:

- a- Developing balanced incentives for both shareholders and workers simultaneously, so that both share a common interest to improve both the profitability of shareholder equity and workers' total remuneration.**

- b- Earmarking at least 50% of annual profits to increase the total equity, in order to support investments in teams and R&D&I.**

c- Setting aside a sales percentage that is higher than industry averages for R&D&I activities.

► **GUIDELINE 3 ► To reconcile the conflict between capital and labor through increased workers' participation in business management, profits and ownership, while implementing the abovementioned guidelines.**

Taking into account that these three aspects can be addressed individually or as a group, their development would lead to:

a- Implementing participatory management systems, with appropriate procedures and tools that foster innovation and organizational changes. This would entail co-responsibility between managers and representatives in the relevant decisions of the business undertaking.

It would include consulting workers' representatives about the most important decisions of the company (as long as these were not confidential in nature) and integrating the participatory management model in the collective bargaining process.

b- Including workers' representatives in the highest levels of decision-making and control of the company. Except in exceptional cases, these same workers' representatives should not also form part of the works council, given the diverse nature of these committees.

c- Enabling collective access to equity participation in the company, which would require searching for adequate time frames and forms of financing in order to be successfully implemented.

This could be carried out through financial contributions from workers who voluntarily join a program opened to all or through company contributions for profit sharing as a result of collective bargaining. In this case, it would affect the entire staff.

In both cases, it is advisable to use an intermediate organization that would collect contributions from workers and/or the company.

For the governance of the intermediate organization, it is recommended to consider the alternative of "one person, one vote", in addition to the usual capitalist methods.

d- Businesses supporting employees' equity participation, by financially contributing to employees' inclusion in ownership, up to a previously set limit.

On the other hand, if an intermediate organization is used to facilitate participation, it is advisable to consider the alternative of sharing benefits among members in proportion to each person's salary, in addition to the usual capitalist methods.

- e- Studying the feasibility of establishing an arbitration committee, for the resolution of internal conflicts, subject to being expanded to include other conflicts that involve suppliers, clients or the environment.

► **GUIDELINE 4 ► To consider the social impact of business activities and address some of the local social concerns.**

This guideline addresses concerns regarding the social impact of business activities and to come up with ways to involve them in finding and implementing solutions.

It would include the following actions to:

- a- Sustain a policy of financial honesty, to prevent fraud and tax evasion, as well as the use of tax havens, so that the necessary public resources to deal with the economic and social challenges of the Chartered Community of Navarre are not reduced.
- b- Participate in the analysis, assessment and, if applicable, implementation of social policies aimed at achieving workplace integration of less skilled workers who could become “excluded” from production processes due to the use of new technologies.
- c- Cooperate with the corresponding public bodies so that professional, continuing and university education adequately meet business needs, establishing appropriate dual training plans, practicum experiences, and apprenticeship programs.
- d- Earmark 1%-3% of profits to go towards resolving social problems, supporting development and university activities related to the social objective of the company, taking into account the workers’ involvement in the various projects and with the support of the works council.
- e- Favoring intra-entrepreneurship and an internal culture that encourages business vocations among the company’s professionals and managers, so they can create new projects that generate wealth and employment for the community.

**V ► Public policies to promote the model**

The parliaments of the Basque Autonomous Community and Navarre, by unanimous agreement of all their parliamentary groups, urge their respective governments to elaborate an action plan to promote an inclusive and participatory business model to be developed by current and future legislatures. This plan will not only support progress towards this model, but also reinforce the strong local identity and continuity of businesses in the BAC and Navarre, while facilitating the resolution of future problems. Such a plan should include the following policies:

- a- Support the dissemination and implementation of participatory management systems that are representative of the inclusive-participatory model, adjusting them

to the definition and deployment of best practices in policies regarding internal communication in Basque/Navarre businesses, as well as the definition of objectives and guidelines, which are considered essential for the transformations proposed.

- b-** Promote the introduction of employee profit sharing plans, cooperating to identify successful strategies both at a local and European level.
- c-** Facilitate the inclusion of workers in business equity, matching the contribution of each worker, with a set maximum.
- d-** Identify the best practices at an international level in terms of tax policies that help promote ownership participation. For example, when employees buy shares in the company where they work, these are treated the same as their contributions towards pension or retirement plans.
- e-** Study the appropriate legal norms and, if needed, create a law that improves current legislation and/or design a new legal mechanism better suited to the requirements of power and profit sharing based on the criteria specified by the workers involved.
- f-** Create a Registry of Participatory Businesses that helps provide legal backing and security to the measures being promoted. These businesses would be required to meet a minimal percentage of employee equity participation and would be further required to follow any additional terms and conditions set forth in the future.
- g-** Cooperate in the creation of an assessment system for the implementation of the inclusive-participatory model, to help businesses identify their progress through the use of a checklist.
- h-** Assist in awareness campaigns aimed at businesspeople and workers to promote the proposed inclusive-participatory model.
- i-** Grant an award or recognition to the businesses that best implement the model.
- j-** Develop business strategy and business management training sessions for members of the work committee, union representatives and union leaders; along with further sessions that would also include business managers.
- k-** Plan the financial resources necessary to disseminate the model and execute the action plan.
- l-** Other policies resulting from the application of the model.
- m-** Encourage the works councils of both parliaments' to annually monitor compliance of the approved recommendations.

## **VI ► Proposed fiscal policies**

In this context, it is especially important to use appropriate fiscal policies that include measures for workers, businesses and business leaders. These measures should also



take into consideration the different stages of a participative process: beginning, continuity and ending.

The proposed policies attempt to supplement the current measures used by the BAC and Navarre Revenue Agencies, which are currently inconsistent, relatively limited and infrequently used in some autonomous territories.

These policies are mainly derived from existing research, examples from international and national comparative law from the United States and Gipuzkoa, and some are innovations.

They are supported by the following ideas:

- Fiscal measures are not an end, but a tool to promote a new inclusive-participatory business model, that contributes to business continuity and sustainability. They represent only some of the tools that can be used in order to achieve this goal.
- Their main objective is to remove the fiscal obstacles that can arise when a business decides to carry out this type of project. Many measures simply are aimed at guaranteeing fiscal neutrality in the processes related to business continuity; while others are aimed at enabling these processes and preventing them from being abandoned due to the fiscal burdens generated. Burdens which are often simply deferred to future times.
- The measures are focused on favoring these business processes and, therefore, they are not just for workers or business leaders, but for both, according to their scope and role in each phase of the process.
- The measures contribute to business continuity, favoring the inclusion of certain people considered to be relevant for continuity, based on a plan and objective criteria. They are not applied to all workers.
- There are also measures that do not require participation in business equity, but that foster involvement, a sense of belonging, innovation, talent recruitment and retention, especially in knowledge-intensive firms.
- It is important to use and benefit from the fiscal sovereignty we have in Navarre which enables us to legislate on these aspects, thanks to the Economic Agreement.
- Lastly, these are targeted measures, which can be perfectly managed by Finance and Industry. Their costs are not relevant, considering that some of them can be deferred, if not exempt from payment.

According to this framework, the following general measures are proposed<sup>3</sup>:

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3. The specific measures proposed summarize an unpublished document by Jose Ignacio Perez de Albeniz Andueza, General Director at Arpa Abogados y Consultores (Arpa Lawyers and Consultants), with extensive tax management experience in the private sector and in the Department of Treasury of the Government of Navarre.

## 1. Modifications to taxation with regards to the participation of workers in the company

A series of tax incentives have been proposed to promote access to ownership and the participation of workers in companies as a way to increase their sense of belonging, productivity, competition and, in some cases, the guarantee of continuity. These are fundamentally aimed at workers who meet the following minimum requirements:

- Length of service: more than three years. Unpaid leave to take care of family members will be considered as part of time worked.
- Length of ownership: shares must be held for at least five years, during which time the worker must continue to render their services to the company except in the case of disability or death.
- Maximum contribution limit: 10% to 20% limit per worker and their family.
- Unlisted companies: Shares shall not be traded in any regulated market.
- Direct and indirect contributions from the company or the group: Access to shares of the company where an individual works or to any shares held by the group, either directly or indirectly, will be made via employees' participation in an entity that groups together the workers and that is directly involved in the place where they work.
- Consequences for non-compliance: Modification of tax benefits in the case of non-compliance.

The following specific incentives are proposed to promote workers' participation in the company. These represent the minimum requirements and are included in an action plan to promote participation and access to ownership that regulates the conditions of access.

### ► Regarding personal income tax

- a- In the case of acquiring shares free of charge or at below market value,** the difference of the market value of shares and the acquisition price will not be paid in kind. In the majority of cases, it is impossible to determine a market value since said market does not exist. Nevertheless, there are agreed-upon prices that relate to logical and justifiable criteria that could be used as defined values, without introducing the legal uncertainty of comparing it to market values that do not exist. In addition, in the subsequent transfer of shares, the gains would be taxed based on the value paid during the acquisition; as such the tax would be differed. This would allow the worker to participate in share ownership, paying agreed-upon prices which provide greater legal security to the transaction. This regulation is in effect in Guipúzcoa.
- b- In cases where a company pays workers with funds that are directly and exclusively assigned to buy company shares,** these payments should be exempt up to an annual limit of 20,000 Euros per worker. In cases where the worker cannot take on the total or partial cost of acquisition, the company

would pay salaries to enable this acquisition. This would mean incentivizing this salary by lowering the income taxes that the worker would have to pay up to a maximum of 20,000 Euros. This measure could be extended to include irregular income garnered through payments to support share buying starting from the exemption of 20,000 Euros up to 50,000 Euros. Income deemed “irregular” would include recurring incomes. This would also minimize the income tax charged to a worker, while also introducing an aspect of escalation.

- c- No asset gain or loss in cases of the transfer of shares in family businesses** (via onerous or gratuitous transfer) to the individuals who work in these businesses and meet the aforementioned requirements. Current measures taken, which make gratuitous transfer tax neutral to family members who continue with the same business, should be extended to business workers in order to allow them to also acquire company shares, both from onerous and gratuitous transfer. This would guarantee the continuity of the business as well as the sense of belonging. These measures are currently implemented in Guipúzcoa.
- d- Current benefits that workers receive from pension plan contributions** (a reduction in the tax base up to a certain limit) should be extended towards the purchase of company shares by those workers who have worked more than five years in the company. As long as they have not previously benefited from tax exemptions of salaries paid to buy shares.
- e- A 15% to 20% deduction for workers to allow them to acquire shares in the companies they work** in as long as they meet the aforementioned requirements. Possible affirmative action for women. This measure would be incompatible with those proposed in number 2 and 4. This measure is currently implemented in Guipúzcoa.

#### ► **Regarding corporate tax**

Company restructuring to accommodate the process of employee participation in business equity should be considered as a valid commercial option.

#### ► **Regarding tax on inheritance and donations**

No taxes on shares in family businesses acquired free of charge by workers, as a supplement to the tax treatment of transferring Personal Income Tax laid out in proposal 3. This measure is currently implemented in Guipúzcoa.

#### ► **Other proposals**

Create a set of requirements to acquire shares that have associated tax benefits for workers or for workers’ organizations with this sole objective. Measures would be applicable when company shares are bought directly by workers themselves or by workers’ organizations. This measure has been implemented in Guipuzcoa.

Lastly, some measures are proposed, from a more general perspective aside from equity participation by employees, to promote personnel retention and loyalty, to support innovative businesses, and to preserve human capital, especially in knowledge-intensive companies. These measures are aimed at engaging and retaining people and their talent in business projects, and represent another form of participating in the spirit and culture of the company.

## **2. Improvements to foster the consolidation and involvement of people in innovative and knowledge-intensive business projects, and worker loyalty**

The proposed measure is aimed at:

- Fostering the innovative and creative culture of the people who are part of business activities.
- Encouraging the creation of patents, as part of the process of smart specialization, via direct incentives to workers who create them.
- Creating incentives that are solely controlled by management to prevent abuse or prohibitive costs.
- Gaining and retaining the commitment of people and talent to business activities, by creating a culture of involvement, belonging and participation, which has a direct impact on businesses' competitiveness and continuity.

Similarly to what is proposed above, the incentive would consist of a personal income tax exemption for workers up to a maximum of 20,000 Euros annually for wages related to any innovative and creative activity that leads to the creation of a patent. Conditions would be:

- The worker benefiting from the exemption is the inventor of a patent.
- Such patent generates revenue for the business the worker works for, in a value that is higher to the salary received by the worker for the creation of the patent.
- The patent meets the legal requirements and regulations necessary to benefit from the patent-box regime. This enables the patent and the process to be solely controlled by management, which oversees the substantive requirements of the patents as well as tax administration. ▀

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# THE COMMITMENT OF ENTREPRENEURS

4

by Romain Buquet

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## ► Introduction

Julien quit business school before graduation. His time, energy and student loan are all now focused on his business project. He has little chance of succeeding, endures great risks and his days are filled with summits of euphoria as high as his moral lows. But despite all rational logic, Julien is committed with his whole body in his project, and he seems to never have doubts or regrets about the choices that he makes. How do we explain such a level of commitment?

Management sciences have broadly approached the question of entrepreneurial motivation, as a psychic disposition that moves to create a business. However, they have not explained the concrete action and loyalty in time to a project. More than just “motivation,” entrepreneurs show true “commitment” since they are directly concerned by the consequences of their actions. The question of organisational commitment has already been well undertaken by researchers, but it is exclusively applied to employees of organisations and not to entrepreneurs. These works focus on resignation and employee turnover, which is then perceived as a flaw of commitment, or “non commitment.”

In this paper, we will broadly look at the question of entrepreneurial commitment and attempt to seize its different dimensions and issues. Rather than following a predefined theoretical framework, we will combine management, anthropologic and psycho-social lecture graphs.

With this approach, we have the benefit of an extraordinary field of research. The beating heart of the Parisian startup ecosystem opened its doors to us for a week, during which we were able to meet and make the portrait of 18 committed entrepreneurs.

Other than just suggesting a new theoretical framework of analysis, this research also provides some updates on certain psychological, sociological and anthropological aspects, which explain and define commitment and its dynamics. There are enough questions opened for further works in the years to come.

## ► Commitment is a relevant study subject in the management sciences

The concept of organisational commitment was first studied by Howard S. Becker in 1960. He defined it as being “a tendency to pursue a coherent course of action” (Becker, 1960). Studies investigated organisational commitment more thoroughly in the mid-1970s, coinciding with the first petrol shock of 1973 and the economic crisis that ensued. A longitudinal study on the rate of psychiatric technician turnover proved that organisational commitment was highly correlated to the technicians’ intent to resign (Porter, Steers, Mowday, & Boulian, 1974). Contrary to Becker’s study, there is an attitudinal perspective at play, as shown by this definition from 1979: “Organisational commitment is the relative strength of identifying a person to an organisation and their involvement in that organisation” (Mowday, Steers, & Porter, 1979).

This topic has been subsequently developed in other situations. Salancik demonstrated that commitment is a very powerful and subtle way to make individuals subscribe to an organisation’s interests; so it can be twisted to make sure that the individual’s behaviour is in line with the organisation’s interests. Individuals can be manipulated by showcasing their efforts, giving them responsibility, and rendering their actions irrevocable. (Salancik, 1977).

Staw studied a particularly damaging aspect of commitment. People who have known a setback may try to reclaim their loss by committing even more resources to the same project. This is called an escalation of commitment (Staw, 1981). Shaw gave the example of the Shoreham nuclear power plant project. In 1966, its initial cost was projected to be \$75 million, which climbed to \$5 billion after 23 years of development, and was scrapped before it ever got off the ground (Ross & Staw, 1993).

In 1991, Meyer and Allen published the three-component model of commitment, which has been largely accepted. Up until that point, there was a distinction between *attitudinal* and *calculated* commitment (Cohen & Lowenberg, 1990; Mathieu & Zajac, 1990). *Attitudinal* commitment is related to an emotional connection (see: Mowday, Porter, and Steers), whereas *calculated* or *continuity* commitment is based on interest and is associated with behavioural commitment. Meyer and Allen brought together the differing visions by proposing a 3-component conceptualisation of commitment based on:

- **A desire** (affective commitment, EA). Emotional attachment to, identification with, and involvement in the organisation.
- **A need** (continuance commitment, EC). An awareness of costs associated with leaving the organisation and lack of alternative employment.
- **An obligation** (normative commitment, EN). Loyalty, based on a feeling of obligation to continue employment.

This multifaceted commitment is a psychological connection that unites the employee and the organisation, which makes the employee less susceptible to leaving it voluntarily (Meyer & Allen, 1991). Thus, commitment takes several forms (affective and calculated) and has several targets (eg. towards the organisation, team, and manager). Meyer and Allen's definition of commitment is the most widely accepted today.

Nowadays, commitment studies are multidisciplinary. Caroline Manville demonstrated that self-esteem could be a driver of commitment. This is especially true when the characteristics of the job (eg. independence, feedback, task priority, etc.) heighten affective commitment; but only if the employee has good self-esteem (Manville, 2014).

Finally, recent studies of fast-growing SMEs show that commitment is important in this type of organisation (de Labriolle, Prim-Allaz, Seville, & Belliato, 2012); and have found a virtuous cycle. SME growth fosters confidence in the organisation. This confidence in turn spurs member commitment (affectively and normatively), which creates "leverage on immaterial resources which reinforces efforts, boosts resource efficiency", and finally stimulates SNE growth.

### ► **Different commitment described in social psychology**

Social Psychology added its own meaning of commitment to the "organisational" definition in the 1960s. According to Kiesler and Sakumura, commitment is "the connection that connects individuals to their behavioural acts" (Kiesler & Sakumura, 1966). Here, commitment results from the subject's acts, which are themselves dependent on the situation that caused them. An individual can justify and rationalise their acts after the fact; whereas for managers, beliefs (affective commitment) involve members of the organisation and influences their acts. The psychologists maintain that people align their beliefs and attitudes with their behaviour. "Only our actions oblige us. Thus, we are not compelled by our ideas or feelings, but by our actual behaviour".

These studies are based on Milgram's experiment on obedience to authority when it leads people to do things that go against their conscience. (Milgram, 1963). They are also a continuation of Kurt Lewin's work on the "freeze effect". Tasked with changing Americans' eating habits after the Second World War, Lewin proved that housewives were more likely to modify their behaviour and to stick to their decision after committing to a first act (they raised their hands to speak during the experiment) (Swanson, 1952). More recently, Robert-Vincent Joule and Jean-Léon Beauvois completed their work on commitment in social psychology. They united all of the persuasive behaviours that manipulate a subject while maintaining the illusion of under the banner of "free will compliance" (Beauvois & Joule, 2010; Joule, Beauvois, & Deschamps, 1987). For them, commitment that arises from previous behaviour is so powerful that it can be used in sales, marketing, or management (Joule & Beauvois, 1989).



Fayolle and Degeorge applied the psycho-social definition to entrepreneurship. They observed the commitment process and escalation in entrepreneurs (Fayolle & Degeorge, 2007). Likewise, the management sciences apply the “escalation of commitment” theory (Staw, 1981), when a person clings to an initial decision even though the facts objectively challenge their rationale. Social psychology refers to this as “cognitive dissonance” (Festinger, 1962) with concepts that are similar to the free will or effort justification paradigms.

### ► From political to societal commitment

In French, the most commonly accepted definition of commitment is still in the political sense: “fact of taking sides on political or social problems by his action and his speeches” (Dictionnaire Larousse). The word embed two dimensions : a personal belief as well as a stance to take action. In this duality lies part of the interest of this concept.

People who are committed to a political cause take a stand and participate in the life of the *polis* (πόλις / pólis ; in Ancient Greek “city”). This definition differs from the previous two (managerial and psychological), however it is still a relevant tool to apply to the business world. The political commitment of leaders or stakeholders can present itself as Corporate Social and Environmental Responsibility (CSR). According to a recent genealogical study, the origins of this type of initiative go back to American industrial companies in the beginning of the 19<sup>th</sup> century (Acquier & Aggeri, 2016). They were truly developed by industry greats such as Henry Ford and Alfred Sloan at the beginning of the 20<sup>th</sup> century. They weren't directly addressed in academic literature until after the Second World War, beginning with *Social Responsibilities of the Businessman* (Bowen, 1953). Many articles on the subject have been published since then; and the number of publications, practices, and rules has accelerated since the beginning of the noughties. For example, publicly traded companies in France have had to submit non-financial reporting since 2001.

Like commitment, CSR (or “societal commitment”) has been firmly established and developed in big companies. Nevertheless, Sandrine Berger-Douce holds that it is still virgin territory for SMEs and entrepreneurs. She writes in “Revue de l'Entrepreneuriat” (Berger-Douce, 2007), “*We must acknowledge that there are still few academic papers on the societal commitment of entrepreneurs in France.*”

### ► Entrepreneurial motivation

Contrary to entrepreneurial commitment, much has been written about entrepreneurial motivation.

In 2014, the *Financial Times* surveyed 7800 graduates of the top 100 MBA programs in the world. The survey found that 22% of all respondents had already launched a start-up; including 40% of those who had graduated from Stanford (Moules, 2015). This is despite the fact that MBA programs are seen as a springboard to top corporate positions. How can this unique motivation for entrepreneurship be explained?

Two major theories on the subject have been expounded (Carsrud & Brännback, 2011):

- An economic approach keeping with Schumpeter's work (Schumpeter, 1934). With this approach, the entrepreneur's motivation stems from a desire to maximise personal gain. To that aim, they compare several money-making options, such as entrepreneurship and salaried employment, and make a decision based on an economic perspective (Arenius & Minniti, 2005).
- A psychological approach, with which factors like risk and desirability tolerance largely predict one's motivation to engage in an entrepreneurial venture. (Gerry Segal, Dan Borgia, & Jerry Schoenfeld, 2005).

Other than these two approaches, writings on the motivation of entrepreneurs cite two main factors. Namely, that creating a business can be either chosen or imposed. The push vs. pull dichotomy has been widely applied to this concept (Amit & Muller, 1995; Gabarret & Vedel, 2015; Kirkwood & Campbell-Hunt, 2007).

## **1. Chosen business creation**

In a positive "pull" scenario, a person chooses to launch an entrepreneurial venture. In this case, it is a voluntary approach. A desire for freedom and independence as well as a sense of opportunity are the two main contributors to the pull approach.

A desire for freedom is the first/biggest factor in entrepreneurial motivation. Many studies have found that it is a strong driver of business creation.

Literature on the subject mentions the importance of sensing and taking advantage of business opportunities as the second main factor of the *pull* approach. From this perspective, people are often inspired to start a business when they smell an exceptional opportunity that they cannot refuse. Shane and Venkataraman covered this factor in their seminal work at the beginning of the Oughties. They even listed this as a key trait of the typical entrepreneur profile (S. Shane & Venkataraman, 2000). Other studies establish a clear correlation between this characteristic (sensing opportunity) and the decision to start a business (Arenius & Minniti, 2005; Langowitz & Minniti, 2007).

In short, when the decision to create a business is a voluntary choice, (*pull*) the motivation to do so comes from a desire for freedom or sensing a business opportunity; ergo, expectation of profit. Additional studies show that these two motivational factors are not necessarily concurrent in every decision to launch a business (Hessels, Gelderen, & Thurik, 2008).

## **2. Imposed business creation**

Not every business owner chooses to do so of their own volition. Some of them have no other choice but to go down that path. In this case, their motivation may stem from a need for income (eg. after unemployment) or (unbearable) unhappiness in their

salaried job (Bradley & Roberts, 2004; Stoner & Fry, 1982). This is what is referred to as the push motivational dynamic of “need”.

This factor is generally negatively perceived because it implies that the person has known professional failure or distress (Kirkwood & Campbell-Hunt, 2007).

The push-pull dichotomy is relevant when assessing entrepreneurial motivation, but the factors are not mutually exclusive. Generally, the decision to start a business is borne of a combination of both push and pull (Kirkwood, 2009).

### **3. Other motivational factors**

The push/pull approach combines four main motivational factors. They are:

- Sensing opportunity (pull)
- Need for freedom (pull)
- Need for income (push)
- Unhappiness at work (push)

Nevertheless, recent research has shed a light on new motivational dynamics that are not just economically driven. For instance, lifestyle entrepreneurs in particular search for meaning, integrity, relationships, or a certain way of living (Ateljevic & Doorne, 2000; Claire, 2012; Hernandez, 2006). A project that is based on social entrepreneurship for example, is motivated by a goal of making a local, social, or environmental impact (Carsrud & Brännback, 2011; Tounes & Fayolle, 2011). According to Cromie, non-economic motivational factors are just as important as economic ones when creating a business (Cromie, 1987).

### **4. The limits of existing literature for our research**

The main obstacle we have encountered when reading available literature on the subject is that most of it focuses on the motivation behind entrepreneurship, or one’s psychic predisposition to it. Not much work is focused on commitment, or the act itself.

Also, a vast majority of research concentrates on the specific moment when a business is launched, or often on the months of preparation that lead up to the launch. This is called “entrepreneurial intentions,” whereby the concept of entrepreneurship is limited to the simple act of creating the business, but creation is just one of many steps in the life of an entrepreneur and their action. To name a few: the first sale, growth, first hire, success, failure, changes, fundraising, and bankruptcy. All of these steps are key moments through which entrepreneurial motivation and commitment in general could be studied.

## ► Collecting data within the Start-up ecosystem

For our research, we interviewed 18 entrepreneurs through a flagship incubator in Paris. The energy that emanates from this place is unique. Young and not-so-young startupper come and go at all hours of the day. New, often friendly and informal events are held every week, such as the Friday “co-lunch”; to which everyone in the building is invited. The atmosphere is conducive to creativity and the house motto is to think outside the traditional business box. The interior design is appealing, with a streamlined and industrial aesthetic one might find in a San Francisco incubator.

We decided on semi-structured interviews with biographical elements. We selected the following topics for our commitment study:

- Drivers
- Beliefs
- Motivation and Disincentives
- Personal background
- Fears and concerns
- Dreams and successes

The results gathered constitute a body of work we would qualify as qualitative and exploratory. We reached a theoretical saturation point with the 18 interviews. Any more interviews would contribute little to no new insight on the topic of commitment. Finally, we carried out a standard content analysis by transcribing, then analysing them thematically. “In some ways, thematic analysis undoes the singularity of speech, and cuts through topics that recur from one interview to another... therefore, thematic analysis is relevant to applying explanatory models of practices or representations, not actions” (Blanchet, 1992). In order to treat the huge volume of material, we applied Hervé Dumez’s multi-thematic coding method (Dumez, 2013 p.81). With this method, we chose enough assorted topics so we could grid the transcripts without over-structuring the analysis, and then cross-reference them. We focused on the similarities (between several entrepreneurs) and differences (extreme or atypical examples) of each topic. We favoured a sociological or anthropological rather than a lexicographic content analysis for our qualitative approach.

## ► A Black-and-white idea of business

All of the people interviewed have an unusual, almost black-and-white vision of business based on an opposition of (small, agile, free) startups and (inert, layered, wealthy) corporations. This antagonism is deeply rooted, albeit contradictory. In any case, they have chosen their sides and don’t intend on changing their minds. *“We know of which we speak because we worked for a corporation for 10 years... it would be impossible to backtrack now.”*

Their opinions on the size of the companies and number of employees are all the more contradictory in that most of them today have less than 3 employees (sometimes it's more like an associate-founder-volunteer triad). For all of that, the Startup vs. Corporation dichotomy is the cornerstone of what they do. We are going to go over the different reasons that explain this opposition.

## ► The Good (Startup) and the Evil (Corporation)

The startup mentality is different from the ideological neutrality that pervades the sterile world of traditional business. Start-uppers have no qualms about taking sides in a fight of Good vs. Evil. These 21<sup>st</sup> century knights are on the side of good, while corporations have gone to the dark side.

Marie offers an explanation as to when this began. *"10 or 15 years ago, people believed that corporations would protect us... the promise of personal growth happens elsewhere now... one doesn't find meaning in big companies today."* She concludes by saying: *"If I'm a 25-year-old in France today, how can I achieve fulfilment? It's pretty simple, I'll start a business."*

Entrepreneurs are convinced they are on the "right" side, and idealise their model and the adventure. They have good perspective on other matters (like money), and the belief that they are doing good is widely shared and rarely questioned. Even though he still works in the public administration, Mickaël is a convert. He says: *"The ideal company is a small, agile company that aims for excellence and fairness, and gets rid of as much hierarchy as possible."* Anthony left corporate life because of a moral quest. *"I want to be able to always look at myself in the mirror and see a good person. It may be a bit idealistic, but that's what I wanted. I couldn't bear not being consistent with my actions."* He made the right choice, and has had a lot of entrepreneurial success. Today, his company employs more than 30 people. He ends by saying: *"I'm confident, because I know that I am a good person today. It's a little bit of psychotherapy, but it's the truth... My contribution might not be huge, just a small nugget added to something that is bigger than myself, positive, and good for society, and the people around me... I tell myself that we've made a kind of campfire on the beach, which has generated heat and light, and it's nice... I don't want to change the world, I just want people around me to be happy and for us to improve the group together... this is my path, to help the group through individual action... it's a completely political project."* His open ambition doesn't prevent him from keeping a certain humility. *"I'm not a hero, I'm not seeking to be one."*

On the dark side, corporations are the embodiment of evil and tend to infect everything they touch, starting with their own employees. Mickael, who has one foot in a big company and one foot in the startup ecosystem describes the difference. *"I see a lot of employees who have some type of complaint – and I'm probably one of them – about the work environment, paperwork, and injustice they suffer on a day-to-day basis... it's*

very French and might be relative to big companies where employees are not considered as much as they should be.” It’s hard not to draw parallels with Mary Douglas’ book on pollution and taboo (DOUGLAS, 1967). According to the author, what is regarded as dirt is connected to cultural constructs. Do our entrepreneurs make a distinction between the dirty lucre of corporations and the cleanliness of their work as entrepreneurs? By doubting the traditional corporate system, part of capitalism itself is questioned. But far from being a part of a collective political movement, our subjects’ answers are individual, and they apply business tools to reinvent an idea that will maintain the capitalist model for a long time. Luc Boltanski and Eve Chiapello paint a clear picture of this phenomenon in *The New Spirit of Capitalism* (Boltanski & Chiapello, 1999). They argue that capitalism needs criticism in order to flourish.

### ► Family vs. Colleagues

Sophie imagines that she is with family: *“The day I hire employees, I won’t consider them employees but family... it’s already that way with the interns, even if they are only here for 2 months.”* Octave feels the same way. He wants to encourage his employees’ social instincts. *“We’re really a small family, even if a business is not a company. We appreciate each other, respect one another, and do things together. We all went to Cannes; I took the whole team, even the support staff and engineers who never see the light of day [laughs]. We did this so everyone could feel like they had their place and could say ‘I am part of the whole.’”*

Clara took the same path and established a different relationship with her staff of 15. Nevertheless, she has started to see the limits of this strategy, without going so far as to doubt it. She clearly explained: *“It’s a true family, but it’s always a little crappy... sometimes it comes back to slap us in the face because we’re too much like a family, so we have family-type conflicts, which should never happen. But at the same time, it shows how much we care, and how close we all are.”* “Family” comes up often in interviews. Anthony, an experienced entrepreneur recalls: *“I had created my dream job. I created my own ecosystem and family (professional, of course, but still...). It was absolutely perfect.”*

And what does an entrepreneur’s actual family think of this? Are they jealous? Not really, but they usually don’t understand. If my son or daughter is playing, why can’t they find a real job? Loved ones make a distinction between real work and the startup game (or if it’s not perceived as a game, it’s seen as a hobby because it doesn’t very much or at all. For example, we heard:

*“My grandparents asked me when I was going to get a real job...”*

*“The ideal job was in an office, in a company. My parents got scared and tried to dissuade me for a long time, especially my father.”*

*“For a long time, my father didn’t know what a startup was.”*

*For a while, I had to tell my parents that I was getting paid when I wasn’t. They would ask me how much, and I would make up figures off the top of my head.”*

## ► Freedom and servitude

The opposition between startups and corporations translates to a wide breach between freedom on one side and servitude on the other. We can see this perception both with entrepreneurs who worked in big companies and young entrepreneurs who have never known anything other than startups.

Typically, their first concern has to do with working hours. *“Since we are our own bosses, there isn’t really a set schedule,”* Daniel told us barely a minute into the interview. Behind the refusal of an imposed schedule is a conviction that they will be more efficient if they set their own hours. Caroline offers this thought *“That is also why I sometimes have a hard time adapting to the corporate system. You have to be at work every day at the same time, etc. In fact, I find that we aren’t very productive and I realised that I was very productive over short stretches of time, at times that I decided.”*

Their second complaint is about processes. This is not surprising, either. These procedures are intrinsic to big companies, and are an obvious symptom of the entrepreneur’s rejection of corporations. Octave condemns this as being like a type of imposed imprisonment: *“Before, as a salaried worker, I didn’t feel comfortable within the structures and processes.”* He later continued: *“In companies, processes are obviously in place (I even created some in my company, he laughs). In that respect, “I didn’t share that way of working and management style.”* Nevertheless, he acknowledged that his role today meant that he had to create processes.

In the end, establishing procedures in the startup system is a way of admitting failure. If I have to limit my employees, it’s because they haven’t made the project their own. In the ideal company, entrepreneurs only hire “intrapreneurs”, explains Nicolas: *“My dream company is one where employees are happy to come and are very independent. Because I don’t like to reprimand people because the work isn’t finished or isn’t progressing, etc. Google is very good about that. They manage to find ‘self-motivated’ people, as they call them. I really like that idea.”*

Despite his young age, Daniel wants to reimagine social relationships in companies. The paradox for these young bosses is that they find themselves on the decision-maker’s side without having years of experience. They condemn hierarchy as being counterproductive for the structure. *“Once a hierarchy is established, one person can say something and someone else can’t. Obviously, the problem is going to deteriorate because we can’t deal with it head on.”* He ends with a very personal vision that is pretty typical of the dichotomy between freedom and servitude: *“The heart of social*

*relations is there... the very concept of the boss... reflects this distinction – who has the capital and who does not.”* These (often) young entrepreneurs, are already bosses and shareholders, and they are reinventing a sort of Neo-Marxist speech.

## ► The radical entrepreneurial experience

Our entrepreneurs’ commitment can only be understood if they are pictured in the context of a trajectory. One cannot analyse their situation today without accounting for their background – how they got to where they are and important milestones. When it comes to telling their story, they could go on forever. They are trained *storytellers* and do not need to be persuaded to give their narrative. They confide secrets as well as funny anecdotes that serve their sales pitch, such as when Clara shared: *“One day I cornered Jacques-Antoine Grangeon, the founder of Vente-Privée, and asked him ‘can you help me?’”*

The first important – and most obvious – factor in their background is parental and familial influence. We chose to systematically include this topic in our interviews, because it often lays the foundation of the discussion. Many of our interviewees come from fertile entrepreneurial ground. Many are following in their parents’ footsteps, experienced entrepreneurs themselves. Sophie is probably the one who was the most exposed to the entrepreneurial spirit as a child. She explained that she always wanted to do this, and her family often talked business around the dinner table. Frédéric is also fully aware of this: *“My family ingrained the idea of having to fight and go after clients... I come from a hard-working background, you had to have ambition. My father taught me to question everything, and the entrepreneurial, risk-taking side I got from my mom.”*

Is it a question of converting to entrepreneurship? We often raised this question in interviews. The concept of conversion implies abrupt and radical change that can be dated. Rather, it seems that their backgrounds combine several important events that brought about deep long-term changes. It seems that it would be more appropriate to talk about a maturing process.

### **Nathan’s story, a symbol of resilience**

*My company encourages people to exercise. In my case, sport sort of saved my life because I was run over by a car. I spent the next 5 years on crutches and the doctors didn't know if I was going to walk again. So, I was pretty out of shape and I actually walked again because I progressively started using a stationary bike and got up to 14 hours a week. I managed to walk again and I looked back at how far I'd come between the moment when I decided to walk again -well one doesn't really decide- the moment I started to take up sport intensively, every day. I started with 5 minutes and worked my way up bit by bit. I realised how far I'd come and that it wasn't easy. I was motivated to do it and it was almost a question of life or death and I wanted to share that with others who don't necessarily have such serious problems or bigger problems than I did. I wanted to share the vision of going beyond sport, that it doesn't have to be in one go, it should be gradual and can give you so much. That's what drove me.*

**Excerpt of Nathan's Interview**



We would like to bring up a last interesting point about life paths. There was a general sense of real imbalance that came out of the interviews. The entrepreneurs we met are not in a stable, long-lasting frame of mind. François' explanation is particularly germane: *"That's what's so great having faith means believing in the future, and looking back and telling yourself 'I couldn't have done better. Now here I am in front of a wall, let's see what happens. Not having regrets is very empowering. If I fail in the end, it will be a great lesson'."* Fabrice and Jean-Baptiste have a theory about offensive imbalance. *"To not have a say [if it works or not] is a seemingly dangerous stance, but it's the only way it can work."* Their situation will invariably change in the coming weeks or months. Will they continue their adventure? Will they have to close shop? Will they manage to raise funds the next time around? Will they have to change tack again? Nicolas best described this imbalance. *"It's like the tennis ball when it hits the top of the net. It looks like it's going to fall on the wrong side, but there is a chance that it surprises us and falls on the good side."* In future studies, it seems crucial to interview these subjects again so as to not limit ourselves to a snapshot in time, rather to account for their trajectory and the challenges they will have to overcome.

### ► Love letter: work, family, startup

*I had created my dream job. I created my ecosystem and my family (professional family, that is, but still), which were absolutely perfect.*

**Excerpt of Anthony's Interview**

Another dimension of their entrepreneurial experience is the very strong emotional – almost passionate – bond that connects them to their commitment. This enthusiasm partly explains why we heard so few complaints from them, even about the more difficult aspects of their field. Sophie is categorical when she says: *"I believe that this is my calling. I love what I do. I love managing a team. I love achieving set goals... I go to work because I enjoy it. I've never woken up in the morning and said to myself 'I don't want to go in to work' I don't really think anything could discourage me. There are highs and lows, obviously, but I have never doubted what I do and why I do it."* Edouard goes even further by saying: *"I kind of fell into entrepreneurship by accident... but the only thing I want is to never lose this type of rhythm and interaction with my teams."* Greek philosophers (like Aristotle and Plato) wrote of *hubris* when a hero started to take himself for a God when he got carried away by their personal successes. It's an extreme comparison, but we can't help but draw parallels. They imagine themselves to be creators, like Daniel, who says: *"Some people dream of becoming an astronaut. I dream of starting a company. It's sort of my work of art. I think it's very similar to an artist who dreams of creating art. In my opinion, the word 'creator' in 'business creator' is more important."* Does this make entrepreneurs the miracle makers of modern times?

There is an undeniable share of narcissism in these fantasies. This narcissism is sustained by the image that society reflects of them. Entrepreneurs have never been so well regarded (while at the same time, there is a general wariness towards traditional institutions-including business and the economy) in the media and collective imagination. This convergence could automatically cause a feeling of invulnerability, but actually it's a more subtle reaction. They are well aware of their vulnerability and likelihood of failure. Their mentors remind them over and over; the rates of failure are well known, and research on entrepreneurship have widely propagated the idea (S. A. Shane, 2003). Paradoxically though, their feeling of invulnerability lies in their own capacity for resilience. They change, experiment, act incrementally, and multiply prototypes and soft launches. Here, trajectory is more important than the final destination, and it seems like it cannot be stopped.

### ► Success – I am successful, therefore I am

*I have friends who work in the fast-food industry and I don't understand them. I don't feel like they are trying to get ahead.*

**Excerpt of Sophie's Interview**

Success, specifically the hope of success is a main driver of entrepreneurs' commitment. Going after success is closely linked to entrepreneurial nature. As we have seen, success does not come in shades of grey. Victory is total, or failure destroys you. Clara told us solemnly: *"Many of my friends tried to create startups and failed. It's awful, they fall into depression. Their product was great, but it didn't find a market."* We later learned that the failed entrepreneurs never really got over their failure, even those who overcame depression are scarred by the experience.

Anthony, who identifies directly with his project also feels a need for recognition *"[It's] a sort of visceral need... to exist. If I do or make something, it's myself. It's ego."* The project's success hinges on recognising the person. Clara has had great commercial success for a while. She developed a product that reached almost 400,000 people at 26. *"When a startup works, we are spotlighted all day. Our face is in the media, which says we're great. Users write us all day to tell us that we changed their lives. People told me 'Please don't stop or I'll kill myself'... I'm overwhelmed with everyone's recognition. It's a real strength. There is an actual joke going around that likens entrepreneurs to rock stars. It's been 5 years. It's a trend, you have to keep that in mind."* The recognition gives her energy that feeds and renews her commitment. When her mother asked: *"If someone wrote your biography, what would the title be?"*, Clara answered: *"Higher"*, without missing a beat. Nevertheless, she seems to be aware of the fleeting nature of this success and the recognitions that comes with it. For Frédéric, the quest for success plays out at the same level. *"The goal is to be Number One in the world... there is no*

*small ambition, the ambition is huge.” Ali feels the same way. He says: “We want to be the best at what we do and to be a recognised brand.” This can also include a quest for parental recognition, generally when they are not entrepreneurs themselves. Clara choked up when she said “At one point I was in magazines like *Télérama*, *Inrockuptibles*, and *Nouvel Observateur*. Things my parents read, left-leaning magazines that professors like. I had made it.”*

Nevertheless, there is often more failure than success. Our subjects are well aware of this, as Ali explains: “You tell yourself, ‘Why not me?’, but you know that there are going to be a lot of conscripts and very few will go all the way.” Caroline comes across many entrepreneurial projects in her internship. She fully agrees with Ali: “*Launching startups is very trendy at the moment, but in reality about 90% of startups fail; so you have to be able to bounce back and deal with failure. And I think that it’s hard for women, especially young women.*”

We noticed a last crucial point about success, which is that it is based on belief. We observed that in web platforms, success is usually determined by the number of users instead of actual turnover. So often, success is built up: entrepreneurs want to believe, users like to believe, investors are caught up in an escalation of commitment after believing, and the media contribute to making everyone believe in success. This dovetails off of what Nathalie Luca found in her analysis of multi-level marketing; in which belief rests on the junction of a desire to “make” believe on the one hand, and a desire to “believe”, or “dream” on the other. (Luca, 2012). The most striking example is that of startup employees who sometimes accept no pay in exchange for business creator shares. (Askenazi, 2015). Are they paid in Monopoly money?

### **Success is a drug**

*Our product is going viral. Yesterday or the day before we saw on Twitter... it’s overwhelming. You feel a little constrained in that there is nothing really you can do about the media frenzy and buzz on social media... at the same time, it’s an interesting feeling. You tell yourself “two and a half years ago, we predicted right. There is a need for this product” When you’re an entrepreneur, you often say that once you have had a taste of it, it’s hard to be demotivated. Often, you see entrepreneurs become serial entrepreneurs. I don’t know if that’s going to happen to me. I don’t think I will become unmotivated one day.*

**Excerpt of Daniel’s Interview**

### **► Making a new world**

*An entrepreneur is someone [laughs] who struggles, who does everything they can to get ahead... who wants to change the world!*

**Excerpt of Sophie’s Interview**

If our entrepreneurs are so committed and willing to make sacrifices for their project, it's above all because they feel that they are making a new world. We discussed this point when we asked them about their conception of business. They pit startups (good) against corporations (evil); but they are also players in this moral dilemma and feel invested in this ethical mission.

Many of them want to have a positive impact on the world. For example, Marie wants *"A better society, truly. I'm obsessed with and inspired by using my time on this Earth to make this world a better place for our kids. It has been the foundation of my actions for a long time."* We expect to hear this type of speech from people who work in humanitarian fields, but it's more surprising to hear it in the business world; where it is actually a widely held belief. Anthony admits that *"My contribution is not necessarily huge, it might just be a small part of a whole that is bigger than me – something positive and good for society and the people around me."* Ali adds: *"What motivates me – and this might make you smile – is changing the world... I would like to have an impact on the world in which we live."*

Thus, our entrepreneurs feel useful. They have the ability to change the lives of their clients or employees. This term comes up regularly in interviews, like with Octave: *"What motivates me... is to see that we are useful and what we are doing helps people."* Marie feels: *"I should be able to act in such a way as to be useful and relevant in a better and more sustainable world."* That is probably what helps Mikhail and François (whose startups seem to be having a hard time) maintain a high level of commitment. Mikhail commented: *"I can't commit to a project when there is not a higher value... I want to create something new. I listen or see a need... helping others to be gettter and go faster."* François added: *"I am driven by working for a higher cause; to be a part of a movement and to give it impetus by working every day."* This notion of "a higher cause" is essential to understanding entrepreneurial commitment. Since they are contributing to something that is larger than themselves, their person and the sacrifices they make are consequential in the end.

### **Vain Desires**

*What motivates me is the desire to change many things that I have considered unfair since I was a little boy. Becoming an entrepreneur... gives you a certain amount of power to help the society in which we were born... It's not a political project because... politics is a power struggle, a struggle for power. For me, entrepreneurship is a more noble way of contributing to society. If you ask a lot of them, of course money is important, but beyond money, I think that many want social recognition through the victory of the startup. Personally, I'm not really interested in that, it's a bit of a vain desire... the most important thing, what drives me every day is the contribution to society.*

*Entrepreneurs... really believe that what they are doing will lead to a better future... Entrepreneurs really believe that this race to innovation will create the economy of tomorrow.*

*What I want is to contribute to society. These days, I feel like we have hit the nail on the head, we have had international press, etc. It's very satisfying, I feel like I am doing something that will make a difference in the everyday life of (for the moment) thousands of people- it's huge. It's really a first dream that has become a reality.*

*Ambition should not be confused with vain desire... earning money, being a millionaire, those are vain desires. Changing society and the way we get our energy, that's not a vain desire. My ambition is to change things without it vain.*

**Excerpt of Daniel's Interview**

## ► Conclusion

There has been an unprecedented boom in entrepreneurship in recent years. Our research focused on the commitment dynamic of people who create businesses. Thanks to the wealth of material and the depth of the field, we were able to understand the commitment of these entrepreneurs through 2 perspectives:

- Their conception of business We saw that it was there was an almost black and white, irreconcilable opposition between startups and corporations. This opposition fuels them. They see startups as a benevolent agent through which they can flourish, have fun, find a family, and work freely and nimbly. Conversely, corporations are a force of evil that saps creativity, exploits, and constricts in an inert atmosphere where power is at play.
- Their personal experience This is romanticised, chivalrous, and is not exempt from moral quandaries. Our subjects' experience drives their commitment. It includes risk-taking and emotional ups and downs, including acute worry. They feel they are creators of a new world and have political ambition for social change. They worship new idols. Finally, they seem to be caught up in an escalating spiral of commitment.

For this young generation, entrepreneurship has made them fall back in love with work and business. While free-market globalisation has put an end to great ideologies and the financialization of the economy has stripped companies of their humanity, these entrepreneurs are re-inventing work. They are leading a fundamentally political project. Our subjects want to change the world, and that begins with changing their professional activity. They all have a feeling of "working towards something that is greater than themselves" and are chasing an ideal. It is a sort of radicalisation, and it could be interesting to compare it with drifts into sectarianism or religious extremism. For our cohort of entrepreneurs, their political calling is much more important than economic considerations. Personal gain is still a driver of commitment, but it is not the main one.

This new form of commitment rests in large part on shared beliefs. Entrepreneurs wholeheartedly believe in their project, their investors believe in their future success and their (sometimes unpaid) employees want to believe in a bright future. Their commitment is constantly renewed by their own beliefs and their fierce desire to make people believe. ▀

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# START-UPS FROM “INCUBATORS-ACCELERATORS”: FROM SPEED TO PRODUCT-LESS BUSINESSES?

by *François Henry*

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**T**he relationship between technical and technological development on the one hand, and its inclusion in society, particularly in the sphere of work, on the other, has always been debated. Alfred Sauvy (1981, p. 240) spoke in his time of “spillover” to illustrate the idea that computer development was the source of many positive economic results, such as job creation.

However, relatively old publications, as well as very recent ones, question the idea of a digital revolution necessarily correlated with efficiency and optimization. Robert Solow, winner of the Nobel Prize in Economic Sciences in 1987, and Robert Gordon, theorist of “secular stagnation” (2016), have already questioned their efficiency from an economic point of view: perhaps, in the end, the enormous technological investments will have created little value compared to their amounts.

Moreover, according to Muzergues (2018), this first quarter of the 21<sup>st</sup> century is the scene of a reconfiguration of social classes, each with their own codes and favourite sectors of activity. Distinct from the class of “millennials”, the “creative class” would correspond to the population of the “start-up nation”. New, urban, ultra-integrated in globalization, it has adopted a very flexible vision of work and therefore of the world.

The creative class can be quite broad, encompassing not only artists, intellectuals or architects, but also “creative professionals” (Florida, 2003, p. 294) who work in the high-tech, innovation, financial services, management or health sectors. The members of this creative class are found and aggregated in well-defined geographical areas. As a result, it is not uncommon for a large city to have several “creative centres” – another name for incubators<sup>1</sup> – dedicated to innovation and industry growth.

The director of one of the incubators describes the purpose of the incubator in the following word:

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1. An incubator is a support structure for start-up projects where entrepreneurs can share their experiences and help each other. For more information, see Degroof (2015).



*This incubator is dedicated to develop and give the possibility to everyone to have the desire to create a company in the sector of new technologies. So we used the Internet at the time, in a region that was suffering from deindustrialization, to ensure that the Internet was a lever, or at least the digital economy was a lever for the digital transformation of the territory. [...] The local authorities have invested money [...] to create a place that is a place of transformation [...] and to welcome start-ups that are creating companies in the digital sector. And the digital transformation, it is done simply by transforming the population and giving them the opportunity to become entrepreneurs or to be employees in technology companies (an incubator director)<sup>2</sup>.*

This type of discourse announces nothing less than transforming the population, and thus has an undeniable political and social dimension.

Therefore, if the diffusion of the start-up and the beliefs attached to it do not represent only, or mainly, a new form of economy, but promise a certain precise and defined future of work, economy and society, investigating the content of its “spirit” constitutes a relevant research axis, with current stakes. Yet, the academic literature is, all in all, still quite virgin of publications on this subject (Buquet, Luca & Bouilloud, 2017). More precisely, we identify the need to provide an academic study that investigates this subject by approaching it as closely as possible, which investigates at the heart of incubators by meeting with start-up entrepreneur.

How do incubators look like? Through their work, what world do digital start-up leaders want to shape? To answer these questions, we will proceed in stages.

The text will take the following form. First, we will focus on incubators, which are both “accelerators” and training institutes. In a second step, we will compare the relationship to time and the relationship to work. Finally, we will present the theoretical and managerial implications of this type of contemporary sense of work. This will be an opportunity to think about work in terms of “the effect that the produced product produces in the world”.

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2. This verbatim is a transcript of an interview with an incubator director, available on YouTube. The video is in the possession of the author of this chapter.

## A qualitative methodology to analyze 27 leaders

Three criteria define a start-up (Ripsas & Tröger, 2015, p. 12; Ripsas, Schaper & Tröger, 2016, p. 4). The start-up must be less than ten years old, use an innovative technology or business model, have rapid and significant growth in revenue or headcount. Moreover, with the exception of five of them, the start-up entrepreneur in our sample are all developing their project in the context of an incubator. With the exception of two Parisians, they come from the same region, making the sample homogeneous. Most of the start-up entrepreneurs are between 26 and 40 years old, have degrees from engineering or business schools, and have already worked for several years in large companies. The youngest is twenty-six, the oldest fifty-six. With a median duration of 1 hour and 37 minutes, twenty-seven interviews were conducted in 2017 and early 2018 with leaders of digital start-ups and incubators in a major metropolis. They were transcribed in full, then coded in a top-down and bottom-up manner.

### I ► Incubators: an arsenal of specific training

Incubators are presented with many figures that reflect the desire to ensure that a significant number of start-ups are created. In France, 9400 start-ups are listed by the FrenchTech accreditation<sup>3</sup>. Training and support programs exist with the aim of creating companies.

#### 1. From “incubators” to “accelerators”

Thanks to Exa<sup>4</sup>, start-up entrepreneur or future managers have access to a wide range of training programs related to both the creation of start-ups and the mastery of “tech”. Several training programs are dedicated to business creation.

The training named Le Wagon allows knowing the basics of coding so that every potential entrepreneur is able to create his website. An important point to note is that these courses are always short and intensive. Their presentation emphasizes their short duration. Thus, Le Wagon allows you to learn to code in nine weeks<sup>5</sup>. Some managers even go to a major American university for two weeks to train with the “world champions” (Julien<sup>6</sup>, 42 years old) of entrepreneurship. One of the incubator’s programs consists in having “eighty days to create your own company” (Corentin, 31). These trainings are like intensive training camps. The first program, the “boot camp”, consists of “two pre-selection stages”. It is a test to pass in order to enter the program, while a computer coding training is presented as such: “*Our boot camp is structured*

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3. See the following link:

[https://www.entreprises.gouv.fr/files/files/directions\\_services/agence-du-numerique/rapport-activite-Agence-du-Numerique.pdf](https://www.entreprises.gouv.fr/files/files/directions_services/agence-du-numerique/rapport-activite-Agence-du-Numerique.pdf) by French Ministry of the Economy and Finance, accessed February 12, 2020, page 4.

4. For discretion, we have renamed this incubator by the name Exa.

5. See the cover of the official training presentation brochure: “*Learn to code in 9 weeks*”. The brochure is available at this link, accessed on August 21, 2018: <https://www.lewagon.com/program>.

6. All leaders are presented with pseudonym.

in 3 core phases. Our students also have to complete a preparation work to be ready for the 9 week boot camp”<sup>7</sup>. These trainings represent the materialised fusion of the themes presented throughout our research results: speed, learning and survival.

From the vocabulary used to describe these courses, a new type of enterprise is discernible. Alongside the so-called “traditional” companies<sup>8</sup>, a new category of companies is emerging: “accelerated”<sup>9</sup> and “innovative companies”<sup>10</sup>. Innovation is so fast that it is pushing companies themselves to be accelerated. Acceleration brings back the theme of speed, which is linked to learning and training.

Training helps to “shape one’s state of mind” so as to develop an “entrepreneurial life” within an “entrepreneurial community”. Accompanied by an “accelerator manager”, participants are promised that beyond the project, “the payoff will be exceptional”.

Ten managers mention incubators other than those in the Lille metropolis, mentioned above. Romain (41) is a “mentor at Numa”<sup>11</sup>. It is “the biggest accelerator in France” (Marco, 34) and has an “international’ scope”. He helps them expand their networks. Marco explains that if he sends them an email for “any problem”, he quickly receives an answer from the incubator: “it gets going pretty quickly”.

The Family is the most widely mentioned incubator. For example, Hugues (32) explains that he regularly watches “videos from NuMa, The Family, Y Combinator”<sup>12</sup>. Simon (27), Emmanuel (34) and Eloi (42) mentioned the Parisian incubator The Family during our interviews. Eloi explains that he regularly keeps up to date with “structures like The Family for example, in Paris, which is an accelerator, which is one of the few French accelerators I had heard of when I was in San Francisco”.

Emmanuel explains that The Family is, according to him, “not really an incubator”, but “they do support the start-ups they follow and invest in”. For example, Marco (34) explains that Numa Accelerate owns 2.7% of his start-up. This incubator is also physically located in “Berlin and London”:

*The Family, which is quite multifaceted, is both an investment company, which invests in start-ups, and an entrepreneurial education company, as well as an accelerator-incubator, which supports the start-ups in their portfolio (Emmanuel, 34).*

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7. Official presentation brochure, page 9.

8. Confidential website, accessed August 21, 2018.

9. *Ibid.*

10. *Ibid.*

11. The name NuMa is inspired by the two French words “NUMérique” and “huMAin” as explained by Buquet, Luca, and Bouilloud (2017, p. 94) and the homepage of the NUMA website: “visionary company whose name combines the French words numérique meaning digital and humain meaning human – is the intersection of digital + people”.

12. These are not pseudonyms, but the real names of the incubators. Since they are particularly well known and the managers in our sample do not come from them, we consider that it is not necessary to anonymise them here.

But not all incubators are unanimous and are sometimes criticised by leaders in our sample for different reasons. The lure of profit, the results, the relevance of decisions and governance are all at issue.

Eloi (42) insists that incubators are “*on volume metrics*” which can prevent them from measuring or “*quantifying*” the relevance of a “*greener*”, “*nicer*” or “*more enjoyable*” product.

## **2. A predominant statistical vision: the start-up as a unit of account**

The incubator recovers young executives who were suffocating in large groups. Once out of these groups, these young executives are in need of a framework. Having “*lost five or six years*” in large groups, “*asleep*”, “*in a lethargic state*”, in a state of “*survival*”, these start-up entrepreneurs, most of the time graduates of engineering or business schools, rediscover their full capacities. While an employee uses only “*2% or 5%*” of his capacities, these are fully put to use in the incubator. At Exa, the start-up entrepreneur is in the “*heart of the reactor*” where boot camps are offered for new recruits. Indeed, he seeks to train himself to exploit his abilities, and to acquire a method aiming at “*deconstructing his knowledge*” to “*learn to unlearn*” and *in fine* “*learn to learn*”. During a module of the HEC Entrepreneurs master’s degree, the start-up entrepreneur will do an internship with cadets of the Ecole Navale de Brest (the French naval academy) to “*learn what it is to be a leader and to lead a team in a time of crisis for example, and to make the analogy between a ship under fire in a storm versus a start-up*”. The incubator is an accelerator that shapes a new type of business. Alongside companies that can be described as “*traditional*”, these are “*accelerated*” and “*innovative*” companies. The analysis of the interviews highlighted the major theme of learning. Observation of events and the Exa website corroborates these findings. For example, let’s look at the presentation of one of the training courses on the Exa website:

*Considered the leading start-up accelerator in France and the top 10 in Europe, Exa has supported more than 300 start-ups in their development, within more than 80,000 m<sup>2</sup> entirely dedicated to this activity. With more than a hundred experts at the service of the innovative projects of numerous companies, Exa offers young companies support in the development of their business<sup>13</sup>.*

This short presentation text is saturated with numbers. Thus, in order, the *first* accelerator is mentioned, which is one of the “*top 10*” – an expression derived from sports commentaries – thanks to the 300 *start-ups* it supports, 80,000 m<sup>2</sup>, *a hundred* or so experts – and even more – and *numerous companies*. The courses are presented with *metrics*. Here are some of the web pages that present a training program.

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13. Official incubator website, accessed August 21, 2018.

**FIGURE 1 ► Part of the presentation page of one of Exa's training programmes<sup>14</sup>**



(Metrics: The numbers speak for themselves! 300+ projects supported since 2009 / 170 M€ of funds raised / 110 businesses created / 50+ partners and mentors).

The orders of magnitude and the amounts displayed in this way cannot fail to impress. The number of start-ups and the amount of total funds raised are put on the same level. Just as the unit of account for the funds raised is the euro – one euro – the unit of account used to evaluate the incubator's activity is, above all, the 'accelerated' company itself, in addition to the rate of start-ups that survive and the number of "Partners & Mentors". Thus, the start-up appears as a *unit of account*, without its nature and the effect of its activity in the world being characterised. This saturation of numbers shows the way in which success is measured. It is primarily about creating start-ups and raising funds. Success is measured by quantitative indicators that are reminiscent of the financialisation of companies (Gomez, 2013), governance by numbers (Supiot, 2017), the digitalisation of the world (Rey, 2016), or the tyranny of metrics (Muller, 2018). Ultimately, what is Exa if not an important training ground? No less than six programmes are offered by this incubator. The constant use of the superlative is similar to that of competition, sport and conquest, with a general and maximum mobilisation of all the resources available to the start-up entrepreneur. The presentation of the incubator's activity and its training programmes is, after all, similar to the most classic reporting. The performance of the incubator is communicated through various slogans and measures. The hypnotizingly repeated statistics are, presumably, intended to impress, legitimize, and win over as many people as possible to the institution that Exa has become. In short, such an avalanche of numbers may reflect a utilitarian relationship to knowledge, intended to allow for practical, efficient execution, easily communicable through numbers. The statistical vision of the incubator's activity loses sight of the reality of the work done by the start-ups and prevents us from seeing the very nature of what is ultimately produced and delivered to

14. Confidential website, accessed September 5, 2018.

the world. Consequently, no debate is allowed and made possible on the nature of what is produced. Olivier Rey, in his book *“Quand le monde s’est fait nombre”* (2016), delves into the implications that the development of statistics has had throughout history.

*In order to avoid political controversy in its midst, it is stated that “the Statistical Society<sup>15</sup> will hold as a first and absolutely essential rule of its operation that all opinions shall be excluded from its work and publications, in order to confine its attention rigorously to facts and, as far as possible, to facts capable of being expressed by numbers and organised in tables.” [...] statisticians proclaimed that their job was to collect and order data, which would be for others to interpret, for theoretical or political purposes* (Rey, 2016, p. 110).

As far as this chapter is concerned, the “facts” are those mentioned above, namely, mainly the number of companies created and the overall amount of funds raised. Considering that it is against these criteria that the incubator and its trainings are to be evaluated, the nature of the activity and the social utility would *de facto* be considered as “opinions” and interpretations. In this framework, the validity of a project is not to be formulated according to a collective reflection that would pronounce on the desirability or not of a good or a service, but according to the investors who, by the very fact of their investment and its amount, pronounce on this subject. For a start-up, raising funds means having convinced investors and therefore acquiring legitimacy. Opinion about a start-up is favourable when it raises funds, unfavourable when it does not.

Continuing his reflection, the mathematician and philosopher Olivier Rey summons the economist Jean-Baptiste Say. As early as 1803, Say emphasised the purely descriptive character of statistics, which cannot indicate the origin and consequences of the facts it records<sup>16</sup>. The French economist warned against arguments that have nothing to show but statistics’, because ‘with tables one can prove anything, as long as there are a lot of figures. Certain results, presented in the sole mode of statistics, are put forward at regular intervals, in the same way as the most banal reporting. This creates a time pressure which has an effect on the nature of the work.

## **II ► Relationship to time – Relationship to work**

### **1. Work as sport and speed**

The results show that the relationship with time is often approached from the angle of speed, experience and sensation, similar to those observed in the field of sport.

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15. This is the Royal Statistical Society of London. The passage in inverted commas comes from the report of the British Association which announces the creation of the aforesaid Society. The source provided by Olivier Rey is: *“Prospectus of the objects and Plan of the Statistical Society of London”*, in Report of the *Third Meeting of the British Association for the Advancement of Science*; Held at Cambridge in 1833, London, John Murray, 1834, p. 492.

16. *Cours complet d’économie politique pratique*, part 9, chapter II : “De l’imperfection des ouvrages de statistique”, pp. 537-538.

Masking a lack of collective purpose that is present with other start-up entrepreneurs, the “what” is relativised in the sense that it is not the ultimate goal of the company:

*If I say that, it's because for me too, this start-up is a learning tool. I actually see it like that. And at all times, I maximise my learning, my return on investment. [...] Well, learning is a lot of fun. [...] What we have done since the beginning is that we have agreed to establish a world leader, because also in relation to our personal aspirations, and my aspirations are to learn the most. I am actually more attached to my job as an entrepreneur and company creator than to this company. [...]*

*I think, anyway, it helps me to say to myself that this is a job. When you're a salesman, you sometimes lose contracts. When you're an entrepreneur, sometimes you miss out on boxes and that's the game. The trick is not to miss too many (Karl, 26).*

Work can be seen as an entertaining occupation to fill time and avoid boredom. Experienced as a simple occupation, work becomes rhythmic and oriented by a succession of objectives. Here is the testimony of Arthur (43) who earns one hundred and fifty thousand euros per year, and for whom the relationship to work becomes analogous to the practice of sport:

*As I was saying, success stories have a sweet taste that doesn't last very long. [...] It lasts a few minutes. It doesn't last much longer. And it's just a step. That is to say, we have set ourselves a goal, we have achieved something. What is the next step? What's the next challenge? What's the next one? That's the problem; you can never get enough of success. So, in reality, you forget about it pretty quickly. [...]*

*And it's a kind of adrenaline that is quite amazing. But I think it's the same for a sportsman when he wins a competition. It's a whole goal and it's the completion of a goal, but it lasts a few seconds. And then you move on to the next thing. A new goal. We are nourished by our goals; we are not nourished by our successes. The challenge. [...]*

**Researcher:**

***For you, what is the meaning of work?***

**Leader:**

*I was going to say something hard: not to think about anything else. That's a bit like it. I need to work, because if I don't work, I get bored, but worse than that, I get depressed. So the meaning of work is that I need to work. I need to feel that I am producing something. Otherwise, life has no meaning. No work, no meaning. Working is the meaning of my life.*

*I find it hard to see myself as something passive. It's not possible for me to be anything other than active. That is to say, I can't exist if I don't want to produce. And to produce, you have to work (Arthur, 43).*

The relationship to work is described with terms similar to those used to comment on sport: “goals,” “challenge,” “competition,” and “previous successes”. In the world of sport, the objectives have no other purpose than that set by the sport itself. However, the objective is sufficient in itself and says nothing about the purpose (Guéry, 2015). The objective to be achieved becomes a challenge to be met, independently of other criteria outside the sport’s frame of reference. In the sample of this research, Eloi (42) drew a parallel between his attraction to digital technology and innovation, as ‘a sportsman in his culture’: *“The fact that I want to be ahead. When there are records, to break them.”* In *The Protestant Ethic and the Spirit of Capitalism*, Max Weber had detected this tendency a century earlier:

*In the field of its highest development, in the United States, the pursuit of wealth, stripped of its religious and ethical meaning, tends to become associated with purely mundane passions, which often actually give it the character of sport* (Weber, 2001, p. 124).

The effort of the activity would give way to a sporting frenzy. The lack of purpose leads to a lack of orientation of work, which is seen as an activity of personal achievement, capable of giving pleasure and avoiding boredom.

## **2. Relationship to time: the relationship between speed and work content**

In a context where the speed of change produces anxiety, the training courses offered by incubators-accelerators seem to be a way to escape from uncertainty and insecurity:

*Acceleration of social change [...] leads to an existential feeling of standing on slipping slopes, the “slipping slope syndrome.” As a result of the “contraction of the present,” in a dynamic society almost all one’s stock of knowledge and property is constantly threatened with obsolescence* (Rosa, 2013, p. 134).

There is thus a link between learning and speed. Fourteen leaders on our panel spoke about the relationship between time and speed. The link between the relationship to time and the relationship to work concerns the relationship between speed and attention to the content of work. This has implications for the short, medium and long term.

Table 1 compares the discourses of two managers in relation to time on the one hand and work on the other.



**TABLE 1 ► The link between the relationship to time and the relationship to work: two types of discourse**

	Relationship to time	Relationship to work
<b>Alexandre</b> (29)	“We are very attached to making things evolve, as quickly as possible. [...] For me, time is a weapon, or at least a tool. [...] I’m looking forward to all that. I live for it, well I live to make it go faster”.	“Actually, releasing a new sheet, a pillowcase, that’s innovation. Of course I’d rather release a new phone, a new thing; I don’t care (sic). In fact, I don’t care about the ‘what’”.
<b>Achille</b> (38)	“A start-up today that tries to develop active ingredients in the world of health, it’s ten or fifteen years of development and validation. [...] Today, we are on what we call long cycles, and innovation takes five to seven years to make it”.	“We develop innovations that have a strong societal impact. We develop innovations that really have a public interest, a very strong societal impact. [...] This is also a driving force for us, we work for a sovereign good, and there is a real idea of working for the general interest”.

This table shows that between the two leaders, both the relationship to time and the relationship to work vary. The relationship to time that seeks speed and the fastest possible change is linked to a sense of work oriented towards innovation, the latter being a goal in itself, independently of the object to which it is applied: *“In fact, I don’t care about the ‘what’”*. The leader whose relationship to time accepts the long term and the slowness of scientific research wishes to achieve innovations in the service of the *“general interest”*.

Table 2 repeats Table 1, presenting not verbatims, but a more conceptual description of what is expressed in the verbatim. When the relationship to time is one of speed and time trial, the “what” – in other words the object to which the work is applied – is evacuated. The relationship to work that is based on attention and patience, and that is part of a long-term project, places particular importance on the object produced, which is intended to serve a *“sovereign good”*.

TABLE 2 ► The relationship between the speed and the “what”

	Relationship to time	Relationship to work
<b>Alexandre</b> (29)	Speed, time trial	Evacuation of the “what”
<b>Achille</b> (38)	Attention, patience, long cycles	Importance of the “what” for a “sovereign good”

Attention to content is inversely related to perceived speed. The comparison presented by these tables does not show a large-scale statistical correlation – even if our fieldwork can show that the words of other managers support this confirmation – but the relationship presented here between the relationship to time and the relationship to the object produced by the work presents a dynamic in action.

According to Rosa (2013), the major experience of modernity is that of acceleration, of a relationship to time that is constantly accelerating.

The evolution of this relationship to time modifies the relationship of man to the elements of the world around him in three types of manifestation. The acceleration of transport modifies the relationship to space, the acceleration of communication modifies the relationship to society, and the acceleration of production modifies the relationship to things (Rosa, 2013, p. 104).

Traditionally, it is *through* the product it delivers that the company endures and exists. The product delivered is the primary cause of the worker’s activity, the company a secondary cause. However, the comments of some start-up entrepreneurs show that this primary cause is no longer as important. The aim of the company is less the product it delivers than the company itself. This observation is not without implications for the world ultimately produced by work.

### III ► Theoretical and managerial implications

#### 1. Invisible in representations:

##### “the effect that the produced product produces”

When the product produced and delivered to the world by work is not discussed, we can speak of *invisible work*, to use the words of Gomez (2013) but with a different meaning, or of an *economy without content*.

The thesis presented in this article is that, *in fine*, it is incomplete to talk about the meaning of work without talking about the content produced by the company and the effect made to the world by the product. In other words, to talk about the meaning of

work, it is necessary to talk about the effect that the product – in the sense of the good or service – produced – by the company and the worker – produces in the world – in the social, economic, ecological and energetic sense, in the short, medium and long term. Work transforms the world, is not disconnected from real life and the world in which people live. It can embellish or affect this world. The trace it leaves on it can be desirable or undesirable. Work cannot be imagined by focusing only on the “how”, but also and first of all on the “what” and the world that this leaves. Without this focus, how can we be surprised by the current ecological crisis? The existence in the middle of the oceans of large areas where plastic debris is concentrated (Monsaingeon, 2017, p. 123) is the result of attention to the means and processes of production independently of the work of imagining and projecting the world ultimately produced. The negative social, ecological and economic consequences are due to a misunderstanding of work. In reality, work is at the heart of the ecological transition. At a time when development wants to be *sustainable*, thinking about work necessarily implies thinking about it in time and even, not just from the narrative in vogue where the objects are produced, but from a counter-narrative from “the world (Bachir Diagne, 2019, p. 63) transformed and created by its objects.

## **2. The thesis and the way forward**

Consequently, it is less important to defend or criticise, with postures that often seem ideological, the “freedom to undertake” than to discuss the “freedom to undertake *what*”. In conclusion, we believe that a rich and comprehensive discourse on the meaning of work cannot fail to mention the product, made by the work and the company, and what it does to the world. It does not seem possible to talk about the meaning of work without talking about the product externalised by the company and what it does to the world. Through deliberation, it is a question of regaining control over the global landscape finally produced, by detaching oneself from a single growth of means (Rey, 2015, p. 40) which concretises the hypothesis of non-finality (Bauman, 2017).

The hypertrophy of operation can obscure the origin and destiny of the company, the world that is ultimately produced, considered as a space onto which the production apparatus pours its production without interruption: following the concept of the “*start-up nation*”.

(Senor & Singer, 2011), it is a question of being “overdependent on export markets”<sup>17</sup> (p. 176). Yet it seems necessary, if not salutary, to stop and move forward by giving pride of place to the stage of thinking about work, without which permanent acceleration (Rosa, 2013) leads to “petrification” (p. 337) and “lightning immobilisation” (p. 363). In this configuration, the worker is condemned to follow only processes. As a result, he is powerless to build a world characterised by sustainability (Arendt, 1958).

Engaging in the ecological transition implies taking as a unit of account not the company, but the world realised by all the products that companies produce. Work cannot be based solely on the production of companies, which is itself based, as we have seen in some of the interview extracts, on highly subjective fragments of meaning. Basing the meaning of work solely on subjective perceptions does not constitute a common aim capable of thinking about work in the hoped-for world, and invites us to return to the intelligence of work, in the sense of Gomez (2016).

Finally, what can we think of “incubator-accelerators”? At the close of this chapter, it seems quite useful to propose structures that make it possible to support meaningful projects, in particular by avoiding unnecessary time wasting due to numerous parameters. Some projects deserve to be supported and encouraged. At the same time, empirical research has shown that when speed is a goal in itself, the meaning of work does not unfold in all its richness but is reduced to Pascalian entertainment or Weberian sport, thus omitting the temporal aspect that fosters a real and fruitful contribution to the world.

However, we have observed that certain approaches, in a framework where intelligence and will meet, combine meaning and work in a fruitful way. We do not intend to be fatalistic, because there are indeed ways of inspiring and implementing them. At a time of disruption, which is simply a new version of programmed obsolescence, it is a question of rediscovering the work, the taste for “work well done” and the love of a lasting masterpiece.

Furthermore, the implementation of training in work and management which leads, at a time when development is intended to be *sustainable*, to *thinking about work in time* could lead to the fruitful reintroduction of time into the economy and companies. ■

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17. More broadly, here is the entire paragraph from which this phrase is taken in Senor and Singer's *Start-Up Nation: the Story of Israel's Economic Miracle* (2011, p. 176): “In addition to an overdependence on global venture capital, Israeli companies are also overdependent on export markets. Over half of Israel's GDP comes from exports to Europe, North America, and Asia. When those economies slow down or collapse, Israeli start-ups have fewer customers. Because of the Arab boycott, Israel does not have access to most regional markets. And the domestic market is far too small to serve as a substitute.” The split between production and consumption, between the development of a project that wants to be innovative and thinking about the world inundated by the products produced could not be better described. These words resonate with the words of Romano Guardini in *Das Ende der Neuzeit* (p. 63), published in English under the title *The End of the Modern World* (p.55) and taken up again in paragraph 115 of the encyclical *Laudato si'* (Francis, 2015): “the technological mind sees nature as an insensate order, as a cold body of facts, as a mere ‘given’, as an object of utility, as raw material to be hammered into useful shape; it views the cosmos similarly as a mere ‘space’ into which objects can be thrown with complete indifference.”

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# WORK AS ENTERPRISE: RECOVERING A THEOLOGY OF WORK

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by Richard Turnbull

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## ► Introduction

Work matters because it is one of the most profound expressions of our humanity. Consequently, since, for the Christian, humanity is created in God's image, work is also a crucial matter of theological concern and investigation.

What, though, is 'work'? The question is not merely one of definition. There are issues of the nature, value, purpose and extent of work. If work is, in Christian theological terms, a reflection of the nature and character of God, then work can neither be restricted to paid employment nor to a particular time span. Christian discipleship extends across the whole of life in both dimensions – latitudinally, there is nothing in life which can be excluded from Christian theology and, longitudinally, Christian spirituality extends from the beginning to the end of life. There are also, further questions, around whether work has intrinsic or merely instrumental value and whether the benefits of work extend further than the individual.

Work is, at the same time, problematic. The absence of work (at least in its remunerated form) may lead to economic and social dislocation. Work itself may be creative and innovative or it may be routine grind and drudgery. The economic trajectory of work has been one of ever-increasing specialisation, with the attendant benefits for productivity and some complex challenges for the quality and nature of work itself. For the Christian theologian, work as toil is a result of the fall. As a result, the complex nature of work and its consequences are proper areas of concern for the theologian.

Work is not a static concept. Not only does the nature of work change over time but so does the ability of human beings to equip themselves with training, skills and knowledge – since humanity is created in God's image this is unsurprising from a theological point of view. There have been two significant periods of history in which the nature of work has changed dramatically and fundamentally. The first of those was in the period from, say, 1760-1840, and is usually termed the Industrial Revolution. This extraordinary time in British history was characterised by the enormous movement of people from country to town and the concentrated deployment of capital in manufacturing and its mechanisation, with the resultant demand for labour, but often in routine and highly pressured environments, with the possibilities of both innovation

and alienation. The second period is the contemporary era, with the movement towards digitisation, artificial intelligence and a wide range of new technologies. This period, too, sometimes portrayed as the Fourth Industrial Revolution<sup>1</sup> has enormous implications for work, employment and leisure, not least with new ways of working in, the so-called, 'gig economy.' Although some observers are depressed about the prospects, theologically speaking, and these developments raise significant and important issues for society (and the redeployment of both labour and capital does have consequences), we should be optimistic, for the very reason that work reflects God's image and purpose for humanity.

Work, argues David Miller, quoting another author, 'is harder to define than one might think.'<sup>2</sup> Darrell Cosden says, 'work is a notoriously difficult concept to define.'<sup>3</sup> Certainly, one aspect of work relates to economic productivity, but for theology, this is a necessary, but not sufficient condition. Work may refer to location, activity or instrumental purpose. There is, however, also an end or purpose to work. So, Miller proceeds to define work as 'human activity that has both intrinsic and extrinsic value' and is discharged both for reward and as an expression of purpose.<sup>4</sup> Pope John Paul II in *Laborem Exercens* (1981) refers to work in terms of the activity through which humanity earns their daily bread.<sup>5</sup> Miroslav Volf describes work as 'social activity,' designed to create products or states of affairs which satisfy the needs of the work and others.<sup>6</sup> The approaches here of the Pope and of Volf, whilst not the sum total of the writers' observations, are essentially instrumental approaches – we work to provide for our needs.

In his *The Pleasures and the Sorrows of Work*, Alain de Botton describes the story of a group of ship-spotters, observing a ship and its cargo from the end of a pier in enormous detail, but giving them an insight into origins, purposes and destinations in a way in which we are largely ignorant.

*I was inspired by the men at the pier to attempt a hymn to the intelligence, peculiarity, beauty and horror of the modern workplace and, not least, its extraordinary claim to be able to provide us, alongside love, with the principal source of life's meaning<sup>7</sup>*

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1. Some commentators refer to four industrial revolutions. The first is the initial movement and deployment of capital in the late eighteenth and early to mid-nineteenth century. The second is the rapid mechanisation of process, engineering development and expansion of the mid-nineteenth to early twentieth century. The third is the more recent 'digital revolution,' and the fourth is the harnessing of new technologies and artificial intelligence alongside the digital. The characterisations, although artificial, are useful in general terms.

2. David W. Miller, *God at Work*, Oxford University Press, Oxford, 2007, page 18.

3. Darrell Cosden, *Theology of Work*, Paternoster, Milton Keynes, 2004, page 9.

4. Miller, *God at Work*, page 19.

5. Pope John Paul II, *Laborem Exercens* (1981), paragraph 1.1.

6. Miroslav Volf, *Work in the Spirit*, Oxford University Press, Oxford, 1991, pages 10-11.

7. Alain de Botton, *The Pleasures and Sorrows of Work*, Penguin, London 2010 (reissued 2015), page 30.

The meaning of work, its beauty, purpose and destiny are central to theological reflection. The complexity of work, issues of ethics and responsibility, are equally matters of theology. Work is creative, redemptive and transformative. Enterprise is itself an intensely theological concept and directly related to ideas of work. Jeff Van Duzer refers to work as value creation and that we are called to 'participate in innovative and industrious work.'<sup>8</sup> Pope Paul VI in *Populorum Progressio* (1967) refers to humanity as gradually uncovering 'the hidden laws of nature' and that humanity 'is stimulated to undertake new investigations and fresh discoveries, to take prudent risks and launch new ventures.'<sup>9</sup>

So, to define work. Perhaps simply, 'any activity which reflects human enterprise with intrinsic purpose and meaning and to provide for individuals, families and society.' This allows for paid and unpaid work, reflects wealth creation and enterprise and is functional, but not restricted to the individual.

Work is a deeply theological concept.

## Chapter I ► Approaches to a theology of work

There is a long history of approaches to the theology of work across the Christian traditions. In this chapter we will review, in outline terms, the key aspects of method and outlook adopted by the Roman Catholic Church, the historic Protestant tradition and some contemporary approaches.

Roman Catholicism, both in its wider reflections upon Christian social thought and, more formally, in Papal Encyclicals, has developed a significant corpus of teaching in and around the subject of work. Although the publication by Pope Leo XIII of *Rerum Novarum* in 1891 is seen as the beginning of modern Catholic thinking in the area, clearly there is a prior history to the understanding of work.

Rodger Charles, in his two-volume work, *Christian Social Witness and Teaching*<sup>10</sup>, reminds us of this history, with consideration of not only the biblical material but also aspects of work in the classical world and through to the medieval period. Some elements of the biblical corpus will emerge in later chapters, not least in relation to creation and covenant. Charles, though, brings out the tension between work as part of God's original creation mandate and the protections provided under the Mosaic law following the fall as work was corrupted. Much practical and theological thinking derives from the exploration of this tension. So, Charles points out how labour was blessed and commended but that cheating and exploitation was regulated.<sup>11</sup> He adds by way of further example that Jesus and his apostles all worked and that some of his disciples

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8. Jeff Van Duzer, *Why Business Matters to God*, InterVarsity Press, Downers Grove, Illinois, 2010, page 47.

9. Pope Paul VI, *Populorum Progressio* (1967), paragraph 25.

10. Rodger Charles, *Christian Social Witness and Teaching*, two volumes, Gracewing, Leominster, 1998 (republished 2006).

11. Charles, *Social Witness*, volume 1, page 22.



were clearly of some means – the fruits of their labours.<sup>12</sup> Paul, likewise, is an example as a tentmaker and indeed, the apostle commands ‘useful work’ – referring to Ephesians 4:28.<sup>13</sup> In the classical world work was a complex phenomenon. Cicero regarded wages as slavery<sup>14</sup>, slaves worked, citizens attended to political affairs and free workers were in effect degraded by undertaking the work of a slave. The crucial development in thinking about work in the medieval period is the development of the monastery. The Rule of Benedict commands several hours of manual labour daily as ‘idleness is the enemy of the soul.’<sup>15</sup> The monastery was a community of work, the land was worked both to provide for the monks and indeed to generate income for the house. Francis of Assisi noted his wish that ‘all my brothers and sisters should work at some honourable trade.’<sup>16</sup>

*Rerum Novarum*, published by Pope Leo XIII in 1891, did not appear in a vacuum. The background was that of industrialisation, the complexities of poverty, the rise of socialism and conflict between employer and employee. Cardinal Manning, the Archbishop of Westminster, had been involved in mediation during the London dock strike of 1889. *Rerum Novarum* rejected socialism and affirmed private property as the basis of dealing with social questions. The encyclical, however, in its reflections upon work and the respective responsibilities of employer and employee marked a turning point in Catholic thought upon which subsequent encyclicals built.

So Roman Catholic teaching came to emphasise something of the dignity of the human person enshrined in work. Consequently, there was also an emphasis on justice for the worker in wages and the rights of association. So, humanity expresses itself in work:

*Man has, of his very nature, a need to express himself in his work and thereby to perfect his own being.*<sup>17</sup>

This work conveys dignity:

*...man's life is built up every day from work, from work it derives its specific dignity*<sup>18</sup>

This dignity reflects the nature of the creator himself, ‘work is a fundamental dimension of human existence,’<sup>19</sup> and ‘man, created in the image of God, shares by his work in the activity of the Creator.’<sup>20</sup> Work is, thus, both a divine obligation and a source of

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12. *Ibid.*, page 40.

13. *Ibid.*, page 42.

14. *Ibid.*, page 49, note 21 (page 378).

15. Rule of Benedict, chapter 48.

16. Quoted in Charles, *Social Witness*, volume 1, page 217.

17. Pope John XXIII, *Mater et Magistra*, 1961, paragraph 82.

18. Pope John Paul II, *Laborem Exercens*, 1981, paragraph 1.2.

19. *Ibid.*, paragraph 4.2.

20. *Ibid.*, paragraph 25.2.

rights and leads to the better ordering of human life.<sup>21</sup> This demands justice for those in work, not least in terms of fair wages and the provision of decent, quality work. So, Pope John Paul II refers to 'inalienable rights' with the example of 'just remuneration for work done,' which, he argues, is essential for access to goods.<sup>22</sup> In other words, justice requires access and participation, wages are the normal means of achieving this aim and hence they need to be at a sufficient level to ensure such participation. Pope Benedict XVI in *Caritas in Veritate* defines decent work as, inter alia, freely chosen, expressing dignity, meeting needs and allowing for human development.<sup>23</sup>

Human dignity may indeed convey rights but the powerful image of humanity in the image of God also means that humanity's natural talents and instincts for entrepreneurship and innovation equally reflect the natural order. Catholic teaching recognises this fact. So, Pope Paul VI in *Populorum Progressio* refers to humanity being 'stimulated to undertake new investigations and fresh dimensions, to take prudent risks and launch new ventures.'<sup>24</sup> In *Centesimus Annus*, Pope John Paul II refers to people becoming 'more knowledgeable of the productive potentialities of the earth'<sup>25</sup> and points out that the wealth of industrialised nations has been built more on the possession of human capital ('*know-how, technology and skill*')<sup>26</sup> than natural resources.

Catholic teaching in its most recent form is perhaps summed up by Pope Francis in *Laudato si'*:

*Work is a necessity, part of the meaning of life on this earth, a path to growth, human development and personal fulfilment.*<sup>27</sup>

We have taken some time to look at the nature of work within Catholic social thought and teaching. The approach represents an important foundation and draws attention to a number of themes such as dignity and enterprise drawing on both biblical motifs, including creation and covenant, and systematic reflection which will be highly relevant to the development of a theology of work as enterprise. The Catholic teaching, however, for all its many strengths, is only one part of the historic and contemporary approach to work. Methodologically, although the material contains significant insights shared with other Christian traditions, the complexity of the relationship over time of the Encyclicals to each other and indeed the relationship of the Encyclicals to the wider corpus of both Catholic and non-Catholic teaching requires that we gather other approaches and material before proceeding further.

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21. *Ibid.*, paragraph 27.7.

22. *Ibid.*, paragraphs 19.1 and 19.2.

23. Pope Benedict XVI, *Caritas in Veritate*, 2009, paragraph 63.

24. Pope Paul VI, *Populorum Progressio*, 1967, paragraph 25.

25. Pope John Paul II, *Centesimus Annus*, 1991, paragraph 31.

26. *Ibid.*, paragraph 32, emphasis in original.

27. Pope Francis, *Laudato si'*, 2015, paragraph 128.

Protestantism represents a significantly more complex phenomenon historically due to the lack of any agreed corpus of teaching. However, that does not mean that the tradition is deficient in systematic insight. There are some considerable differences in approach between historic and contemporary forms of Protestantism.

We will allow the Protestant theologians, Martin Luther and John Calvin, to speak for themselves in the course of this work. However, the way in which subsequent commentators have interpreted Calvin in particular is instructive. Max Weber, in his deeply influential, but ultimately unsatisfactory, *The Protestant Ethic and the Spirit of Capitalism*, established a particular form of association between Calvinism and capitalism which has shaped the discussion ever since its publication in 1904. In essence his argument was that Calvinism, with its ideas of election and predestination, emphasised the idea of individual salvation yet, psychologically, this generated an inner loneliness as the believer sought the certainty of call and election. This quest for assurance manifested itself in the struggles of everyday life. The world was to be shunned, no time was to be wasted, patience, dedication and hard work were the order of the day for the Lord's people. The consequence of this was the Protestant work ethic and its attendant commercial success.

*The exhortation of the apostle to make fast one's own call is here interpreted as a duty to attain certainty of one's own election and justification in the daily struggle of life. In the place of the humble sinners to whom Luther promises grace if they trust themselves to God in penitent faith are bred those self-confident saints whom we can rediscover in the hard Puritan merchants of the heroic age of capitalism and in isolated instances down to the present.*<sup>28</sup>

The influence of Weber was that he isolated some important truths; the empirical observation of commercial success, the rugged individualism of the Protestant mind and the paradox of the certainty of salvation resulting in a work ethic in this world. More complex, and with less rigour was the sociologist's causal links of particular doctrines and commercial effect and his failure to properly understand the nature of both Protestantism (which he rather assumed to be monolithic) and indeed the nature of capitalism itself. So, for example, the role of discipleship in the world for the Protestant is an important motif in reflecting upon work; it does not necessarily follow that this particular expression of discipleship in the commercial world is a result of lack of assurance in salvation. The Weberian thesis, however, has dominated the landscape. This may partially be due to the low ebb of Protestantism at the time of publication; or at least that the dominant form at the time was a rather rationalistic version of the tradition. The impact has been two-fold. First, the historic Protestant teaching around vocation and call has been rather lost to sight and understood in the light of the Weberian thesis rather than

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28. Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, Allen and Unwin, 1930, this edition, Routledge Classics, Abingdon and New York, 2001, page 67.

being allowed to speak for itself. Luther cannot be simply set aside and his approach to vocation and calling remains a central motif in any Protestant theology of work. We will consider this in more detail in chapter 3.

Second, the counter-cultural discipleship of the Protestant theology of redemption has shaped other more contemporary approaches to work. In contemporary Protestantism this approach to work is perhaps most clearly seen in aspects of both the *Faith and Work* movement and a pietistic withdrawal in parts of reformed evangelicalism. David Miller in his book, *God at Work*, analyses both the positive and negative aspects of the movement. He points out that the motivations for involvement are varied and include ethics, evangelism, purpose and enrichment.<sup>29</sup> He also draws attention to the dual problem of lay ministry being viewed as increased levels of participation in the institutional church and the theological motif of liberation theology leading to a general hostility towards business.<sup>30</sup> One consequence of this has been that ‘whether conscious or unintended, the pulpit all too frequently sends the signal that work in the church matters, but work in the world does not.’<sup>31</sup> A further consequence of this is that work can come to be viewed entirely in instrumental terms – in other words, rather than containing intrinsic meaning and purpose, its true rationale is primarily to provide support for the true spiritual work of the spiritual kingdom. Nothing could be further from the historic Protestant position of vocation and calling, the intrinsic value of work in Calvin, and, of course, the Kuyperian motif of God’s sovereignty and providence covering every single aspect of human life and work. As Darrel Cosden points out, ‘from a Christian point of view, all human work (and not just “religious work”) has eternal meaning and value.’<sup>32</sup>

Perhaps in reaction to some of these particular complexities some contemporary Protestants have sought to reshape the theological debate away from creation and vocation towards charisms and eschatology. So, Darrell Cosden’s work seeks to set the debate in terms of an eschatological mandate rather than a creation mandate:

*... work is perceived as teleologically directed and orientated forward toward the future new creation rather than backward toward the restoration of the initial creation.*<sup>33</sup>

The epitome of this approach is perhaps Miroslav Volf’s, *Work in the Spirit*. He articulates the position in similar terms to Cosden:

*The first and most basic feature of a theology of work based on the concept of new creation is that it is a Christian theology of work. It is developed on the basis of a specifically Christian soteriology and eschatology, essential to which is the anticipatory experience of God’s new creation and a hope of its future consummation.*<sup>34</sup>

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29. Miller, *God at Work*, pages 76-77.

30. Miller, op. cit., page 56.

31. Miller, op. cit., page 10.

32. Darrell Cosden, *The Heavenly Good of Earthly Work*, Baker Academic, Grand Rapids, 2006, page 2.

33. Cosden, *Theology of Work*, page 46.

34. Miroslav Volf, *Work in the Spirit*, page 79.

Volf not only seeks to move from creation to new creation but also seeks to place weight upon gifts and charisms rather than vocation. So Volf describes human work 'as an aspect of the charismatic life', and the 'pneumatological understanding of work' as 'an heir to the vocational understanding of work, predominant in the Protestant social ethic of all traditions'.<sup>35</sup> He goes on to argue that this charismatic definition means that it is the Spirit which calls, endows and empowers Christians in their vocations, the presence of the Spirit is essential to enable the Christian and when the Christian displays the transformative values of the new creation.<sup>36</sup>

What conclusions can be drawn from this review of approaches to a theology of work?

- First, there are significant resources across the theological traditions to enable us to reflect and develop a meaningful theology of work with contemporary meaning and relevance.
- Second, there are important motifs across both Catholic and Protestant traditions which come together to form and shape such a theology.
- Third, historic themes and theologians need to be allowed to speak in their own terms.
- Fourth, contemporary approaches can add significant insight but should be seen as complementary rather than replacing historical insights.

If work is to be understood from the point of view of enterprise, then both the dynamic transformative wisdom of Volf is needed, recognising skill and innovation as endowed by God, and the historic insights of creation, calling and vocation. Christian values will shape ethics and both covenant and new creation will shape those values. The combination of these themes will enable an affirmation of both wealth creation but also ethical constraint. Catholic and Protestant traditions have much to say in common, including the reclaiming of vocation and indeed the nature of human flourishing. We have noted pitfalls to avoid, but we now have the building blocks to develop the idea of work as enterprise.

## **Chapter II ► A biblical theology of work**

What is a biblical theology of work?

Any biblical theology faces a number of questions, ranging from the extent to which the text as received is prioritised to matters of development over time, assessment of themes and the use of extra-biblical resources. These are not matters which can simply be chosen between but are rather nuanced methodologies of approach. In this chapter we will review the basic biblical motifs and texts which are concerned with work before proceeding in subsequent chapters to a consideration of the theological themes which shape this material.

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35. Volf, *op. cit.*, pages 104-105.

36. Volf, *op. cit.*, pages 113-114.

The first problem, as we have already hinted more broadly, is that of definition. In particular should we seek to define 'work' broadly or narrowly, in respect of all human work or as it relates solely to the Christian? To define work only in respect of what it might mean for a Christian carries significant dangers of prioritising spiritual work to the neglect of the nature of work for all humans, which is also, of course, part of God's purpose. So, although some elements of understanding work are of especial relevance to Christian discipleship and we will need to make that distinction, if a theology of work is to carry any meaning, then it must engage with all human work. However, that does not mean that every single aspect of work as recorded in the bible can be covered. Alan Richardson, in his *The Biblical Doctrine of Work*, notes three principle usages, the work of creation, human work, and the work of Christ. For our purposes, although we will want to note that human work is derived from the principle of God's work in creation, we will concentrate on evaluating the nature, purpose and meaning of our human work. According to Dorothy Sayers, work:

*should be looked upon, not as a necessary drudgery to be undergone for the purpose of making money, but as a way of life in which the nature of man should find its proper exercise and delight and so fulfils itself to the glory of God.*<sup>37</sup>

And as a warning against too narrow an approach:

*The worst religious films I ever saw were produced by a company which chose its staff exclusively for their piety.*<sup>38</sup>

The importance of the task cannot be underestimated. Not only are individuals struggling to make sense of daily work in the economy, but too many Christians have come to view work as a distraction from the spiritual life. Work, though, is part of the natural order and part also of the social order. The demise of biblical and Christian influence over society has led to the loss of language capable of conveying deep wisdom and insight around the nature and purpose of work. The development of the language of 'rights' has simply exasperated the process. Christian theology provides both a moral and a spiritual language about work, a language which conveys principles of enterprise, beauty and relationships which tells us, at the very least, that any biblical theology of work cannot be merely instrumental – if we believe in the goodness of creation (the work of God) then the work of humanity must also have intrinsic worth and cannot be reduced to merely providing food and shelter.

We noted in the introduction that scholars find work hard to define. We should not let this trouble us. David Miller points out that work is both an activity and an institutional

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37. Sayers, *Why Work?* page 1.

38. *Ibid.*, page 21.

location.<sup>39</sup> However, should work be defined in terms of productive activity, economic activity, paid or unpaid or indeed simply any human activity? Jeff Van Duzer refers to work as wealth creation, generating economic capital and providing goods and services.<sup>40</sup> Paul Stevens refers to both remunerated and unremunerated work.<sup>41</sup> Both Miller and Cosden end up with rather long-winded definitions. However, one might draw some principles that work involves:

- Human activity
- Activity which carries both intrinsic and extrinsic value
- Physical, emotional and/or intellectual energy
- Results in human development
- Leads to economic exchange
- Provides for human need

Perhaps rather than a formal definition recognising these aspects of work may indeed be sufficient. However, one can see how the idea of enterprise runs through these elements of work.

What does the bible actually say about work? What follows is a summary, we will consider the implications in subsequent chapters.

The starting point lies, unsurprisingly, in the creation narratives. God's command to his new creation of humanity was, in Genesis 1:28, to fill and conquer the earth, and to take dominion over production. This is reinforced in Genesis 2:15 where humanity is commanded to both cultivate the land and exercise stewardship 'The LORD God took the man and put him in the Garden of Eden to till it and keep it.' Some versions actually use the word 'work' rather than 'till' but the sense is clear. God, in his providential wisdom had also provided the raw materials of water, gold, resin and other precious stones – see Genesis 2:10-12. These are crucial verses for a theology of enterprise.

There are numerous biblical examples of enterprise and entrepreneurship. The first origins of commerce and enterprise are illustrated in Genesis 4. Cain and Abel are early examples of the principle of specialisation – one concentrating on livestock, the other arable. In Genesis 4:20-22, the family tree of Lamech is illustrated by reference to those who raised livestock, played stringed instruments and forged iron and bronze tools. The basic point is that this is a normal part of the biblical narrative. The ideas look back to the provision of raw materials in Genesis 2 and forward to Exodus 35:30-35 where we see how God has endowed people with skill, artistic and manufacturing ability.

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39. Miller, *God at Work*, page 18.

40. Van Duzer, *Why Business Matters to God*, page 47.

41. R. Paul Stevens, *Work Matters*, Eerdmans, Grand Rapids, 2012, page 2.

*Then Moses said to the Israelites, 'See, the lord has called by name Bezalel... he has filled him with divine spirit, with skill, intelligence, and knowledge in every kind of craft – to devise artistic designs, to work in gold, silver, and bronze, in cutting stones for setting, and in carving wood, in every kind of craft. And he has inspired him to teach, both him and Oholiab... He has filled them with skill to do every kind of work done by an artisan or by a designer or by an embroiderer in blue, purple and crimson yarns and fine linen, or by a weaver – by any sort of artisan or skilled designer.*

Jacob and Joseph can be advanced as further Old Testament examples. Both demonstrated entrepreneurial flair, risk taking, planning. The former did so in his dealings with Laban and his flocks in Genesis 30 and Joseph in planning, collecting and managing the preparations for famine in Egypt in Genesis 41. Further examples include the entrepreneurial woman of Proverbs 31 – 'she considers a field and buys it; with the fruit of her hands she plants a vineyard' (Prov 31:16) – in other words accumulation, deployment and investment of capital.

In the New Testament, as well as the example of Lydia 'a dealer in purple cloth' (Ac 16:14), we have Paul the tentmaker (Ac 18:3) and, of course, of Jesus himself. Jesus worked as a carpenter (Mk 6:3) in his earthly father's family business and he experienced the stresses, strains and joys of entrepreneurial life. It is inconceivable that Joseph's business enterprise was anything other than profitable in order to have been sustainable over some 30 years. In addition to that Jesus' disciples are also examples of enterprise and work. The fishermen apostles certainly included some of wealth and means; they were business partners and (Mk 1:20) employed others. They were thus independent business people in a thriving fishing industry.<sup>42</sup> Colossians 3:23 reminds us that in Christian discipleship, 'whatever your task, put yourselves into it, as done for the Lord.' Manual work was honoured in ancient Israel. So, for example, Isaac's sowing and planting of crops in Genesis 26:12 led to the Lord's blessing which manifested itself in wealth and property. Hard work is held in respect and indeed linked to the acquisition of wealth and well-being; laziness is chided. Thus, Proverbs 10:4-5:

*A slack hand causes poverty,  
but the hand of the diligent makes rich.  
A child who gathers in summer is prudent,  
but a child who sleeps in harvest brings shame.*

Further warnings against laziness are in Proverbs 6:6 ('Go to the ant, you lazybones; consider its ways, and be wise!') and in the New Testament, in 2 Thessalonians 3:10 ('anyone unwilling to work should not eat'). The bible praises the work of both the craftsman (Ex 35) and the housewife (Prov 31). This last point is not about gender issues but, rather, the principle of both economically active and inactive work (perhaps

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42. Charles, *Social Witness*, volume 1, page 40 and note 14.



remunerated and unremunerated) being equally honoured. However, both the Mosaic law and the teaching of the New Testament offered protections to workers and limits to work that provide the moral basis for work ethics. So, in Leviticus 19:13, there is the injunction against holding back wages, in Jeremiah 22:13, warnings about growing wealthy at the expense of the honest labourer. These points are reinforced by the prophetic injunctions against injustice generally, but specifically including oppressive taxation (Amos 5:11), bribery (Amos 5:12) and other dishonest business practices (Amos 8:5-6) – honest labour was to be honoured and respected. In the New Testament, Christ, in reaffirming the Commandments (Mt 19:18-19), restated the basic principle of property rights. Paul quoted Lk 10:7 ‘the labourer deserves to be paid’ and the Deuteronomic law that the ox was not to be muzzled, in a discussion (1 Tim 5:17-18) about double honour which clearly had some remunerative implications including incentivisation. In addition in the New Testament there was ownership of capital – houses and fields – but also warnings about wealth and pride. Examples include the parable of the rich man in Lk 12:16-21, Dives and Lazarus in Lk 16:19-31, and the injunctions of Mt 6:24, ‘you cannot serve God and wealth’ and 1 Tim 6:10, ‘the love of money is a root of all kinds of evil’). However, these warnings did not provoke an identical response (Mt 19:21, sell everything to give to the poor, Lk 19:8, Zacchaeus gave half of his possessions, alongside the ownership of property and wealthy business people such as Lydia). These themes are central to the ideas of covenant and ethics which we will discuss in chapter 4.

Work in general is blessed. There are many biblical warnings about the perils, temptations and dangers of wealth, but there are no reservations about the goodness of wealth itself. Property rights were established and lay at the heart of both the work ethic but also social responsibility. The biblical creation and the biblical covenant both understood work to be natural and part of human duty towards God. There are warnings against idleness and injustice. Enterprise lay at the heart of everything which the bible teaches about work. The subsequent chapters will put this biblical material into a wider theological context.

## **Chapter II ► Creation mandates and human dignity**

The idea of ‘creation mandates’ is central to a biblical theology of work. For a theology of enterprise, a creation mandate approach is a necessary, but not sufficient condition. The creation mandate approach establishes a number of basic principles around human purpose, creativity, liberty and dignity. Creation mandates are necessary conditions for a theology of work and enterprise since it places these fundamental aspects of human life within the natural order; in other words, inalienable aspects of God’s creation. However, the consequence of the fall, the disruption of the natural order through the entry of sin into the world means that on their own creation mandates are insufficient for a fully worked out theology of work and enterprise. Further questions around ethics and how sin can be restrained will need to be considered in the next chapter.

Dorothy Sayers argues that in respect of an intelligent carpenter, 'the very first demand that his religion makes upon him is that he should make good tables.'<sup>43</sup> Josemarie Escriva, the founder of *Opus Dei*, wrote from within the Catholic tradition that it is not possible to be a good Christian and a bad shoemaker.<sup>44</sup> Calvin conveyed this essential dignity of work:

*Even the artisan with the humblest trade is good at it only because the Spirit of God works in him. For though these gifts are diverse, they all come from the one Spirit; it pleased God to distribute them to each one (1 Cor. 12:4). This does not refer only to spiritual gifts, which follow regeneration, but to all the sciences which concern our use of the common life.*<sup>45</sup>

The theological question is why this should be so. Darrell Cosden, in his *Theology of Work*, argues for a three-fold approach to the nature of work, instrumental, relational and ontological.<sup>46</sup> The former deals with means and survival (food on the table, a person works in order to eat), the second with the order and organisation of work and the latter with the intrinsic nature of work itself. If work is to have value and meaning in itself, and hence both the act of working and that which is produced convey goodness and purpose then the instrumental understanding of work cannot stand alone. As Cosden argues, in that case, 'then much, if not most, of our human life takes on only a secondary value.'<sup>47</sup> His ontological view is that work is part of the natural order of its very essence. Pope John Paul II, in his 1981 encyclical, *Laborem Exercens*, links this idea to the opening chapters of the bible, in Genesis.

*The Church finds in the very first pages of the Book of Genesis the source of her conviction that work is a fundamental dimension of human existence on earth.*<sup>48</sup>

David Hart argues that 'Calvin often repeated that God had made man to work.' Indeed in his Commentary on Genesis 2:15, Calvin makes this clear:

*Here Moses adds that the earth was leased to man, on this condition, that he busies himself cultivating it. It follows from this that men were made to employ themselves doing something and not to be lazy and idle.*<sup>49</sup>

Calvin adds in his *Commentary on the Harmony of the Evangelists*, that 'we know that men were created for the express purpose of being employed in labour of various

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43. Dorothy Sayers, *Why Work?* page 18.

44. Josemarie Escriva, *Friends of God*, first published 1977, [http://www.escrivaworks.org/book/friends\\_of\\_god.htm](http://www.escrivaworks.org/book/friends_of_god.htm) page 61.

45. John Calvin, *Harmony of Ex-Dt*, quoted in Ian Hart, *The Teaching of Luther and Calvin about Ordinary Work: 2. John Calvin (1509-64)*, *Evangelical Quarterly* 67:2, 1995, p127.

46. Darrell Cosden, *Theology of Work*, page 9.

47. Cosden, *Theology of Work*, page 10.

48. Pope John Paul II, *Laborem Exercens*, 4.

49. Calvin, *Commentary on Gn 2:15* quoted in Hart, *Teaching*, pages 121-122.

kinds.<sup>50</sup> Luther in his commentary on Genesis 2:15 also emphasised that ‘man was created not for leisure but for work, even in the state of innocence.’<sup>51</sup> Pope John Paul II and John Calvin are articulating the idea of a creation mandate, a principle set down in the origins of God’s actions and purposes in creation, prior to the fall, which conveys the intentions, demands and ultimate ends of God for humanity for all time. Hence, John Paul II adds, that these ‘truths are decisive for man from the very beginning.’<sup>52</sup> An appreciation of the creation mandates as they relate to work is essential for the development of ideas of enterprise.

There are three central aspects of how creation narratives and creation principles apply to work and enterprise.

First, God himself is presented as a worker in the creation of the world. The opening verse of Genesis 1, ‘in the beginning when created the heavens and the earth.’ Then, in Genesis 2:2-3, ‘on the seventh day God finished the work that he had done, and he rested on the seventh day from all the work that he had done.’ Genesis 1:27 tells us that God created human beings in his own image. R. Paul Stevens lists different metaphors of God as worker which appear in the Bible, including gardener (Genesis 2:8), shepherd (Ps 23), potter (Jer 18:6), physician (Mt 8:16) and teacher (Ps 143:10).<sup>53</sup> As Van Duzer puts it, the God in whose image humanity was created was also a worker and hence:

*Men and women then, were made in part to work, and by so doing to reflect this aspect of God’s glory.*<sup>54</sup>

This is a principle from derivation. Since God was a worker and humanity is created in his image, then humanity too must reflect something of the purpose of God in work. As we will see shortly this point is then reinforced by specific commands. However, if work does convey something of the ultimate ends that God intends for his creation, then we can reasonably conclude that work is good because the creation is good (Genesis 1:31), work is creative because God creates (Genesis 1:1) and that these are intrinsic values to work. From the point of view of a theology of work as enterprise we might add that work is not only creative, but also innovative; the creation itself being the prime example. A further consequence is that work must be meaningful; since if it were not, then that would imply the creation itself was meaningless. Thus Darrell Cosden states:

*The person is a worker, not as an accident of nature, but because God first is a worker and persons are created in his image.*<sup>55</sup>

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50. Calvin, *Commentary on the Harmony of the Evangelists*, vol 2, quoted by Hart, op. cit., p127.

51. Works Luther, vol 44, 183 quoted in Hart, op. cit., page 38.

52. Pope John Paul II, *Laborem Exercens*, 4.

53. R. Paul Stevens, *Work Matters*, page 10.

54. Jeff Van Duzer, *Why Business Matters to God*, page 32.

55. Cosden, *Theology of Work*, page 17.

Pope John Paul II in *Laborem Exercens* summarises the idea as follows:

*The knowledge that by means of work man shares in the work of creation constitutes the most profound motive for undertaking it.*<sup>56</sup>

This idea then has a further consequence, representing a second creation mandate or principle, that human work conveys dignity upon the individual. The essential dignity of the individual derives from Genesis 1:27 – ‘So God created humankind in his image.’ The dignity of the human being derives from the concept that the human carries the very image of God himself. This dignity has a number of aspects. First, the dignity that is conveyed in the creation mandate means that the value of human work derives not from the particular type of work undertaken but from its human agency. Calvin wrote that ‘no work will be so mean and sordid as not to have splendour and value in the eyes of God.’<sup>57</sup> *Gaudium et Spes* argues that man through work puts his seal on his nature.<sup>58</sup> Work then is a realization of our humanity.

Second, since the creation is good, work too, as a participation in creation must also be good, at least intrinsically. Work glorifies God and the beauty of work is a reflection of the beautiful, and bountiful goodness of God. These are the theological reasons why Dorothy Sayers can argue ‘work is the natural exercise and function of man,’<sup>59</sup> and Alain de Botton that work is ‘the principal source of life’s meaning.’<sup>60</sup> So, the second creation mandate is the dignity of the human person. This mandate effects not only work itself, but also the worker. If the dignity of work comes from the dignity of humanity, then so does the dignity of the worker. This has implications for rights and responsibilities, the nature of work, remuneration and so on.

Third, humanity is commanded to work as part of the original creation. This creation mandate is the command to work itself. The command is located in Genesis 2:15, ‘The Lord God took the man and put him in the garden of Eden to till it and keep it.’ So working the garden is part of the very purpose of God for humanity. This command to work also precedes any prohibitive commands. Work transforms nature and provides human fulfilment. Thus industriousness is a virtue and moral habit and God’s creation represents part of the givenness of the moral order. There is therefore an obligation to work. Work then has value in its own right and cannot be reduced to instrumental purposes, although clearly survival and development, and the needs of others also require work.<sup>61</sup> There is, however, a telos, an end and a purpose in work itself. This

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56. Pope John Paul II, *Laborem Exercens*, 25.

57. Calvin, *Institutes*, 3.X.6, edition, LCC vol XX, edited by J.T. McNeill.

58. Pope Paul VI, 1965, *Gaudium et Spes*, para 67.

59. Sayers, *Why Work?* p12.

60. De Botton, *Pleasures and Sorrows*, p30.

61. Pope John Paul II, *Laborem Exercens* 16.2.

creation mandate also means that the creation of goods and services, of value and of wealth, reflects God's very nature. Economic growth comes from humanity's application in the production process of the richness of God's creation.<sup>62</sup> We see this set out for us in the creation narratives. Preceding Genesis 2:15 is the description of the precious raw materials which God had provided, gold, aromatic resin and onyx, together with the waters of the river. Thus, part of God's clear intention for every person is that they work, they harness the resources of the world in producing goods and adding value. Very quickly in the biblical story we see the development of commerce. For example, in Genesis 3-4 we read of herdsman, labourers, owners of livestock, artists and creative metalworkers.

Taken together these creation mandates are crucially important elements of a theology of enterprise. Together they mean that work is a fundamental element of human existence. Hence work should contribute to human growth and development. Equally they convey that work has some intrinsic value and cannot be understood in merely instrumental terms. Work then is part of the natural order. The creation mandates give dignity to both the creation of wealth and the worker. The fact that God rested on the seventh day means that recreation and family life is also part of the creation mandate. The moral order is fully given in the original creation, albeit obscured by sin. The creation mandates not only endow 'rights' but also responsibilities. The rights and responsibilities endowed, in the production of goods and services, would include the right to initiative, innovation, economic freedom and private property. The creation mandates are an essential element of a theology of enterprise, but they are not, in themselves, sufficient.

### Chapter III ► Calling and vocation

The concept of calling and vocation to business and the economy is the beginning of practical ethics. The motif is one of the principal paradigms for understanding work. The idea is deeply embedded in the theology and thought of Martin Luther. When Dorothy Sayers in her famous essay argued that it 'is the business of the Church to recognise that the secular vocation as such is sacred',<sup>63</sup> she was reflecting the deep-rooted influence of Luther. Sayers puts her finger on the power of the idea of vocation.

*If your heart is not wholly in the work, the work will not be good – and work that is not good serves neither God nor the community; it only serves mammon.*<sup>64</sup>

Calling invests work with both meaning and ethics and hence sits alongside the creation mandates as a central feature of the theology of work. Paradoxically modern conservative Protestantism seems to have forgotten Luther whilst Roman Catholicism

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62. Pope John Paul II, *Laborem Exercens* 12.2 and 12.3.

63. Dorothy Sayers, *Why Work?* page 17.

64. *Ibid.*, p24.

has embraced the concept of vocation and calling to work and business. Others have critiqued the notion from within the Protestant tradition.

We must begin with Luther. Martin Luther's theology of vocation and calling is built upon two other theological concepts; his idea of the two kingdoms and his view of the spiritual life. Luther conceived of two kingdoms, the temporal and the eternal. The two kingdoms stand alongside each other, under the providence and sovereignty of God, and are different, but not hostile to each other. Each has their respective roles. Humanity lives in the earthly kingdom yet hopes for the eternal. Consequently, the calling to particular offices or stations in the temporal kingdom is the way in which humanity serves God. Interesting for Luther, the conflict between good and evil, between Christ and the Devil cuts across both kingdoms. Hence in the exercise of the human vocation in the temporal kingdom the conflict between God and Satan is as fully played out as it is in the eternal kingdom. This is the battle of ethics *in* both the temporal and spiritual realm, and not simply *between* them. If ethics is a battle between the two kingdoms (true ethics belonging only in the spiritual) then that is the end of ethics in work, business and the economy. There is no dualism here in Luther. Vocation and calling, ethics and behaviour are the ways in which God is served in the temporal kingdom. Paul Althaus in his *The Ethics of Martin Luther* helpfully and coherently describes the concept:

*In this context God has established two governments, the spiritual and the secular, or earthly, temporal, physical. This secular government serves preserve external secular righteousness; it thus also preserves the world. The spiritual government helps men to achieve true Christian righteousness and therewith eternal life; it thus serves the redemption of the world. God provides secular government throughout the whole world even among the heathen and the godless; but he gives his spiritual government only to his people.*<sup>65</sup>

The two kingdoms both find their source in God. The spiritual kingdom is one of grace, salvation and redemption; our ultimate home. The temporal kingdom includes family, work, business and all other secular matters. Both are necessary, established by the same God. However, there are also differences between the two kingdoms, primarily one of rank. Hence the spiritual kingdom has the priority, helping us achieve true righteousness and secular government is subordinate to the spiritual. Here Luther, in his development of the nature of God's providential rule over the world, may have left open a possibility which has led to some distortion in contemporary Protestant approaches to work.

The second of Luther's building blocks in his ideas of calling and vocation lies in his rejection of the priority of the spiritual office over the secular. Although there are some scattered early references in his lectures and sermons, Luther sets out his understanding

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65. Paul Althaus, *The Ethics of Martin Luther*, Fortress Press, Minneapolis, 2007, page 45.

in one of his three treatises in 1520 – *To the Christian Nobility of the German Nation*. Luther describes the distinction of the spiritual state from the temporal state as one of the three walls of the Romanists. It is, he says, ‘pure invention that pope, bishops, priests and monks are to be called the “spiritual state”; princes, lords, artisans, and farmers the “temporal estate.”’<sup>66</sup> The only difference, according to Luther, is that of office.

*A cobbler, a smith, a farmer, each has the work and office of his trade, and yet they are all alike consecrated priests and bishops, and every one by means of his own work or office must benefit and serve every other...*<sup>67</sup>

If the temporal office is lesser in kind than the spiritual, then these tailors, cobblers, masons and carpenters should be prevented from supplying those of the higher office with shoes, clothing and houses. All are of the same estate, it is simply the work that is different. Part of the complexity of Luther’s approach is that it is driven by his rejection of any spiritual priority for the monastic vow. Thus, ‘... I would like to take up this kind of life, in order to discipline my body, serve my neighbour, meditate on your Word, as another chooses farming or a trade.’<sup>68</sup> Gustaf Wingren also refers to Luther’s treatise on the blessed life of the soldier emphasising service, skill, fitness and, the right to a wage for his labour.<sup>69</sup>

Calvin reaffirmed Luther’s understanding and vision around calling. In the *Institutes*, Calvin argues that ‘agriculture, architecture, shoemaking and shaving are lawful ordinances of God.’<sup>70</sup>

These are important principles underlying the idea of calling and vocation in the Protestant tradition which have become lost in the Weberian mists. True Christian vocation involves using God’s gifts in service to others, an acknowledgement of the call of God and indeed of the rule of God. Vocation belongs to this world as much as the spiritual realm. As Bernard Lohse has said:

*Life as a monk or a nun is thus a calling that is ultimately no different from any other secular calling. The sacralising of an especially sacred career has come to an end theologically on Reformation soil.*<sup>71</sup>

The way in which Protestantism understands calling and vocation is deeply influential for ideas of work and enterprise. However, the priority of the spiritual kingdom leaves open the possibility of Protestantism repeating the very error of medieval Catholicism that Luther sought to resist. Luther’s re-emphasis on the biblical doctrine of justification

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66. Martin Luther, *To the Christian Nobility of the German Nation*, <https://web.stanford.edu/~jsabol/certainty/readings/Luther-ChristianNobility.pdf>

67. *Ibid.*

68. The Judgement of Luther on Monastic Vows (1521), in WA 604, 9-23.

69. Gustaf Wingren, *Luther on Vocation*, Wipf and Stock, Oregon, originally published, 1957, Muhlenberg Press, page 3.

70. Calvin, *Institutes*, 4.XIX.34, in McNeill, *Institutes*.

71. Bernard Lohse, *Martin Luther’s Theology*, page 142.

inevitably led him to prioritise the spiritual kingdom for fear of promoting a 'works' theology. This has allowed for some contemporary thinking to offer a new priority of Protestant spiritual work as we noted in chapter 1. The contemporary Protestant has replaced vocation and calling with pietism. So, Cosden argues that:

*Ordinary, daily, mundane work was at best a mission field, and at worst a distraction in the spiritual life.*<sup>72</sup>

A truly Protestant picture of vocation and work must account for and explain work, enterprise and wealth creation in the temporal realm, and to that we will return.

There are two further matters. Firstly, the criticism of the concept of vocation. Calling and vocation can be seen as individualistic and inward. Consequently, the argument proceeds that these leads to a static concept that reinforces power relationships and indeed the capitalist economic system. Alan Richardson in *The Biblical Doctrine of Work* directly challenges the idea of vocation to the secular profession.

*We must deplore and protest against the secularization of the biblical concept of vocation in our modern usage; we cannot with propriety speak of God's calling a man to be an engineer or a doctor or a schoolmaster.*<sup>73</sup>

Richardson effectively allies more liberal Protestantism with modern conservative evangelicalism. He suggests that our secular employment is secondary and relevant only as means of service to the Kingdom. Richardson rightly draws attention to the danger of dualism or a dichotomy in the understanding of work (that is, you cannot biblically separate out gospel work and secular work) but deals with it by seeing spiritual work as superior. There is a rather deep irony. Perhaps it is also ironic (or maybe that is the case only to a Protestant writer) that Josemarie Escriva, founder of *Opus Dei*, recognises the same dilemma but deals with it by elevating the secular employment to the level of the divine.

*You cannot forget that any worthy, noble and honest work at the human level can – and should! – be raised to the supernatural level, becoming a divine task.*<sup>74</sup>

Escriva adds that 'we Christians must not abandon the vineyard where God has placed us,'<sup>75</sup> and summarises the vocation to work as:

*It is meant to fill out our days and make us sharers in God's creative power. It enables us to earn our living and, at the same time, to reap 'the fruits of eternal life.'*<sup>76</sup>

Secondly, then, it is perhaps rather less surprising that Protestant thinking developed along Weberian lines and Roman Catholic thought sought to recover the concept of vocation.

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72. Cosden, *Theology of Work*, pxx.

73. Alan Richardson, *The Biblical Doctrine of Work*, SCM Press, London, 1952.

74. Josemarie Escriva, *The Forge*, 687, first published 1987, [http://www.escrivaworks.org/book/the\\_forge.htm](http://www.escrivaworks.org/book/the_forge.htm)

75. Josemarie Escriva, *Friends of God*, op. cit., 48.

76. *Ibid.* 57.



*The vocation of the businessperson is a genuine human and Christian calling. Pope Francis calls it “a noble vocation, provided that those engaged in it see themselves challenged by a greater meaning in life; this will enable them truly to serve the common good by striving to increase the goods of this world and to make them more accessible to all.” The importance of the businessperson’s vocation in the life of the Church and in the world economy can hardly be overstated. Business leaders are called to conceive of and develop goods and services for customers and communities through a form of market economy. For such economies to achieve their goal, that is, the promotion of the common good, they should be structured on ideas based on truth, fidelity to commitments, freedom and creativity.<sup>77</sup>*

As we noted earlier, others, Volf in particular, have sought a more dynamic approach by replacing calling with gift and focussing teleologically not on creation but on the eschatological transformation in the new creation. However, the two approaches can be seen as complementary. Vocation, albeit, not alone, is an important building block in a theology of work as enterprise. Perhaps though the idea can be best understood as the exercise of calling in the whole of the period between the creation and the new creation, a dynamic expression of discipleship under God in the temporal kingdom.

## **Chapter IV ► Curse and covenant**

Christian theology has interpreted the idea of work from a number of theological and philosophical perspectives. We have already explored, or at least noted, approaches that give weight to creation, vocation, election, gift and transformation. Despite their differences it is relatively easy to see in these methodologies how work is given intrinsic value and the goodness of work, enterprise and wealth creation is affirmed. From an ethical perspective concerning behaviour in the market-place we considered that vocation and calling played a significant role as the beginning of ethical behaviour. However, there remains a tension in theological writing concerning work – that is particularly prominent in the Encyclicals – between the goodness of creation with its implications for work and the impact of the fall and of sin. Consequently, there emerges friction between creation principles and ethical standards imposed by rules and regulation. This same tension is also played out in Protestant thinking where much emphasis has also been placed upon the ‘blessing-curse’ motif in understanding work. Is it possible to reconcile these conflicting themes in a constructive way which recognises the beauty of creation, the reality of sin, and the inherent complexities of a rules-basic ethic? The idea of ‘covenant’ may help us.

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77. Pontifical Council on Justice and Peace, *Vocation of the Business Leader*, 6, Rome 2014.

The appeal to the curse of work has a long history. The impact of the fall in Genesis 3 and the entry of sin into the world had a direct impact upon work. So, to Adam, God said, in the light of his disobedience:

*... cursed is the ground because of you;  
in toil you shall eat of it all the days of your life;  
thorns and thistles it shall bring forth for you;  
... By the sweat of your face  
you shall eat bread  
until you return to the ground.*<sup>78</sup>

This is the traditional biblical approach; work becomes hard and a toil. However, the implications go further. The greater the weight placed upon the impact of the fall, the more work is viewed through the idea of curse. Work has thus become corrupted and degraded. As a result work is difficult and complex, we are susceptible to greed and exploitation and we face complex ethical problems around behaviour, markets and business practices. This is the reason why integrity and justice matters in work and business. The reference to 'thorns and thistles' in the biblical passage is a reminder of the practical impact of sin posing ethical challenges to work and business. Paul Stevens gives the example of Cain and Abel in the immediate next chapter in Genesis as an example of how this corruption led to jealousy, anger, greed and, in this case, even murder.<sup>79</sup> So the creation mandates may suggest the enjoyment of daily work with its intrinsic value and purpose, but the fall means that we cannot ignore human sin, expressed not only in the heart but in the structures of business and society.<sup>80</sup> Calvin makes the point that although the fall curses work, the curse is partially at least lifted in Christ. As he put it, 'the bitterness of that punishment is softened by the clemency of God.'<sup>81</sup> Hence curse is not the end of the story and just as human beings can be spiritually transformed so can their human work. That which was lost is restored in Christ. This theme of restoration has been picked up by modern writers such as Cosden and Volf, but it is there in Calvin.<sup>82</sup>

The consequence of sin is that work can no longer be understood in a one-dimensional way. Work is mixed. This is the reason why the Encyclicals regard work not only as a source of growth and development, an obligation and a duty, but also as a source of rights. Consequently there is a concern, at the detailed level, for matters such as just wages, the ability to participate in the economy through goods and services, the role

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78. Genesis 3:17-19.

79. Stevens, *Work Matters*, p21-23.

80. Edward Vanderkloet, 'Why Work Anyway?' in *Labour of Love – Essays on Work*, Wedge Publishing Foundation, Toronto 1980, pp20-21.

81. Calvin, *Commentary on Genesis 3:19*, quoted in Hart, *Teaching*, p122.

82. Hart, *op. cit.*, p123.

of trade unions, the challenges of unemployment and the requirement for rest.<sup>83</sup> From a theological point of view this is both necessary and complex. There is significant material in the Deuteronomic law, elsewhere in the Old Testament and in the teaching of the New Testament which reflects these demands for justice in work. So, for example, Deuteronomy 24:14-15 deals with timely and just wages, Deuteronomy 25: 13-16 with honest weights and measures – an ethical injunction returned to in Amos 8:5-6 and the numerous (if varied) challenges to the wealthy and to justice in the New Testament (see for example James 5:1-6). The ‘Teacher’ in Ecclesiastes 1 is the epitome of the negative side of work, that all is meaningless. This tension has been reflected also in Protestant and evangelical thinking. So Calvin, like Luther, ‘inveighed against fraudulent business practices’ and regarded it as sinful to offer those in need of work unacceptably low wages and also that employers returning healthy profits had a responsibility to pay well.<sup>84</sup> Later evangelicals had a sense of inner conflict concerning money and wealth; success in business was seen as an act of providence, even a focus of Protestant pride,<sup>85</sup> but carried great responsibility. Preachers and commentators warned against fraud and dishonesty in business dealings, including honesty, adulteration, and poor treatment of employees.<sup>86</sup> The themes are familiar. However, without a framework to understand the relationship of work as holding intrinsic value and enabling human development with work as distorted by sin we face the danger of dealing with the symptoms of sin without regard for God’s original intent and purposes in creation.

This framework is indeed provided for in the biblical material in the concept of covenant. The idea of covenant can help us hold in tension creation and fall, relationship and contract, ethics and law. The notion of covenant is a familiar theme in Old Testament theology (see for example, Walther Eichrodt, *Theology of the Old Testament*). There are in fact multiple covenants in the Old Testament and much work has been done on comparing these covenants with wider treaty provisions in the ancient near east. For our purposes the essential point is that the covenant involves both relationship and mutual obligation. The principal biblical formulation of covenant is Jer 30:22, ‘And you shall be my people and I will be your God.’ At the heart is the concept of relationship. Stevens contrasts this with contractual.<sup>87</sup> However, at least to some extent this is a false dichotomy. From the point of view of work, it is easy to see (and indeed perhaps rather too easy to say) that *covenant work* will be relational. Certainly, this will help us when we consider what ‘good work’ is within the idea of covenant. However, the

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83. Pope John Paul II, *Laborem Exercens* 16.1, 19.1, 19.2.

84. Hart, *Teaching*, page 131.

85. Richard Turnbull, *Evangelicals, Money and Business*, in *The Routledge Research Companion to the History of Evangelicalism*, Routledge, Abingdon, 2019, page 248.

86. Turnbull, *op. cit.*, pages 254-260.

87. Stevens, *Work Matters*, page 17.

reality is that covenant carried obligations, perhaps even contractual obligations, on behalf of both God and the people. God promised love and relationship and the people promised fidelity. There are many worthy modern writings on the importance of relationships in the workplace; but they rather miss the point. Covenant work is both a relationship and a contractual obligation, on the part of both employer and worker. This is why covenant is so helpful. The idea can hold the original purpose of work alongside ethical expectation and requirement and protection. Any theology of work needs to avoid the trap of falling into a mere articulation of regulation.

Rodger Charles argues that God's people were 'covenant' people and points out that the social and economic system of ancient Israel was not egalitarian, but there were constant warnings about abuse and the dangers to which the wealthy were exposed.<sup>88</sup> This tension is entirely appropriate and an essential component of a theology of work as enterprise as we will consider in the next chapter.

Since the impact of the fall was that 'the original meaning of work was seriously distorted,'<sup>89</sup> the consequence was that work became one of the essential expressions of our very identity. Thus, what we do, what we make, the hours that are put in, the level of income generated all becoming defining features of who we are. This is the opposite of what God intended for work. Work leads to moral and spiritual growth<sup>90</sup>, the better ordering of human life<sup>91</sup> and yet remains distorted and mixed.<sup>92</sup> Essential then to the understanding of how the idea of covenant relates to work is the concept of 'good work.'

De Botton describes this tension, indeed reflected in his title, *The Pleasures and Sorrows of Work*:

*We are now as imaginatively disconnected from the manufacture and distribution of our goods as we are practically in reach of them, a process of alienation which has stripped us of myriad opportunities for wonder, gratitude and guilt.*<sup>93</sup>

The British government's report on work and the 'gig economy' chaired by Matthew Taylor, the chief executive of the Royal Society of Arts, was entitled *Good Work*. Pope Benedict XVI in *Caritas in Veritate* explored the concept of decent work which included the work expressing dignity, being freely chosen, generating respect, meeting needs, allowing for free association, provides for development and growth and guarantees a decent standard of living.<sup>94</sup>

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88. Charles, *Social Witness*, vol 1, page 22.

89. Van Duzer, *Why Business Matters to God*, page 57.

90. Pope Francis, *Laudato si'*, 127.

91. Pope John Paul II, *Laborem Exercens*, 27.7.

92. Van Duzer, *Why Business Matters to God*, page 69.

93. De Botton, *Pleasures and Sorrows*, page 35.

94. Pope Benedict XVI, *Caritas in Veritate*, para 63.

The covenant mandate enables then both positive and negative ethics. The link back to the creation mandate and the original purposes of God both enable an enterprise approach to work, but through calling and the nature of the image of God demand an ethical approach to work. The mutual obligations of the covenant after the fall bring injunctions, regulation and law (what one might term negative ethics) into the picture. The key to a theology of enterprise is how to hold these matters in creative tension. The work covenant is built on two principles which Jeff Van Duzer has articulated as first, that creation purposes must be combined with ethical limitations and, second, that the market will not usher in the kingdom of God.<sup>95</sup> A faithful theology of work as enterprise will recognize these tensions; work is part of the purpose of God, yet mixed; the market mechanism is provided by God, but is not unlimited.

## **Chapter V ► A new paradigm – Work as enterprise**

We now have the building blocks in place for developing a theology of work as enterprise. The concept of enterprise is one that is very fruitful in a number of ways. First, the idea is a dynamic one, that reflects God's character and purpose. The dynamic, innovative God is an enterprising God – as shown in the very creation process. Second, the use of enterprise as a motif allows weight to be given to innovation and creativity, wealth creation, the provision of goods and services, reward and incentive. Third, the model permits investigation of human development in key areas such as skills and permits creative engagement with the challenge of, for example, emerging technologies. Fourth, the concepts of gift and responsibility can also be given prominence. All of these ideas have implications for the nature and design of work. They require good and meaningful work. We should also reflect on what a theology of work as enterprise does not mean. A theology of enterprise requires some form of market economy as that is the setting in which these ideas can best flourish. However, that is not to invest the market with some form of divinity or, in a fallen world, to suggest there is no such thing as market failure or even market abuse. That is why the principles established in the previous chapters are a prerequisite to a proper understanding as work as enterprise. The creation mandates, calling and vocation are central. However, so are the requirements of the covenant, bringing responsibility and indeed the need for law and regulation into the mix. What is crucial, however, is that the starting point and the relative priorities are clear. A theology of work as enterprise allows certain concepts – innovation, skills, calling, gift – to achieve a greater degree of significance than is often the case. Proper regulation obviously has a part to play; but if that becomes the point of initial departure, crucial elements of enterprise will be lost, or at least shrouded in mist.

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95. Van Duzer, *Why Business Matters to God*, pages 72-79.

The first area to discuss is innovation and creativity and the implications of that for work in the economy. What is clear from the preceding chapters is that God's action in creation is the supreme creative act and that is reflected in both human nature and human purpose. All of this conveys meaning and purpose to work. The moral order may be a given, but through, for example, entrepreneurship, that order is not static. Central, however, to the idea of innovation and creativity is the principle of wealth creation. Work must have purpose if it is to honour and glorify God. Perhaps concepts such as wealth creation grate for some. However, it is impossible to read Genesis 2 without concluding that part of the purpose of work is combine raw materials into greater things – that is to add value or create wealth, creating economic capital. This is at the heart of work, enabling human beings to flourish, creatively combining raw materials into the goods that are needed and wanted, providing services to other people, and, as Van Duzer puts it, providing for the material well-being of God's people.<sup>96</sup> This flows into the discussion of skills and the development of human capital which we will turn to shortly. As well as 'value creation' the notions of innovation and creativity also leads to the conclusion that entrepreneurship is to be encouraged as the earthly expression of heavenly creativity and innovation. The Encyclical *Populorum Progressio* summarised the link of wealth creation and entrepreneurship well:

*By dint of intelligent thought and hard work, man gradually uncovers the hidden laws of nature and learns to make better use of natural resources... he is stimulated to undertake new investigations and fresh discoveries, to take prudent risks and launch new ventures, to act responsibly and to give of himself unselfishly.*<sup>97</sup>

This is then reflected in the development of commerce in the biblical narrative, and indeed the examples of entrepreneurship (from Joseph, to Jacob, to the entrepreneurial woman of Prov 31 to Lydia) as well as the emphasis on calling, the work ethic and responsibility. If the theology of enterprise sees such innovative and entrepreneurial activity at the very heart of what God intends for all humanity then we need to be open, in an imperfect world, to ways in which we can encourage such innovation in our work. This then opens debate around how work is rewarded and creativity incentivised. It is entirely consistent with a theology of work as enterprise that private property rights are an essential part of the reward for work, that levels of taxation need to be such that work not only is rewarded more than not being in work, but that work is not disincentivised. It is similarly consistent that enterprising, entrepreneurial innovation is encouraged through the tax system. These arguments of principle often do not feature prominently enough in the debate. Naturally this emphasis raises questions about work design, meaningful and good work, to which we will need to return.

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96. Van Duzer, *Why Business Matters to God*, pages 38-39.

97. Pope Paul VI, *Populorum Progressio*, para 25.

We also need to be wary of regulation which stifles innovation. Thus, Darrel Cosden:

*Nor should we primarily or exclusively seek to moralise the markets through legislation that often times inadvertently stifles human risk and thus creativity and exploration.*<sup>98</sup>

That, of course, is not the last word on regulation. However, one of the lessons or implications of a theology of enterprise is that of order and priority. There are proper debates to be had about law, regulation, the restraint of inappropriate behaviour in markets, the protection of workers, wages and conditions. The starting point, however, should not be law and regulation, but innovation and creativity as it is this which represents God's essential purpose for human work.

The second area of discussion is that of skills and education. A theology of work built around the enterprise theme will give significant weight to the development of skills, human capital and indeed personal growth and development. The value of work thus includes its ability to shape the future through the development and acquisition of new skills. This moves the idea of work away from the purely instrumental. This also clearly links into the theme of innovation and creativity and forms an important element of the dynamic of work. Hence Dorothy Sayers refers to work as 'the full expression of the worker's faculties, the thing in which he finds spiritual, mental and bodily satisfaction and the medium in which he offers himself to God.'<sup>99</sup>

The biblical narrative contains a clear, and early, progression from the combining of raw materials into goods to the recognition of the acquisition and development of skills and indeed of human capital to be passed on to other generations. We have already noted in Exodus 35 the way in which the bible describes the endowment of skills by God on individuals. Crucially, in v34, Moses adds, in reference to Bezalel and Oholiab, that he has given them the ability to teach others. A theology of work as enterprise will give clear weight to the concept of human capital. The idea of both the development of new skills and the passing on of those skills to others is an essential element of enterprise as a theology of work. Education, teaching and learning are inextricably linked to work. In addition, work leads to not only the acquisition of skills but to on-going human development. This is a constant and indeed valuable emphasis in the Encyclicals. So, *Laborem Exercens* refers to humanity through work contributing 'to the continual advance of science and technology'<sup>100</sup> and this is reinforced in the more recent *Laudato si'*:

*Work should be the setting for this rich personal growth, where many aspects of life enter into play: creativity, planning for the future, developing our talents, living out our values, relating to others, giving glory to God.*<sup>101</sup>

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98. Cosden, *Theology of Work*, page 182.

99. Sayers, *Why Work?* page 13.

100. Pope John Paul II, *Laborem Exercens*, preface.

101. Pope Francis, *Laudato si'* para 127.

So at least part of what ‘good work’ might involve must include the possibilities of development and growth, both personally and in terms of human capital. In policy terms this would certainly call for some debate around on-going skills development and acquisition, flexibility on the part of both employers and employees, apprenticeships and wider educational questions.

A further point to reflect upon in this area of skills and education is the place and indeed the challenge of technological developments. The fear of artificial intelligence, robots, the fourth industrial revolution and so on is that jobs will be destroyed and unemployment increase. A theology of work as enterprise turns this idea on its head. The process of economic development as set out in the bible directly embraces technological advancement as new skills and abilities are used in order to make economic progress. If such innovation leads to the mechanisation of certain jobs or processes, this is neither the first time this has been encountered nor does it mean inevitable unemployment – that would deny the God of enterprise. There may be reallocations of capital and labour (both of which can be painful) but there is no inevitability of net jobs being lost – there will be new and replacement jobs, but those jobs may be of a different order. This prospect links very strongly with the ideas of education and skills we have been discussing. Workers and other economic participants in the economy may need to change their skill set, to innovate and to be creative as they adjust to new economic realities; this is precisely what a theology of work as enterprise would mean.

The third area for consideration is the transforming impact of work. Theologically speaking, if work is an intrinsic part of creation then it will also contribute to the new creation. Hence, work has transformational qualities. This also reinforces that work is not reductionist, it cannot be characterised by or evaluated by its instrumental purposes alone.<sup>102</sup> This emphasis also allows weight to be given to Volf’s notion of ‘gift.’ Work is both calling and gift. As a gift work then is also to be honoured, used in the service of God and humanity, and should therefore have characteristics of purpose, beauty and intrinsic value. Work has transforming qualities reflected in the move from creation, to curse, to redemption, to new creation. Work is part of the dynamic of change as the Garden of Eden is transformed into the Eternal City of the new creation as illustrated in Revelation 21-22. There is both continuity and discontinuity with the original creation. The fundamental purposes and value of work will be maintained but all trace of curse and alienation will be removed and in addition there will be new aspects and new things which characterise work in the new creation. The crucial point is that work is not static. This then also has implications for the relationship of work and society. Work is discharged by individuals but has clear community and societal consequences. If work as an individual activity goes beyond the instrumental (that is, work is more than providing

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102. Cosden, *Theology of Work*, page 154.



for needs) then that must be true for society as a whole. In contemporary debates about the nature and design of work, the transforming nature of work, both individually and corporately, means that clear attention needs to be given to the impact of work on society. This transforming nature of work in society is often lost in the mists of debates over flexibility, contractual arrangements, wages and rights. The way in which work changes and transforms society is multifarious. Work changes both individuals and society economically. Income is provided to individuals and families, goods and services for society as a whole, employment and well-being to individuals and opportunities for companies and firms. The purely economic effects of work should not be ignored, rather celebrated as part of God's purpose and his gift of work. However, this does mean that there are societal implications if work is not available or found (hence the creation of jobs in an economy is an overwhelmingly positive matter) and similarly there are responsibilities on employers to pay good wages (that enable economic participation beyond subsistence), clear progression from entry level jobs and wages, and good working conditions. Indeed, this brings back once again to industrial education and skills. Socially, however, work enables participation in society, enhances community and, indeed, contributes to the tax base and the provision of public goods and services. A theology of work as enterprise then will have all of these characteristics of innovation, creativity, the development of skills, education, personal developing and the ideas of gift and transformation. In a fallen world where sin still pervades ethics will always remain central to practical debates and policies around the nature and design of work. The beginning of ethics, however, is clear purpose, value and calling and hence, although there is indeed an appropriate and proper place for law, rule and regulation, a theology of work as enterprise may at least suggest a rather different starting point. ▀

# CURRENT TRANSFORMATIONS OF WORK AND PERSPECTIVES FOR THE CATHOLIC SOCIAL TEACHING

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by Pierre-Yves Gomez

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*“Man is made to work like a bird is made to fly”*

**T**he transformations of work are now the subject of considerable attention and research. According to some authors, the technological and organisational revolution we are witnessing will have positive consequences on society by releasing unprecedented individual production capacities and by offering workers more choice in their activities. For others, however, it suggests that the organisation of work will be based on anonymous digital platforms, the use of which will alienate a large part of the self-organisation capacities of individuals. The current technological leap points to a liberated society on the one hand and a new form of collectivised society on the other. This contribution does not intend to settle the current debate, but to present the elements that make it possible to form an opinion in order to suggest what can be expected from the Catholic social teaching on these questions. After describing what is meant by digitised work, I will present the main transformations underway, distinguishing between those that concern the organisation of work and those that impact on the level of employment. Based on these observations, I will propose some modest ways of updating the Catholic social teaching on the question of work.

## I ► What does the digital revolution change?

Emerging in the 1970s, digital technology became widespread in the 1990s and in the 2010s suggested a new economic paradigm. Digitalisation is both a technique and a culture: a technique that allows the binary codification of all information and therefore possibilities of accumulation, transmission, processing and use that are unprecedented in the history of humanity.

### 1. Transformation of markets

But more than that, digital technology develops in a *technical system* according to Simondon<sup>1</sup>. The modalities of acquisition, accumulation and processing of information

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1. Simondon, G., *On the Mode of Existence of Technical Objects*, 1958. The following reflections are inspired by Simondon's approach to the autonomy of technical systems. In a more critical perspective: Ellul J. *The Technological System*, 1977. The rereading of these works seems to me to be essential to understand the articulation between technique and work and the autonomization of the digital sphere by self-production of its norms to which human work must adapt.

now obey the same technical and logical conditions, based on the translation into binary language. In other words the raw material (the information) and the modalities of its use (the algorithms of treatment) were unified by the digitalization. This is the basis of the new industrial revolution underway, comparable to the one that saw the appearance of the internal combustion engine.

Digital technology offers an unprecedented reformulation of the relationship between information and its use. As a result, it is developing not only as a technique but also as a mode of economic and social organization and as a culture, implying a totalizing representation of the “digital society”: information is a high-value resource whose flexible and rapid processing makes it possible to reorganize social relations. The technical tools (the laptop, the cell phone, the tablet) are only *screens* that should not hide the deeper transformation of the organization of work, social practices and even customs, by the accelerated diffusion of information as a means of regulation, the compression of the time of exchanges towards instantaneity and the questioning of traditional trustworthy actors in favor of social networks. On the economic level, digital technology encourages a generalized market economy by lowering transaction costs and by multiplying evaluation, auction and pricing platforms for all products, from travel and training to financial investments.

## 2. Transformation of production

The billions of data obtained, exchanged and analyzed in a fraction of the time, turn the way of defining and organizing production upside down. The economic logic assumed that the accumulation and storage of resources over a sufficiently long period of time would allow their analysis, processing and use. The creation of value and even the source of competitive advantage was based on the control and optimization of this time, which was necessarily stretched if not long (inventory management, knowledge development, research, long distribution networks, etc.).

According to the Boston Consulting Group, nine innovations define the digital revolution and the transformation of production processes: mass data management (Big Data), new forms of robotization, simulation, horizontal and vertical information systems, cybersecurity, outsourced data storage (Cloud), additive manufacturing (production in successive layers using 3D printers), augmented reality (the possibility of acting in a virtual environment)<sup>2</sup>.

These innovations call into question traditional production processes: on the one hand, they shorten production times to extremely short durations: the economic challenge is now to master hyper speed and not long time; on the other hand, they allow production in continuous flow: the inventory management essential to long

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2. Rüßmann, M., Lorenz, M., Gerbert, P., Waldner, M., Justus, J., Engel, P., & Harnisch, M., *Industry 4.0: The Future of Productivity and Growth in Manufacturing Industries*. Boston Consulting Group. 2015.

production flows is becoming counterproductive in an economy where flow (and not inventory) management is a source of value; finally, it allows the connection of production stages that were previously isolated from each other and ensures an integrated production of activities: these are the perspectives opened by Industry 4.0 since 2010 in Germany and 2012 in France, which connects not only objects but producers<sup>3</sup>. These transformations revolutionize not only the traceability of production, but more essentially its organization: companies will be integrated into digitized production systems that will inform them in a continuous flow, not only of the state of final demand, but of intermediate demands at all levels of production. In this way, a form of real-time production *planning* based on *market* indications would be achieved, making the old opposition between the plan and the market obsolete: information from the market will guide production in a continuous flow. The creation of wealth due to the exploitation of considerable quantities of information (giant databases or Big Data) is made possible by computers with gigantic processing capacities and, henceforth, a certain capacity to interpret information (artificial intelligence). If it is not always easy to discern what is a naive exaggeration in the perspectives that the promoters of these technologies outline, a “technological arms race” has begun for the mastery not only of the databases that allow for the continuous analysis of consumer behavior, but also of the machines that are capable of making the most of this information by interpreting it in the most precise, that is, the most singularized manner: Artificial intelligence allows machines to learn from the information they process themselves in order to refine the precision of their processing. We are thus moving from a statistical analysis of averages by population class to an analysis that allows us to anticipate individual behavior on the basis of an ultra-fast interpretation of considerable quantities of information concerning the individual himself. The consequences are considerable for the functioning of markets, marketing, the definition of products and services, but also for the functioning of democratic societies.

### 3. Open perspectives for the organization of the economy

The key words of the current industrial and cultural revolution are: hyperconnection and fluidity of information. However, the game remains open because technological transformations offer opposing possibilities of action and forms of economic organization. This can be illustrated through two pairs in tension:

- The pair of centralization/decentralization of information: supercomputers and servers concentrate information in databases of global size allowing very fine processing of

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3. For a recent study: Charlet V., Dehnert S et Germain T. (dir.), *Industrie du futur : progrès technique, progrès social ? Regards franco-allemands*, La Fabrique de l'industrie/Presses des Mines, 2017. Bidet-Mayer T., *L'industrie du futur : une compétition mondiale*, La Fabrique de l'industrie/Presses des Mines, 2016. Velz P., *La société hyperindustrielle*, La République des idées, Le Seuil, 2017.

information; but, as a corollary, technologies allowing the use of this information at very decentralized levels (tablets, smartphones, etc.). The extreme centralization of information requires and produces an extreme decentralization of the use of this information that both abounds in the Big Data but also allows a large amount of information to be used locally: for example, it is the use of cell phones that allows the databases managed by Google to be filled in on a global scale, but the same cell phone allows people to intervene in “short circuits”; to create local relationships and services and thus to innovate on a local scale.

- The pair of mass production/localized production: the very fast processing of information by very powerful computers now allows new generations of robots to perform fine repetitive tasks on a very large scale and therefore at low cost. But, on the other hand, these new generations of robots are able to produce in a very localized way, certainly in connection with a global system of interconnected objects, but they can produce very small series at low cost, which is a reversal of the classic paradigm of economies of scale: this is the case with robots that are unfairly called 3D printers and that should be called “domestic factories” because their function is to produce objects (by additive manufacturing) on a piecemeal basis at the level of each household.

From the technical system based on hyperconnection and the fluidity of information, the innovations underway highlight two trends: concentration and planetary mass production on the one hand<sup>4</sup> and, on the other, decentralization and relocalized production. These two polarities explain the debates and opposing interpretations of the current transformations, some emphasizing the centralization and increased globalization of the economy, others predicting the explosion of autonomous and local production in a globalized framework. The new equilibrium of the mode of production will undoubtedly combine these two tensions in a generalized market economy, self-regulated by information technology.

## II ► Consequences on the way we work

The technological revolution is radically transforming the organization of human work. From the abundant literature on this subject I will identify three major trends: 1) the increased individualization of work, 2) the increased dependence of the worker on the technical system, 3) the reduction of the boundaries between private and professional spaces.

### ► FIRST TREND ► Increased individualization of work

Technological capital makes it possible to individualize and further empower human labor through access to vast amounts of information.

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4. The political and geopolitical consequences of this concentration are beyond our subject. See the alarmist remarks of Bellanger P. *Souveraineté numérique*, Stock, 2014.

Rifkin<sup>5</sup> considers that we are witnessing the most significant revolution since the origin of capitalism because the technical capital necessary for wealth creation – now related to information processing, networking and the development of collaborative processes – is within the reach of anyone with a simple laptop and a smartphone, for example 87% of the French population.

The use of intermediation platforms reduces transaction costs to access customers. Everyone can therefore sell their services more easily, from home delivery to advice. Individual creativity could therefore be further liberated with an increase in autonomy in the organization of work: in its most basic form, this is simple remote working. In more subtle forms, we are witnessing an increased individualization of production among both employees and self-employed workers. At the extreme, work platforms that allow the realization of *crowdworking*, that is, punctual micro-tasks paid individually, as in the case of the *Mechanical Turk* set up by Amazon<sup>6</sup>.

The connection between supply and demand is made more fluid, allowing individuals to offer new services: 46% of the businesses created in France in 2016 were in home delivery, short-distance transport and consulting activities<sup>7</sup>. However, digitization is not leading to an explosion of self-employment: the rate of self-employment was 11% in France in 2016 compared to 20% in 1980. If since 2010 there has been a slight increase in the United States, as in all developed countries, this is not a radical transformation as was anticipated with as much fanfare as factual inconsistency, and wage employment remains and will remain for a long time the dominant form of contractualization of professional work.

## ► SECOND TREND ► Increased dependence on the technical system

The new individual autonomy of workers, whether in the company or as “freelancers”, is tempered by the technical system that makes it possible. The coordination of individualized work is always ensured by computer platforms. These platforms provide intermediation, they determine individual tasks, and they also manage the content of autonomous activities: the control and use of the algorithm that allows this coordination is decisive for the effective freedom of those who use it. There is thus an ambivalence between the flexibility of work that the use of the platform allows and the dependence on the rhythms and meaning determined by the platform’s algorithm. The neologism *uberization* has popularized this ambivalence: the use of the company Uber has

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5. Rifkin J. *The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World*, Palgrave Macmillan, 2011.

6. Amazon Mechanical Turk (AMT) is a work platform opened in 2005 that connects freelancers with sponsors to perform simple tasks (evaluation, writing reviews, word-for-word translation, etc.) paid by time spent (on average \$2 per hour). 500,000 Americans are registered on AMT in 2017, 57% derive their primary income from it (source [www.mturk.com/mturk](http://www.mturk.com/mturk)).

7. Bonnetête F. et Bignon N., *Entreprise births in 2016*, INSEE première, n°1631.

allowed thousands of ride-hailing chauffeurs to find an “independent” activity. But the extreme dependence of such drivers on the price and pace conditions imposed by the Californian platform makes the exercise of the activity precarious and even alienating.

► **THIRD TREND ► Reduction of the boundaries between private and professional spaces**

Digitized work obeys the logic of global and continuous flow production. We can now connect everywhere and at any time to networks that allow us to carry out paid activities, whether they are salaried or not. Digitized work blurs the spaces, which were previously quite clear, between non-professional and professional activity. In non-professional activity, we used to consider domestic, associative and collaborative work; in professional activity, we used to distinguish self-employment and salaried work.

Digitalisation is upsetting these distinctions. First of all, in companies: 20% of employees on permanent contracts now work shifted and variable hours, 30% have to work on Sundays, 10% have flexible working hours and 17% use remote working. These changes in the rhythm and time of work are also changing the traditional relationship of subordination. Until now, hierarchies have been based on the distribution of skills and therefore on the control of information by the person with decision-making power. However, this distinction between those who know and those who do not know is devalued in a world of open and instantaneous information and in organisations that seek to promote innovation precisely by allowing wide access to information for all. Within organisations, a logic of quasi-integration in the sense of Williamson<sup>8</sup>, is therefore developing, with employees feeling less a part of a project than of a space open (or not) to their personal fulfilment. This metamorphosis of the hierarchical relationship is much discussed in the world of human resources, particularly around a supposed ‘Generation Y’ of young workers who are reluctant to accept old hierarchies and who will be the managers of tomorrow. The digital revolution is having an even greater impact on the evolution of non-professional work. The use of platforms allows for more collaborative and associative work: for example, the largest encyclopaedia ever conceived in history (Wikipedia) was created in less than 10 years by several million Internet users working for free to share their expertise on countless knowledge subjects. The countless *open source* activities, in other words those carried out and used free of charge by thousands of volunteers, compete with traditional “professional” activities: this is the case with free software (Linux, Mozilla, Apache) or with the record or film industry, which have been completely overhauled to take account of free exchanges between clients. Voluntary activities compete directly with commercial activities.

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8. Williamson O., *Markets and hierarchies, Analysis and Antitrust Implications*, 1975. Quasi-integration implies a recurrent relationship between a purchaser and a performer involving a pooling of resources, without the performer being subject to the subordination link. By analogy, the most “autonomous” employees act with the feeling of being quasi-integrated into the company and not a member of a work community.

In the opposite direction, we are witnessing the marketisation of what was once voluntary work, which enables individuals to obtain marginal remuneration by using so-called capital platforms. These platforms offer to add value to goods such as a car or a flat by allowing them to be rented out to a third party on an ad hoc basis for a journey (as is possible, for example, with Blablacar) or an overnight stay (as is possible with Airbnb). What used to be free, such as picking up a hitchhiker, or welcoming a guest into one's "spare room" now offers the possibility of a paid activity on the margin. The boundary between domestic and professional time is thus becoming blurred, which constitutes a return to pre-industrial practices: for thousands of years, the distinction between private and professional spaces did not exist; it was the emergence of rationalised production in factories or offices that institutionalised this division from the 19th century onwards. Less, therefore, than the blurring of the distinction between personal and professional life, the truly new phenomenon lies rather in the fact that the *rhythm* of work is both defined by the worker but also subject to the limits that the technological and organisational system tolerates: a classic example is the continuous flow of e-mail, which is uninterrupted and often obliges people to work at times they do not choose (meetings in international contexts with time differences, management of urgency accelerated by the speed of information processing, etc.). This tension can be seen in the increased demand for both remote working and the right to disconnect.

## **1. Individualised work, between autonomy and dependence on technology**

In the end, the major trends that are transforming the organisation of work today highlight a double polarisation: On the one hand, more individual autonomy, open expertise and individual creativity, freedom of self-organisation, individual and collective innovation, the possibility of using and selling one's abilities; on the other hand, work that is strongly determined by the technical platforms that ensure the connections, collaboration and control between those who work – hence an increased dependence on the platform economy, technologies, digitised organisations and those who control the algorithms and their objectives. An optimistic or pessimistic representation of the future of work depends on the strength of attraction that one gives to one or the other of these two poles.

In both cases, however, it can be concluded that there is greater individualisation and thus a questioning of the collective dimension of work. It is now possible to take part in meetings or projects "remotely", but also to teach or diagnose illnesses without physical meetings, relying on the technological system to manage contacts, evaluations, tasks to be carried out and the necessary adjustments. Yet one of the essential dimensions of work is to produce communities, which is to say a way of living together by carrying out common projects. "Virtual communities" now only require their members to be flexible in their membership, which again is a corollary of the supposed autonomy of individuals in a



market society that is increasingly liquid in Bauman's sense<sup>9</sup>. This is an element of attention for the future of the social entity to which we will return when we address the question of the appropriation by the Catholic social doctrine of the current transformations of work.

### III ► Consequences of digital technologies on employment

The consequences of digitalisation on employment are very uncertain. The debate is often distorted by erroneous considerations about the “disappearance” of salaried employment if not of work<sup>10</sup>. It seems that wage employment will remain by far the majority in the next decades in the developed world and that it will increase in developing countries. Moreover, we are witnessing the growth of quasi-professional forms of collaborative or independent work thanks to the use of digital platforms. We can therefore expect neither the disappearance of work nor the disappearance of the wage earner as a form of contractual relationship in the next few years.

Another thing is the impact of digitalisation on the *level* of employment, that is, the number of employees or self-employed. On this subject, there is no agreement among economists on the future of employment<sup>11, 12</sup>. In a global survey conducted in 2014 among 2000 experts worldwide, it appeared that half of the economists questioned considered that artificial intelligence and robotisation would destroy net jobs, the other half considered that the jobs destroyed here would be recreated elsewhere<sup>13</sup>.

To fuel this debate, the concept of “creative destruction” due to Schumpeter is frequently used, although he only used this expression once in his work<sup>14</sup>, without really theorising about it, and it has never been proven<sup>15</sup>, hence the possibility of a current debate. This raises two questions:

1. Is the productivity of digital capital not so high that it is not possible to adapt that of human capital? We would then see a decline in professional work as it has developed since the beginning of the 19<sup>th</sup> century, through the simple replacement of humans by machines in companies and administrations;
2. Even if an adaptation were possible, can the speed with which digitalisation disrupts the productive apparatus leave the necessary time for the emergence of new sources of wealth based on human labour? In other words, in the pairing of creative destruction, the speed of “destruction” is such that “creation” may become impossible due to lack of resources.

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9. Bauman Z. *Liquid Modernity*, The Polity Press, 2000.

10. Rifkin J., *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*, Putnam Publishing Group, 1995.

11. To contribute to the ongoing debate see among others, Cohen D., *Le Monde est clos et le désir infini*, Albin Michel.

12. Stiegler B., *L'emploi est mort, vive le travail : Entretien avec Ariel Kyrrou*, Les Mille et une nuit, 2015.

13. Aaron Smith A. et Anderson J., *AI, Robotics, and the Future of Jobs*, Pew Research Center, 2014.

14. In Chapter 7 of *Capitalism, Socialism and Democracy*.

15. Refer to Caye P., *Critique de la destruction créatrice : production et humanisme*, Les belles lettres, 2015.

While it is impossible to answer these two questions with any certainty given the current state of the data, we can anticipate with some certainty some major upheavals in the next generation, in the number of employees, the type of jobs and the sociology of employment.

## 1. On the number of jobs

The subject is controversial because two technological phenomena are combined without the effects on jobs being deduced from similar experiences in the past: robotisation and artificial intelligence. The study by Acemoglu and Restrepo of MIT shows that over the period 1993-2010, a robot replaced an average of 5.6 employees and that the impact of one robot per 1000 employees reduces employment by 0.34% and wages by 0.5%<sup>16</sup>. Will new generations of robots increase this impact? The often commented study of over 700 occupations, by Frey and Osborne from Oxford, estimates that over the next 20 years 47% of tasks in these occupations will be affected by automation in the US and 37% in Britain. In terms of net job losses, Arntz, Gregory and Zierahn calculated a loss of 9% in the US, 10% in the UK, 9% in France and 7% in Japan<sup>17</sup>. For France, an analysis note by *France Stratégie* nuances these statistics by using the case of the banking sector and by showing that the phases of automation have been accompanied, in the past, by a reorganisation of jobs<sup>18</sup>.

However, it is difficult today to assess what the consequences of artificial intelligence could be, especially for jobs with high technical skills. A team from Oxford and Yale surveyed 352 scientists who had published on artificial intelligence to identify trends related to its expansion. It appears that machines will outperform humans in translation by 2024, report writing by 2026, truck driving by 2027, retailing by 2031, and surgery by 2053. While the latter once compensated for the loss of unskilled jobs replaced by robots, the new computational and interpretative capabilities of computers will make some skills considered high value-added today obsolete. Robotisation will have a major impact on management and expert jobs, although it is not yet clear what new human jobs will emerge<sup>19</sup>.

## 2. On the content of professional jobs

As a result of the digital revolution, expertise can no longer be limited to the possession of knowledge or know-how. Knowledge is becoming less exclusive than inclusive, the expert being the one who has the capacity to make creative links between public data

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16. Acemoglu D. et Restrepo P, *Robots and Jobs: Evidence from US Labor Markets*. Boston University March 17, 2017.

17. Arntz M., Gregory T. et Zierahn U., *The Risk of Automation for jobs in OECD Countries: A Comparative Analysis*, OECD Social, Employment and Migration, Working Papers, n° 189, 2016.

18. Le Ru N., *L'effet de l'automatisation sur l'emploi : ce qu'on sait et ce qu'on ignore*, July 2016 N°49.

19. Roland Berger Strategy Consultants, *Les classes moyennes face à la transformation digitale. Comment anticiper ? Comment accompagner ?*, 2014. Florida's highly controversial study popularised the idea that these new professions would be about artistic creation and intellectual innovation: Florida. In his books: Florida R. *The Rise of the Creative Class*, New York: Perseus Book Group, 2002.

rather than conserving them in order to make them available. For some authors, such as Deming, this new situation implies the emergence of new professions of interface and network managers. At the same time, expertise is passing into the hands of those who have mastered the ability to manage information rapidly by knowing how to develop increasingly sophisticated processing algorithms. The prestige of knowledge (the evolution of the practices of teachers, researchers, politicians and doctors) is transferred from the management of knowledge to the production of algorithms that automate the production of knowledge. These transformations in the value of work will produce migrations within the labour market and may allow one to speak of a “digital exodus” by analogy with the “rural exodus”<sup>20</sup>.

The transformation of the content of high value-added jobs implies adaptations of the populations all the more rapidly as the productivity gains of machines are exponential according to Moore’s second law (the transistors of an electronic chip double every 2 years). If we assume that creative destruction is taking place, a race against time is underway to create new jobs in a context of low growth and very high capital productivity, which presupposes massive training policies, the content of which is still hypothetical.

While salaried employment is contracting, we have seen that “non-professional” work constitutes a source of income: a study by Chase Manhattan has shown that the use of work platforms (such as Uber, crowdworking, etc.) generates income that replaces salaried income to the tune of 12%, while capital platforms (such as Airbnb, Blablacar) increase income to the tune of 15%. In other words, work for hire through platforms replaces income, but the work resulting from the rental of one’s assets increases it. The transformation of the content of jobs therefore also means increasing multi-activity with compensatory incomes and increased precariousness depending on the opportunities offered by the labour market. Countries with a low unemployment rate also have a high rate of part-time or precarious workers: a comparison between France and Germany shows an unemployment rate of 10.5% in France compared to 4.8% in Germany; yet the rate of part-time employment is 18% in France compared to 26% in Germany where between 1999 and 2011, “*the creation of part-time jobs represented all the new jobs created*”<sup>20</sup>. The phenomenon of the “*working poors*” has emerged: Whereas until recently poverty was associated with the absence of employment, it now affects employees as well as those without jobs. In an international study, Brady, Fullerton, and Cross showed that, of those individuals or families below the poverty line, 30% were in employment in Britain, but 50% in Germany and France and 65% in the USA<sup>21</sup>.

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20. Nicolas Coste N., Laurence Rambert L., Emmanuel Saillard E., *Temps partiel et partage du travail : une comparaison France/Allemagne*, Trésor-Eco n°141, 2015.

21. David Brady D., Andrew S. Fullerton A., Jennifer Moren Cross J., *More Than Just Nickels and Dimes: A Cross National Analysis of Working Poverty in Affluent Democracies*, *Social Problems*, Vol. 57, Issue 4, pp. 559–585, 2010.

A much-discussed consequence of the transformation of labour markets concerns the evolution of the middle classes. For two centuries, economic growth has been accompanied by the generalisation of a middle class. The distribution of income in the population of developed countries benefits a very large majority of middle-income earners in the range of 1 to 4: in France, 95% of the population earns an income between 900 and 3100 euros per month, with a median income of 1772 euros in 2014<sup>22</sup>. However, for some observers, the transformation of work is tending to worsen the economic situation of the intermediate and middle classes. In the United States, we are witnessing strong growth in very high incomes and stagnation in the incomes of middle and low-income groups<sup>23</sup>. According to the *winner-take-all society principle*<sup>24</sup>, high-skilled jobs, especially in the digital sector, are absorbing most of the growth in wage income. If this trend were to be confirmed, the transformations of the labour markets would result in an unequal distribution of the gains from economic growth, similar to the one we experienced in the 1990s and 2000s as a result of the over-valuation of finance jobs.

#### IV ► Perspectives for the Catholic social teaching

The current technological social transformations around work are bringing about more than just a new economy, because it is the whole of society that is being modified by the digital technical system and the transformations of work. In short, this new economy is characterised by:

1. An organisation of the production system based on both large centralised platforms and a decentralisation of the use of the means of production down to the level of the individual;
2. A parallel tendency towards a very strong individualisation of individual work within the framework of a constraining technological system;
3. A change in paid jobs, which is reflected in the disappearance of some of them and the appearance of new ones, although the balance of these transfers is not yet predictable;
4. A transformation of forms of remuneration of work towards more individualised contractualisation.

Generally speaking, we are witnessing an extension of the market economy and an increased “commodification” of work activities. The opposition between State and market that was clear in the 1980s has given way to an opposition between an economy in which either the technical system is at the service of man (decentralisation of technologies, increased

22. Insee, *Les niveaux de vie en France*, Insee première n° 1614, 2014.

23. Piketty T., *Le capital au XXI<sup>e</sup> siècle*, Seuil, 2013.

24. Robert H. Frank R. et Cook P. *The Winner-Take-All Society : Why the Few at the Top Get So Much More Than the Rest of Us*, The Free Press, 1995.

local initiatives thanks to collaborative work; *open source* spaces allowing private initiatives with low entry costs); or man is one of the production factors of a generalised technical system (domination of global platforms; centralisation of the management of *big data* and mass data processing technologies thanks to artificial intelligence).

The issue is therefore not only economic, but also civilisational. The prospects opened up by transhumanism and the control of private data, the superpower of a few very large global companies, or the robotisation of social relations are signs of a change in civilisation that originates in the metamorphosis of work.

Since the encyclical *Rerum Novarum*, the Church has contributed to establishing “*the relative rights and mutual duties of the rich and of the poor, capital and labour*”, the just principles that should govern the organisation of work and the governance of organisations, while recognising that it is difficult “to define the relative rights and mutual duties of the rich and of the poor, of capital and of labor”<sup>25</sup>. Now it is a question of thinking about work in a space and rhythm that are no longer determined exclusively by the traditional company but which are diluted in the digital system: the boundaries are becoming blurred between private time and common time; between the function of production and consumption insofar as, by consuming, one is also a producer of information on one’s own behaviour; between paid and unpaid work.

Faced with the claims of the technical system, the Church has affirmed that “*economics and technology are meaningless if they do not benefit man, for it is he they are to serve. Man is truly human only if he is the master of his own actions and the judge of their worth, only if he is the architect of his own progress. He must act according to his God-given nature, freely accepting its potentials and its claims upon him*”<sup>26</sup>.

In response to these considerable challenges, the Catholic Social Teaching, updating the evangelical message to the data of the contemporary world, could present proposals on work in three complementary ways:

**1. A LEGAL ASPECT** ► A decisive issue for the future of our societies is that of property rights over the information that digital technologies allow to accumulate and process. Until now, the law that has prevailed is that of objects, on the principle that the company that accumulates and manages the data has “ownership” of it, as if it were an intangible<sup>27</sup>. This issue is highly debated because the production of data is not the result of a capital investment, but of the work of the platform users: who should own the data accumulated by the social network Facebook, for example, which is provided by its own users? The debates concern, on the one hand, the extent of the uses

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25. *Rerum Novarum*, 2.

26. *Populorum Progressio* 34.

27. For a stimulating discussion, Blair, M.M. & Wallman, S.M.H. (2000). *Unseen Wealth: Report of the Brookings task force on understanding intangibles sources of value*. The Brookings Institution. Washington.

and, in particular, the legal possibility of reselling the data recovered to third-party companies<sup>28</sup>. On the other hand, they concern the governance of digital platforms: who has the right to control them? For what purposes? How are these purposes defined and controlled? For some, the accumulated information is a commons that must be managed in such a way that it cannot be appropriated by any power, whether public or private. In response to the current state of Fordian capitalism, which was then becoming widespread, the encyclical *Quadragesimo Anno* (1931) advocated renewed forms of governance, stating that “*workers and other employees thus become sharers in ownership or management or participate in some fashion in the profits received*”<sup>29</sup>. The perspectives thus opened up inspired, among other things, the so-called Rhenish model of governance: co-determination of company strategy allowed by parity on the supervisory board between shareholders and workers<sup>30</sup>.

In response to the new forms of organisation of capital and work, the Church could draw up some guidelines for the governance of digital platforms which will be of considerable importance for the work and individual freedom of millions of citizens. On the one hand, these paths could outline the modalities of participation of enlarged stakeholders in the governance of platforms; on the other hand, the role of a renewed “public service” as a determining actor in maintaining the accumulated information and its use as a “common”.

**2. A SOCIAL ASPECT ►** The transformations of work are producing a greater precariousness of workers. As we have seen, this concerns the forms of employment contracts (increased individualisation of working hours and remuneration), that of productive organisations (possibilities of working independently from platforms) and traditional salaried employment (transformation of job content). Even if one remains optimistic that new social balances will emerge from these upheavals, it would be naive to ignore that the period of adjustment will be a source of increased difficulties for the most vulnerable. We have seen that this vulnerability will concern the middle classes more than in the past. The word of the Church will be awaited on the new forms of poverty or the widening of the income gap. The Magisterium has spoken out a great deal over the last fifty years on the wealth gap between

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28. Cf. The new EU General Data Protection Regulation will come into force in May 2018. It strengthens the rights of individuals in all EU countries regarding the use of their data by companies and limits the possibility for companies to transfer data outside Europe.

29. *Quadragesimo Anno*, 65.

30. The German model of codetermination (*Mitbestimmung*) was directly inspired by the Catholic Social Teaching and in particular the work of the Jesuit sociologist Oswald von Nell-Breuning, who inspired the *Quadragesimo Anno* encyclical and wrote an influential book, *Mitbestimmung*, in 1950, at the time when the first forms of codetermination were being discussed. For a summary of this history Gomez P-Y and P. Wirtz, *Successfully mobilizing for employee board representation: lessons to be learned from post-war Germany*, *Journal of Management History*, 24, 3, 2018.

the North and the South, and to encourage development policies in Third World countries. The work of the Pontifical Council for Justice and Peace, created in 1967, was in line with the desire of *Populorum Progressio* to promote “concern for the developing nations”<sup>31</sup>.

In today's world, the divide between extreme wealth and extreme deprivation, between job security and job insecurity, and between high and low incomes cuts across all societies, both in the North and the South. The opposition between developed and developing countries can therefore mask issues of social justice that no longer concern “peoples”, countries or continents as a whole, but social categories that suffer the same problems in rich or poor countries.

Without a systemic understanding of the transformations of work that affect all countries in solidarity, there is a risk of reproducing divisions that are no longer effective. The word of the Church is expected at this level of global and unprecedented understanding of the changes underway in order to promote “*man's complete development and the development of all mankind*”<sup>32</sup>. It could, for example, link the “digital exodus” and its consequences on employment in developed countries with South-North migration, because the issue of migrants cannot be fully understood without taking into account the precariousness of work in the host countries; the Church could also shed light on the much debated issue of “universal income”, that is, the minimum income guaranteed to the members of a civilised society when household income can no longer be ensured by salaried work alone.

**3. AN ANTHROPOLOGICAL ASPECT ►** Changes in work tend towards greater individualisation. Logically, the forces at work are pushing for its adaptation to the “liquid” post-modern society characterised by total individualism. Yet work has an eminently collective dimension: we never work alone and for ourselves, but always in a social context, to participate in a common project, a collective work, a society. It is one of the stubborn myths of modernity to suggest that production is the result of a series of individual activities that can be isolated and coordinated by a planning organisation, even a private company. An impressive amount of empirical work<sup>33</sup> shows that work implies a solidarity between those who perform it, a solidarity that is anthropologically founded: the nature of man is to live, and therefore to work with others, and both work and the worker are produced by this collective dimension of activities. To ignore the latter is to participate in the ideology of integral individualism and to give the technical system in particular an unjustified weight in the coordination

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31. *Populorum Progressio* 5.

32. *Ibid.*

33. The collective dimension of work is a truism in the sociology of work and in management science, so much so that it is difficult to provide a bibliography on such an obvious subject.

of those who work and in the planning of their activities. This is why the voice of the Church is needed to remind us that work is part of society, creates human relationships and requires solidarity. A reconsideration of the anthropological depth of the collective dimension of work would be all the more necessary as it is little understood in the texts of the Magisterium until now. Thus, the great encyclical on work, *Laborem Exercens*, addresses and articulates the subjective and objective dimensions of work, but says little about its collective dimension.

It is clear that the whole of Christian anthropology assumes that man is a social animal and therefore that *“in the case of work, especially work hired out to others, there is a social aspect also to be considered in addition to the personal or individual aspect”*<sup>34</sup>. When, discussing the personalist argument, St. John Paul II concludes *“every effort must be made to ensure that in this kind of system also the human person can preserve his awareness of working ‘for himself’*, he restores to work its dignity in a context where collectivisation was still considered a successful form of economic organisation. In today’s times, “working for oneself” needs to be balanced by the responsibility to participate in common projects, to “make society” by recalling how the dignity of work also consists in working with others, in partnership and solidarity with them. Thus each worker *“collaborates in the work of his fellow employees, as well as in the work of suppliers and in the customers use of goods, in a progressively expanding chain of solidarity”*<sup>35</sup>. The reaffirmation of this fundamental anthropological dimension is a decisive issue for the freedom of humans involved and intertwined in a technical system that isolates them more and more from each other’s work through “virtual” relationships.

The transformations of work that we are experiencing today are on an unprecedented economic, but above all social and societal scale, comparable at least to the situation posed by the “workers’ question” in 1891. This is why it is not forbidden to hope that *“today’s ‘new things’”*<sup>36</sup> call for an encyclical on the subject that could have the political relevance and impact of *Laudato si’*. ▀

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34. *Quadragesimo Anno*, 46.

35. *Centessimus Annus*, 43.

36. *Ibid.* II.





# THE ECONOMIC IMPACT AND THE ETHICAL CHALLENGE OF CONVERGING TECHNOLOGIES

## THE ROLE OF SOCIETY'S INTERMEDIATE BODIES

*by Stefano Zamagni*

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### ► Introduction

In this paper I will deal with a niche topic of great significance, the phenomenon of converging technologies, or, in what sense the 4<sup>th</sup> Industrial Revolution touches on our living conditions and affects the articulation of our societies. It is now generally accepted that the current one is a real passage of epoch; not a natural evolution or a simple magnification of trends already in place during the long phase of industrial society. It is also widely known that from the origin of the current transition, in addition to the 4<sup>th</sup> Industrial Revolution, there existed the phenomenon of globalization. But while literature is already stacked up to support the latter, the same cannot be said with reference to the other phenomenon of epochal importance. We do not yet know how new technologies and the culture which governs them will modify the essence of capitalism in the years to come. We do know, however, that a new great transformation of the Polanyan type is underway.

In this paper, I will not go into the technical characteristics of the new mode of production, resulting from the digital revolution. Instead, I will focus on the consequences that the structural changes now underway are having on two specific fronts: that of human labor, and that of public ethics. It is reductive to identify the fourth industrial revolution solely as a new technological paradigm. To insist, as unfortunately most of the literature on the subject does, only on this dimension does not allow us to grasp the elements of rupture on the social and cultural fronts that this emerging phenomenon is highlighting. As a result, it is not possible to set up lines of intervention that are up to today's challenges. It would be appropriate for me to make clear from the outset the perspective from which I view this reality, that of the most recent Social Doctrine of the Church. The author of this paper does not recognize himself in the position of the "laudatores temporis acti", of the so-called techno-pessimists, nor in that of the uncritical exalters of the "magnificent progressive fate" of humanity. If the lauders of

the Fourth Industrial Revolution are wrong, their denigrators are not right. I consider, in fact, the current techno-scientific trajectory as something positive in itself, and, in any case, unstoppable, though to be governed with wisdom (i.e. with reasonableness) and not only with competence (i.e. with rationality).

In order to better understand the point raised, it is opportune to give a word of clarification on the notion of development, a word that is overused today. In the etymological sense, development indicates the action of freeing from tangles, ties, and chains that inhibit the freedom to act. It is Paul VI (*Populorum Progressio*, 1967) to whom we specifically owe the insistence on the link between development and peace: development as a process of expansion of the real freedoms enjoyed by human beings. In biology, development is synonymous with the growth of an organism. In the social sciences, on the other hand, the term indicates the passage from one condition to another and therefore calls into account the notion of change (as when we say: that country has passed from the condition of an agricultural society to that of an industrial society). In this sense, the concept of development can be associated with that of progress. It should be noted, however, that the latter is not a merely descriptive concept, since it entails an implicit, yet indispensable, value judgment. Progress, in fact, is not simply a change, but a change for the better, and therefore implies an increase in value. It follows that the judgment of progress depends on the value considered. In another way, an evaluation of progress, and therefore development, requires a determination of what should proceed towards the better. Robots, even those with artificial intelligence, are not, nor will they ever be, adequate to this need.

The central point to note for the purposes of what will be said in the following paragraphs is that development cannot be reduced to economic growth alone – still measured today by that indicator known to all which is GNP – which is indeed one of its dimensions, but certainly not the only one. The other two are socio-relational and spiritual. But – please note – the three dimensions are in a multiplicative relationship, not an additive one. This means that it is not possible to sacrifice the socio-relational dimension in order to increase the growth dimension – as is unfortunately happening today. In a production process, even if only one factor is cancelled, the entire product amounts to zero. Not so in a summation, where the zeroing of an addend (something added) does not annul the total sum; on the contrary, it could even increase it. Here lies the great difference between total good (the sum of individual goods) and common good (the product of individual goods): it is impossible, strictly speaking, to speak of growth in solidarity and inclusion, while one can and must speak of development in solidarity and inclusion. In essence, complete human development is a transformational project that has to do with change for the better in people's lives. Growth, on the other hand, is not in itself a transformation. And this is why, as history teaches us, there have been cases of communities or nations that have declined by growing. Development belongs to the order of purposes, while growth, which is an accumulative project, belongs to the order of means.

In what follows, after illustrating some salient features of the so-called convergent technologies – those resulting from the synergistic combination of nanotechnology, biotechnology, information technology, and cognitive science: in acronym NBIC –, I will move on to address the two issues mentioned above. The expression “converging technologies” is derived from the circumstance that in the 4<sup>th</sup> industrial revolution there was no new breakthrough or innovation, as was the case in all three previous revolutions. (As a reminder: 1784, with the invention of the steam engine, the first industrial revolution took place; 1870, with the advent of electricity and chemistry, the second took place; at the beginning of the 1970s, with the birth of information technology, the third industrial revolution took place). The four new technologies of the NBIC group are the ripe fruit of the third industrial revolution, which gave way to the fourth towards the end of the last century.

## **I ► The “res novae” of the 4<sup>th</sup> industrial revolution**

The promise of an empowerment, and therefore of a transformation, both of man and of society, that the converging technologies of the NBIC group creates today give an account of the extraordinary attention that technoscience is receiving in a plurality of fields, from the cultural to the scientific, from the economic to the political. The goal pursued is not only the enhancement of the mind, nor only the increase of the diagnostic and therapeutic capacity against a whole range of diseases, nor even the improvement of the ways of control and manipulation of information. What we want to aim for is the artificialization of man and, at the same time, the anthropomorphization of the machine. It is to Julien Huxley that we owe the invention of the word transhumanism, to describe a future world in which, instead of opposition between beings, we will have a ongoing hybridization of the human. As a global movement, transhumanism developed in Silicon Valley, thanks to the interventions of Google and Apple whose aim is to build an “augmented man” in his capabilities. It is on this premise that it is now urgent to lift the veil of silence, opening a high-profile debate. The issue, in fact, touches even the anthropological level. Two conceptions of man are being compared: that of man-person and that of man-machine. The latter is gaining ground. This explains, among other things, why the ideal of the man-machine is creating a real educational emergency today: training/education has taken the place of education. The man-machine “asks” for education; he does not need education. It is to the theory of equilibration that we refer, according to which the motor of the mental development of the child and the young person is a process of cognitive adaptation to impulses coming from outside. Nothing could be more mechanistic; a vision inspired by the principle of homeostasis, the same principle that underlies cybernetic theories. A disturbing sign of this reductionism is the progressive disappearance of the figure of the educator. The master-teacher is reduced to a facilitator or mediator who does not have to educate,

but only to facilitate the process of self-learning or self-training, because only what is self-made has value. This is one of the most devastating consequences of libertarian individualism, which I will discuss in the last paragraph. (The thoughts of H. Arendt comes to mind, according to which the teacher is the one who takes responsibility for the world in which his student lives). Moreover, the declaimed anti-authoritarianism – we must not influence or guide the “free” choices of the subject – actually hides an authoritarian vision: only the expert in self-education can speak about school. But didactic methods do not provide knowledge, nor do they allow it to be measured objectively, as we tend to believe. It may be of interest to recall that we already have evidence that denounces iPhone addiction in a growing number of young people, such as depressive syndromes, decreased ability to concentrate, especially among young smartphone “junkies” (J. Twenge, *iGen*, New York 2017). This is so much the case that two of the largest American investment funds (Calstrs, California Teachers’ Pension Fund, and the hedge fund Jana Partners) have formally invited Apple to intervene in changing the intensity and the mode of use of new machines, and to devise measures specifically aimed for teachers’ use. (The threat, not so veiled, is the withdrawal of more than two billion in Apple shares – a clear example of “voting with a pocketbook”).

Let’s take a look at some of the most relevant innovations associated with the phenomenon we are dealing with. One of these is that new organizational mode of production (not just manufacturing) known as Industry 4.0. This is an expression coined by Germany’s Bosch and first presented at the Hannover Fair in 2011. Artificial intelligence, robotics, genomics, information technology, linked together according to a multiplicative relationship, are literally revolutionizing both the way of production and the meaning of human work. The fusion between the real world of facilities and the virtual world of information, between the physical world of human beings and the digital world of data, has given rise to a mixed cyber-physical system that aims to unravel those knots that models of the past had not been able to achieve: how to reduce waste, how to collect information from the work process and process it in real time, how to anticipate design errors through the virtualization of the factory, how to fully exploit the creativity of the worker, how to incorporate the specific requirements of the customer at all stages of the production process (For an effective description, I refer to A. Magone, “Technology and the Human Factor in the Digital Factory,” *L’Industria*, 3, 2016).

Clearly, in order for the Cyber-Physical System (CPS) – the heart of the Industry 4.0 project – to generate the expected results, it is essential that radical organisational innovation is carried out in the company, abandoning the obsolete Ford-Taylorist model based on hierarchy and on a strong specialisation of tasks. It is of little use to acquire the new machines and to activate the technological platforms if the change of management model is not realized, one that knows how to value cooperative behaviors and to develop participatory culture between all those who operate in the enterprise.

That's why, for some time now, we've been talking about the urgency of including new professional figures in companies, such as the "Digital Innovation Officer", responsible for digital innovation; the "Technology Innovation Manager", facilitator of innovation; the "Data Protection Officer", responsible for data protection and privacy; the "Coding Expert", who can teach how to instruct the machine to perform a certain task through programming language; and others. These professions are essential to better manage the changes imposed by the use of "big data", "Internet of things" – an expression first used by Kevin Ashton in 1999 – and in the near future of "Internet of the beings", which represents the third phase of the life of the network. It is precisely the lack of such figures that account for the difficulties of the present time.

As we know, the main factor responsible for productivity gains today is digital fluency, consisting of the set of new skills made possible by the introduction of new technologies. This is a meta-competence that goes beyond mere digital literacy, i.e. the simple knowledge of programs and applications. When, in 2001, Marc Preusky traced the difference between digital natives and digital migrants, he certainly could not have imagined that his distinction would become obsolete within the following decade. Today, the distinction that matters is not between digital and non-digital businesses, but between businesses that are digitally fluent – and thrive – and businesses that are not – and therefore simply survive. The former, in fact, have workers who are able to integrate commercialization within design, using feedback from sales, which results in cost reduction and increased levels of competitiveness.

In essence, we are now faced with a new segment of the labour market, that of the digital workforce and the non-digital workforce, the anthropological and economic consequences of which will be discussed in the next paragraph. Here I will limit myself to reiterating the urgency of updating the managerial culture inherited from the recent past, a culture that is incapable of bridging the profound gap between the logic of participation demanded by digital fluency, which encourages horizontal collaboration regardless of hierarchical relationships, and the model still prevailing in companies, especially Italian ones, which favors linear processes and hierarchical control of a bureaucratic nature. It so happens that, thanks to the possibility of employing a digital workforce, companies born digital, not subject to the constraints represented by past organizational models, end up enjoying a comparative advantage over digitally migrant companies. Consider what may happen in the near future with the large-scale deployment of 3D printers, applied not only to manufacturing but also to consumers. As you know, the 3D printer model, the so-called Rep Rap (Replication Rapid Prototyper), is self-replicating and free. Potentially, a 3D printer could enable companies to produce batches of a single unit of product. This means that it can reproduce its own parts (those that are plastic), and because the schematics are available to everyone with a few clicks, everyone can over time make their own improvements and share them with others.

The printer's way of conceiving and producing is the opposite of the craftsman's careful gestures. It proceeds by "additive manufacturing": the three-dimensional model is broken down into very thin horizontal layers, so that the object is constructed from the base to the top, like a superimposition of lamellas. The work no longer meets the resistance of wood or stone. With that, the work is no longer a place, but a flow, an activity that can be conducted in different places. Creativity and innovativeness are thus required of all workers, not just those in management roles. The American company AT&T has introduced an "idea-gathering" system within the company of the following type: workers grouped in teams present their projects to managers as if they were in front of a "venture capitalist" who must decide whether or not to finance them. The workers are thus induced to take on the risk, at least in part – which raises entirely new problems regarding both governance and ownership structures. It's worth remembering that Adrian Bowyer – the inventor of the 3D printer – wanted to do with his machine what Marx believed he could do with a political revolution. *"The Rep-Rap will allow a revolutionary appropriation for the means of production by the proletariat"*, said he, because the consumer will be able to become also a producer – it is the figure of the so-called prosumer. In every neighbourhood – wrote Jeremy Rifkin – there will be 3D printers more powerful than those that a single citizen could buy and manipulate, and in these places, neighbors will be able to help each other to manufacture everything they need for domestic life according to their projects. Of course, the near future will be in charge of showing whether this is something real or merely utopian.

## II ► The future of human work in the age of robots

Extreme techno-optimists base their view on the effects of the digital revolution on employment levels from the famous prophecy of J.M. Keynes. In a lecture given in Madrid in 1930, later published as an essay in *Economic Possibilities for Our Grandchildren* (1930), the great English economist wrote: *"We are suffering from a bad attack of economic pessimism [...] technical improvements in manufacture and transport have been proceeding at a greater rate in the last ten years than ever before in history [...] The very rapidity of these changes is hurting us and bringing difficult problems to solve. Those countries are suffering relatively which are not in the vanguard of progress. We are being afflicted with a new disease [...]: technological unemployment. This means unemployment due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour. But it is only a temporary phase of maladjustment."*

Two annotations deserve attention. For Keynes, technological unemployment was a transitory phenomenon, destined to disappear gradually when the economy adjusted to the innovations made possible by the second industrial revolution, such as, electricity and chemistry, for example. He was so confident of this premise that he prophesied,

in 2030, which would be the end of the adjustment period, when machines had freed men from work, humanity would have been able to dedicate itself to the cultivation of the arts and philosophical thought. Keynes could certainly not have imagined that after the second industrial revolution, two other industrial revolutions would have occurred, whose main feature was the marked acceleration with which technological change is realized: from intergenerational to intragenerational. It is this hyper acceleration that does not allow a metabolization of the novelty: techno-scientific advancement runs faster than ethical thinking. Furthermore, the mechanism of creative destruction, which J. Schumpeter, almost twenty years earlier, had already indicated as the true engine of capitalist development – the old is destroyed in order to make the new grow, like the farmer who prunes the plant in order to make it grow stronger and bear more fruit – affects more heavily those economies whose workforce is less capable of absorbing the change. In fact, it is the developing countries that today suffer most from the occupational risks associated with the new wave of automation, not only because the advantage, until recently assured by the low cost of labor, is now waning in importance, but also and above all because the low average level of qualifications does not allow for the passage from the old to the new types of work (For a valuable empirical description of the impact of digital technologies on labor transformation I refer to G. Valenduc, P. Vendramin, *“Work in the digital economy: sorting the old from the new”*, ETUI, Brussels, 2016). On the other hand, techno-pessimists – some of whom end up on the slippery slope of neoluddism – rely on what the historian of economic thinking Robert Heilbroner declared in 1965: *“as machines continue to invade society, duplicating greater and greater numbers of social tasks, it is human labor itself that is gradually rendered redundant.* (quoted in D. Akst, *“What can we learn from past anxiety over automation,”* Wilson Quarterly, 2, 2013). Wassily Leontief’s vivid statement that *“Work will become less and less important.... More and more workers will be replaced by machines. I do not foresee that the new industries will be able to employ everyone who wishes to work”* lends strength to this position (*The New York Times*, 1983).

A recent report by Nesta (the well-known British research center), *The Future of Skills: Employment in 2030*, seems to confirm this pessimism when it clarifies that specialized skills, which are still necessary, are no longer enough to ensure employability. What the new technological trajectory requires are relational skills, such as empathy, propensity for teamwork and autonomy. This is why, as A. Donadio notes (*HRevolution*, Milan, Franco Angeli, 2017), one of the central problems of management today – still far from being addressed – is how to move from “governing” to “empowering” human resources capable of being innovators. A first rigorous analysis of how new machines replace human labor and what conditions need to be taken into account if the ongoing replacement process is not to lead to lower employment (and wages) is that of D. Acemoglu and P. Restrepo, *“The race between machine and man”*, NBER, WP22252, June, 2017).



I am of the opinion that if the digital changes the relationship between knowledge and work, challenging traditional jobs – and if it is true that, as Erik Brynjolfsson illustrates in his recent *Machine, Platform, Crowd*, (2017), technology has always destroyed and created work, the outcome is not a jobless society, but certainly radical transformation of the same. Consider, in fact, that the replacement mechanism that worked, more or less well, depending on the case during the first and second industrial revolution, today with artificial intelligence no longer works. At that time, machines replaced the physical work of man – first in agriculture and then in industry – pushing towards trades of greater cognitive value; now artificial intelligence covers the entire cognitive spectrum. Imagine for a moment, for the sole purpose of a further illustration, of the professionals who perform trades such as para-legal work preparing cases in law firms; the data scientist (those who extract information from data allowing companies to create ad hoc strategies); the digital artisans; and so on. Now, if it is true that we cannot ignore the displacement effect on work that automation and artificial intelligence is causing, it is also true that – if we so desired – we could activate forces that push in the opposite direction – that of increasing the demand for work. I am thinking of the productivity effect: by decreasing the cost of production of automated tasks, the economy expands, which causes an increase in the demand for labor in non-automated tasks. And I am also thinking of the creation effect of new tasks and new activities where labor enjoys a comparative advantage over machines (D. Acemoglu, P. Restrepo, “*Artificial intelligence, automation and work*,” NBER, WP24196, Jan. 2018). This being the case, it is a matter of deciding in which direction we want both job transition and reskilling and upskilling to be implemented. The consequences of the transformation of work can already be seen today, some of them rather worrying, as B. Stiegler expressed it: “*The solution to the crisis in which we find ourselves could take the form of a digital neo-taylorism*”: humans work at the service of machines! In any case, the social costs of the transition to the new production model cannot be ignored: What about those who, during the phase of structural adjustment, remain on the margins of the work force or even go to swell the ranks of “human waste”? J. Hicks in his *Capital and Time* (Oxford, 1973) had already called attention to the costs of the “traverse”, that is, the costs of the transition from the old to the new equilibrium. This concern is also accepted by Z. Bauman, who in his latest book, *Retrotopia*, (Laterza, 2017), explains why the attitude towards the future has changed so much: from a time of hope to a nightmare, which fosters nostalgia – and sometimes regression. The processing of mourning for the end of the past and the conquest of a constructive approach to the future do not happen spontaneously but require a rigorous cultural commitment capable of changing the interpretative categories.

In light of this, it is appropriate to focus a little on the limits of the current work culture, of its meaning, of its nature, of its shortcomings. I begin with the question of meaning.

The current cultural climate simultaneously exalts and depresses work. On the one hand, it brings work in everywhere, making it become the “new measure of all things”; creating a new type of man – homo laborans in the words of K. Marx and later of H. Arendt. On the other hand, no culture like the present one instrumentalizes work for a purpose that is increasingly “external” to the work activity itself. It does not valorize it in itself, making it functional only to the valorization of capital. On the other hand, and in a compensatory way, work is aimed at consumption: we work more to consume greater quantities of positional goods in the sense of Thomas Schelling’s text (1960). But there is no one who does not see how the recovery of the proper nature of work must start from the realization, that work, even before being a right, is an irrepressible need of the person. It is the need that man feels to transform the reality of which he is a part and, by acting in this way, to improve himself. Recognizing that work is a fundamental need is a much stronger statement than saying that it is a right. And is because of the simple reason that, as history teaches us, in certain epochs, rights can be suspended or even denied; needs, if fundamental, cannot. We know that needs cannot always be expressed in the form of political or social rights. For example, needs such as fraternity, love, dignity, and a sense of belonging cannot be claimed as rights. In order to grasp the meaning of work as a fundamental human need, we can refer to classical philosophy, from Aristotle to Thomas Aquinas, on human action. This thought distinguishes two forms of human activity: transitive action and immanent action. While the former connotes an action that produces something outside the one who acts, the latter refers to an action that has its ultimate term in the acting subject himself. In other words, the former changes the reality in which the agent lives; the latter also changes the agent himself. Now, since in humankind there is no activity so transitive that it is not also always immanent, it follows that the person has priority with respect to his actions and thus his work. Twofold are the consequences that follow from the acceptance of the person-principle.

The first of these is well rendered by the statement of the Scholastics “*operari sequitur esse*”: it is the individual who decides his own actions; in other words, self-generation is the fruit of the individual’s self-determination. When action is no longer experienced by those who carry it out as their own self-determination and therefore their own self-realization, it ceases to be human. When work is no longer expressive of the individual because he no longer understands the meaning of what he is doing, work becomes slavery. The action becomes more and more transitive, and the person can be replaced with a machine when more advantageous. But in every human work, one cannot separate what it signifies from what it produces. (S. Zamagni, “*Ethical Issues in the Global Economy*,” 2018).

The second consequence I mentioned above involves the notion of justice in work. Just work is not only that which ensures a fair remuneration to the person who has carried it out, but also that which corresponds to the need for self-realization of the

person doing the work and which is therefore capable of fully developing his or her abilities. As a fundamentally transformative activity, work transforms both the person and society; that is, both the subject and its object. These two outcomes, which arise jointly from work activity, define the moral character of work. Precisely because work transforms the person, the process through which goods and services are produced acquires moral value and is not something axiologically neutral. In other words, the workplace is not simply the place where certain inputs are transformed, according to certain rules, into outputs; but it is also the place where the character of the worker is formed (or transformed), something that Alfred Marshall was among the first of economists to recognize explicitly at the end of the 19<sup>th</sup> century.

The scope of the great challenge before us is therefore how to achieve the conditions for an authentic freedom of work, understood as the concrete possibility that the worker has of realizing not only the acquisitive dimension of work – the dimension that makes it possible to come into possession of the purchasing power with which to satisfy material needs – but also its expressive dimension. Where does the difficulty of such a challenge lie? In the circumstance that our liberal democracies, while they have succeeded in achieving (more or less) the conditions for freedom *at* work – thanks to the long struggles of the workers’ movement and the trade unions – seem powerless when they have to take steps towards freedom *of* work. The reason is quickly stated. It is the fundamental tension between the freedom of the individual to define his own conception of the good life and the impossibility for liberal democracies to declare themselves neutral between ways of life that contribute to production and those that do not. In other words, a liberal democracy cannot accept that someone, in order to see his or her worldview affirmed, can live on the labor of others. The tension arises from the circumstance that not all types of work are accessible to all and therefore there is no way to guarantee congruity between work that generates social value and work that affirms an individual’s conception of the good life.

The Protestant Reformation first raised the question of the freedom of labor. In Lutheran theology, the expulsion from Eden does not so much coincide with man’s condemnation to the drudgery and punishment of work, but rather with the loss of the freedom of work. Before the Fall, in fact, Adam and Eve did work, but their activities were carried out in absolute freedom, with the sole purpose of pleasing God. It is well-known that current historical conditions are still far from being able to ensure the exercise of the right to freedom of work. However, this cannot dispense us from the search for credible strategies to approach that objective.

I turn now to the question of the “lack” of work (see the now classic essay by C.B. Frey, M. Osborne, *“The future of employment”*, Oxford Martin Programme, W.P. sept. 2013, according to which 47% of U.S. employment is exposed to replacement risk). A critical response to this forecast, unjustifiably apocalyptic, is that of M. Arntz,

T. Gregory, U. Zierahn, (*"The risk of automation for jobs in the OECD countries"*, Oecd, WP 189, Paris, 2016) who, while not denying the substitution effect (i.e. displacement of labor) associated with the pervasive introduction of the digital, emphasizes how the technological evolution generates a transformative effect of labor that is able to more than compensate for the former. Why does it seem so difficult, today, to get a handle on unemployment and especially unemployability? Is it perhaps the lack of knowledge of the causes of the phenomenon or the unavailability of the instruments of intervention that makes it so difficult to solve the problem? I don't think so. Rather, I believe that today's unemployment and poor employment is the consequence of a social organization incapable of articulating itself in the most suitable way to enhance the human resources available. It is a fact that the new technologies of the Fourth Industrial Revolution free up social time from the productive process, a time that the current institutional structure of work transforms into unemployment or systemic precariousness. In another way, the increase, at the level of the economic system, of the availability of time – a time that can be used for a plurality of different uses – continues to be used for the production of goods (or services for the production of goods) which we could easily do without and which, instead, we are "forced" to consume, while we are unable to consume other goods and services because there is no one able to supply them. The result of this state of affairs is that too many ideational efforts are directed towards attempts to create new opportunities for ephemeral or precarious work instead of being used to redesign the life of a post-industrial society fortunately able to leave repetitive tasks to the "new machines" and therefore potentially able to use the time thus freed for jobs that widen the spaces of freedom for citizens.

To draft a defense of this thesis, a clarification is in order. Unemployment refers to a shortage of jobs, i.e. positions on the labor market. But there are many other job offers and demands that do not pass through the labor market. One thinks of caregiving work inside and outside the family; of the work that goes into the production of personal services; of the work provided within third sector organizations, etc.: these are work activities that society supports, even intervening at the legislative level with norms that decree the rules for their execution, without, however, subjecting them to the rules of the labor market. It is therefore necessary to distinguish the notion of employment or job from the much broader notion of working activity. When we speak of unemployment, the reference is always and only to the category of employment. It thus happens that the post-industrial society can experience a problem of insufficient number of jobs – i.e. unemployment – even though it is true that it has a problem of excess demand for work activities, a demand which is not met. In other words, a country can record, at one and the same time, a situation of high unemployment and an even higher unfulfilled demand for work activities.

Now, in each phase of historical development it is society itself, with its institutions, that sets the boundaries between the sphere of employment and the sphere of working

activities, that is, between work remunerated according to the rules of the labor market – wage labor, precisely – and work remunerated according to other rules or in other ways. Moreover, the boundary between the sphere of employment and that of working activities is today substantially the same as it was during the long phase of development of Fordist society. This is the real rigidity that needs to be overcome, and quickly, if the problem in discussion is to be solved. To think, in fact, of giving a job to everyone today in the form of employment, that is, of a salaried position, would be pure utopia or, worse, a dangerous lie. In fact, while in the industrial society, the expansion of consumption and the slowness of technical progress allowed the labor market both to absorb new labor and to reabsorb the old labor made exuberant by the use of “machines”; in the post-industrial society these margins of intervention are practically denied. This is why it is necessary to intervene regarding the boundary mentioned above.

In fact, it is true that policies to reduce labour costs (and, in particular, wages) together with policies to support and boost aggregate demand could – in some sectors – increase production faster than the increase in productivity and thus contribute to reducing unemployment. But at what price could such a positive result be achieved? Perhaps at the price of accepting as natural a new social class, that of the working poor; that is, of subjects who do receive an income from work, but this is below the threshold of decency. Today we know that competitiveness is the benchmark against which to base any discussion aimed at creating jobs. Only competitive enterprises can be born and grow, and in doing so they can create employment: jobs increase with the increase of the margin of competitiveness of enterprises. This is the new golden rule of employment. It is a novelty of no small importance with respect to the more recent past, when (almost) full employment could be ensured by keeping alive the “dry branches” of the economy by the public sector, or by Okun’s famous law, according to which the growth of the product would always be accompanied by the growth of employment. Today we know that this law has been rendered useless by the phenomenon of jobless growth. It is therefore not difficult to understand the reasons why the golden rule is so difficult to translate into practice (See S. Benzell, J. Sachs, “*Robots are us: some economics of human replacement*,” NBER, 20941, Feb. 2015).

The sense of the above statements is clear: it is manual or repetitive work and work that does not require interaction by workers that will be increasingly replaced by the new machines, while the work (manual or intellectual) that cannot be fungible – as happens in personal services – or that postulates particular structures of relationship with the counterpart that will be saved. In good substance, *knowledge economy* and *creator economy* will continue to strengthen at the expense of the old blue and white collar workers. Thus it happens that, while employment increases in the design of new IT services, in telecommunications, in data processing – see the dynamism of groups such as Google, Apple, Genentech, Amazon, etc. in competing for the *creative class*

– occupational opportunities for intermediate professional levels – those associated with qualifications equivalent to a bachelor's degree – are increasingly reduced. We can think of new forms of work such as *crowd work* – thanks to which a worker from anywhere can connect to a digital platform and receive work orders that he can fulfil as he chooses – *smart working* – which allows the worker to work on behalf of his company, by connecting to a virtual platform at the times decided by the same and without the constraints of heterodirection. The World Bank, in the 2016 Report *The Global Opportunity in Online Outsourcing*, estimates that in 2020, 11% of workers will experience this new forms of work. It is not difficult to imagine the fallout of such trends on the fronts of both labor law and organizational innovation (Cf. E. Occhetta, *Il lavoro promesso*, Ancora-La Civiltà Cattolica, Milan, 2017).

The question arises: why does it seem so difficult to overcome this rigidity? Why, in other words, is there such strong resistance to taking note of the fact that current unemployment is essentially linked to the profound change that has taken place in the organization of production? The answer I find most convincing is that there is still a widespread idea among experts that one can successfully intervene on unemployment by working through traditional remedies, i.e., those that have been applied in more or less recent times to deal with the three major categories of unemployment: that which is associated with high labor costs; that which is due to a lack of effective demand; and that which is related to technological unemployment. But it is not so. It is therefore necessary to change our view of reality. (M. Ford, *The future without work*, Il Saggiatore, 2017).

Furthermore, remaining within the conceptual scheme that identifies full activity with full employment, it is clear that the achievement of the latter objective enters onto a collision course with the achievement of equally legitimate and important objectives – such as ecologically sustainable growth; a model of consumption that does not generate alienation by distorting individual preferences; a society that is not stratified and tends to be “inclusive”. In other words, the insurmountable limit of all proposals, even ingenious ones, aimed at alleviating the scourge of unemployment generates, in our societies, dangerous *trade-offs*: in order to distribute work to all, a neo-consumerist model of consumption is justified; or new forms of poverty are legitimized (the “so-called” new poverties); or certain freedoms of citizens become restricted. All this is unacceptable from both an ethical and a political point of view. I am of the opinion that when we come to realize this, we can find the courage to dare to take new paths.

It cannot be understated that that enterprise is the main way to create work. Because work must be created. We cannot be satisfied with redistributing what already exists. But, mind you, the enterprise that creates work is not only the private capitalist one, but also the *social* enterprise (i.e. the enterprise whose regulating principle is the principle of reciprocity, as it is expressed in cooperative enterprises, social enterprises, and benefit societies). This is possible on one fundamental condition: that the transfer of demand

towards categories of goods, such as common goods and relational goods, takes place. As we hear more and more often, at the foundation of the new growth model there is a specific demand for quality of life. But the demand for quality goes far beyond a mere demand for “well-made” manufacturing (or agricultural) goods. Rather, it is a demand for attention, care, service, participation – in essence, relationality. In other words, the quality we are referring to is not so much that of the products (goods and services) being consumed, but rather the quality of human relationships.

### **III ► Some ethical implications of the 4<sup>th</sup> industrial revolution**

It is in the field of public ethics that the consequences of the diffusion of converging technologies in our societies posits the most delicate problems, first of which is understanding how the digitalization of our lives is succeeding in modifying even the way we perceive it. And yet, it is precisely on this front that there is a sort of “*fin de non-recevoir*” from the high culture, both scientific and philosophical. There are only two particular aspects that I would like to mention here in brief. The first concerns the question of trust: can artificial intelligence generate the trust that is necessary for the proper functioning of our market economies? The second aspect involves the problem of accountability, or, more specifically, what it means to be accountable in the age of digitalization. Are “smart machines” moral agents and therefore accountable? Will algorithms govern us, in all cases in which people are not able to fully understand the issues in which they must express their opinions? I will start with the first aspect.

There is a general consensus that trust is one of the decisive factors in ensuring the benefits of collective action and, in this way, in sustaining the development process. It is easy to understand why. All exchanges that take place in the market are embedded in contracts: explicit or implicit; Spot or fixed-term; complete or incomplete; contestable or not. Except for Spot contracts, all other types of contracts need some mechanism to be enforceable. We know that the enforceability of contracts, how to ensure that contractual terms and obligations are honored, is possible in varying forms and degrees, due to expected legal norms, expected social norms of behavior prevailing in a given community, and mutual trust. Well, when the first two factors are not sufficient to ensure the enforceability of contracts, it is trust that is used to make the market work. This is especially true today, since globalization and the fourth industrial revolution have severed the traditional ties (of blood, religion, tradition) that in the past functioned as surrogates, more or less perfect, of trust.

Note the paradox typical of the current historical phase. While trust in institutions, both political and economic, is declining for a variety of reasons, including the endemic increase in corruption, the global market is increasingly being conquered by companies and organizations that demand proof of trust from their clients and users, something quite unprecedented in the past. It is as if individuals are learning the lesson of Puccini’s well-known Tosca affair: mutual distrust always generates suboptimal results. Think of

the concession of the use of one's own home to total strangers (Airbnb) or the sharing of car journeys with people who are total strangers (Uber, BlaBlaCar). In other words, what is happening is that the decrease in vertical institutional trust is being matched by an increase in personal trust, i.e. horizontal trust between people. According to Tim Wu, an established jurist at Columbia University, what we are witnessing is a massive transfer of social trust: having abandoned trust in institutions, we are turning to technology. "Trust", writes R. Botsman (*Who Can We Trust*, Milan, Hoepli, 2017), "*is the new currency of the world economy. It is a true multiplier of earning opportunities because it allows underutilized assets to be leveraged.*" Think of the phenomenon of cryptocurrencies – the best known of which, but certainly not the only one, is bitcoin – digital currencies that are exchanged between peers. Transactions are not guaranteed by any central authority but validated by the network participants themselves through an algorithm. At the same time, the strength of these cryptocurrencies is that they allow for anonymous transactions that are not subject to taxation and safe from state confiscation. The underlying infrastructure is the blockchain, which is a distributed ownership ledger in which all exchanges are noted, without the possibility of modification. Blockchain technology – so far used practically only in the financial sphere – already enables a wide range of applications, from those in the social sphere to those of a political-administrative nature. Think of the management of administrative processes, where the blockchain can certify in a secure way and for forever a given act without the need for a third-party certifier. Consider also that the United Nations is planning to use the same technology for the management of relief aid, of various kinds, to refugees and migrants. (M. Gaggi, "*The blockchain dream*", *Lettura*, Feb. 4, 2018).

The heart of today's paradox lies in the fact that the contemporary market economy needs mutual trust even more than that of the past in order to function at its best. At the same time, however, the extraordinary levels of efficiency reached so far by our economic systems seem to make us forget that it is necessary to reinforce the fiduciary networks between people because the market, while it "consumes" more and more trust, is not able, given the current institutional structure, to produce enough of it. Hence the disquieting social dilemma: we demand more and more efficiency to increase material well-being, wealth and security, but to achieve such an objective we irresponsibly deplete the patrimony of trust that we have inherited from past generations (patrimony is a word that comes from Latin "*patres munus*": the gift of the fathers). It should be noted that a command economy can do well without the need for trust to ensure its own functioning, but not so a market economy, as mentioned above. At the time of the USSR ("*Trust is good, control is better*", as Lenin used to say), there was no need to invest in interpersonal trust; institutional trust was more than sufficient.

Recent behavioral economics, on the basis of laboratory experiments and of some results obtained by neuroscience, now suggests the following way out of the above dilemma.



In a collective work published in *Science* (2006) it is reported that if one deactivates, by means of transcranial magnetic stimulation, a particular area of the cerebral cortex, subjects significantly increase their pro-social behavior, which leads to a substantial increase in their degree of trust. In particular, by nasally administering a certain amount of oxytocin (a hormone naturally produced by many mammals) it was found that it deactivates the cerebral activity of a specific region of the brain (the amygdala) responsible for controlling the behavior of individuals in trust relationships. (D. Narvaez, *Neurobiology and the Development of Human Morality*, Norton, New York, 2014). Think also of interventions aimed at cognitive enhancement that act on abilities such as attention, memory, and tendency to intellectual fatigue. Techniques such as *deep brain stimulation*, which involves implanting a microchip in the brain, and *transcranial direct current stimulation*, which involves stimulating the brain with doses of electrical current, are already being practiced.

A few years ago, a group of researchers at the University of Berkeley tested thirty-five subjects with a sample of a drug “capable of artificially producing feelings of goodness and benevolence towards others” (*Current Biology*, 3, 2014). The results obtained would confirm that *tolcapone*, another human hormone, helps to increase the rate of equanimity towards even strangers and to increase the propensity to trust. (These are attempts at a *mood enhancement* in people, to change their character and increase their psychological well-being, counteracting the disposition to sadness and introversion). This is not the place to discuss the plausibility of similar results and to judge the effectiveness, in practice, of proposals such as the chemical administration of molecules designed to enhance our morality. I only want to observe that the attempt to attribute the origin of the moral sense to biology, an attempt that reduces this sense to a mere brain chemistry, if, on the one hand can have the desired effects with respect to what is functional to good business performance, on the other hand reduces freedom (positive) and therefore individual accountability. To see moral thinking as intrinsic to the human brain, rather than as a product of will and culture, would entail a regression from the already problematic and reductive figure of the *homo oeconomicus*.

There is no one who does not see how approaches of this kind are positioned, besides the official declarations, in the context of that great project, both political and philosophical at once, which is transhumanism, whose ambition is to merge man with the machine in order to expand its potential indefinitely and, above all, to demonstrate that consciousness is not an exclusively human entity. The objective here is not so much commercial or financial: it is political, and in a certain sense religious, and that is because the project aims to transform – not so much to improve – our way of life, as well as our reference values. Transhumanism is the apology of an “augmented” human body and brain, that is enriched by artificial intelligence, whose use would allow for separating the mind from the body and therefore to affirm that our brain would not need to have a body to work, and this would allow arguments to develop about the

significance of the person and its unity. It may be of interest to recall that the word robot is derived from the Czech “robota” meaning, literally, forced labor. It first appears in Karl Capek’s 1920 science fiction novel, *RUR – Rossum’s Universal Robots*. The novel describes the dream of RUR’s corporate head who predicts the advent of a time when prices of goods would fall to zero thanks to productivity gains provided by robots and in which toil and poverty would be defeated. But the dream vanishes when the robots “decide” to eliminate their creators, killing all men. In the season of the fourth revolution, the mechanical component of robots – which made them lacking in versatility and therefore scarcely advantageous – was replaced by the electronic-informatics. This is how we arrived at cognitive manufacturing, in which robots place themselves on the same level as humans, since they are able to understand the context in which they operate. (YuMi is one of the first collaborative robots put on the market that operates not only in the factory, but also in the services sector).

The strategy pursued by Ray Kurzweil, in charge of the project that Google has been implementing for some time, aims to produce cyborgs with physical features and cognitive abilities similar to those of *homo sapiens*. It is the goal of “playing God” that hides the desire to take the reins of evolution in hand (R. Kurzweil, *How to create a mind*, Milan, 2013. See also C.F. Camerer, “The potential of neuroeconomics”, *Economics and Philosophy*, 24, 2008). The physicalist approach (according to which there is only one reality – the physical one – that the cognitive sciences try to understand in order to explain how knowledge is generated), accepted by neuroscience, questions the link between responsibility and freedom. We come from a long season in which it was accepted that freedom, as an expression of responsibility, corresponded to responsibility as consent to the application of the same freedom. What does it mean for an operator to work all day with a cooperating robot? We already know how the advent of social networks and the use of smartphones are changing our habits and lifestyles. But can we imagine a future in which man spends his entire working day “talking” with a robot, without falling into new and more serious forms of alienation?

We can imagine for a moment, the real problem with *smart machines* may begin when they perform actions that involve the need to choose or decide. The soldier-robot, the car-robot, the broom-robot might make choices that are fatal to non-robotic lives. Who is responsible for these choices? What is the subliminal message of Bill Gates’ recent provocation to tax robots, endowed with electronic personality, like corporations that are endowed with legal personas? As Gunther Anders has lucidly explained, (*Man is Outdated. Sulla distribuzione della vita nell’epoca della terza rivoluzione industriale*, Torino, Bollati Boringhieri, 2002) – the 21<sup>st</sup> century has inaugurated the era of human irresponsibility, immunizing subjects from their relationships. The “smart machines”, specifically, those with artificial intelligence, are able to make autonomous decisions, which have both social and moral implications. (See the case of the Tesla driverless car,

created by Elon Musk, which killed a passenger in May 2016). How can we ensure that the decisions made by such objects are ethically acceptable? Given that these machines can cause harm, how do we ensure that they are placed in a position to differentiate between “right” and “wrong” decisions? And in the case where some damage cannot be avoided – think of the driverless car that must choose between running into another vehicle and killing its passengers, or running over children crossing the road – how can we instruct (in the sense of programming) these machines to choose the least damage? Examples in literature are now numerous. And they all agree on the need to provide AI with some ethical canon, in order to solve moral dilemmas such as “autonomous driving.”

It may be worth considering that, in the current debate, two different ways of conceptualizing AI are competing. The first concerns software that seeks to reason and make cognitive decisions the way humans do. For this conception, AI would aspire to replace humans. (The famous Turing test has to do with this type of AI). In contrast, the second way aims to provide smart assistance to human actors. This would look like AI partnering with humans, often referred to as “Intelligence Augmentation” or “Cognitive Augmentation”. In concrete terms, Google is moving in the first direction; and the stated goal is to merge humans with machines in order to increase, without limit, their capabilities; IBM, with its *cognitive computing*, proceeds with the second method. In 2013, IBM launched the Artificial Intelligence system “Thomas Watson” in homage to the name of its first president. Watson answers questions posed in natural language on any subject. The front page of the site dedicated to Watson reads, “*Watson is a piece of cognitive technology that can think like a human being.*” It will be a matter of waiting to see if the machine will become smarter than humans. In any case, it remains true that the standardized answers that Watson (or any other machine) can give will never be more effective than those that can be given by people who can understand the problems of other people. Indeed, machines, no matter how intelligent, will never be capable of empathy, because they do not have moral feelings. In any case, the problem of knowing how and to what extent the development of empowering technologies will affect the values of justice and social equality is now more complicated than ever. To the extent that these technologies would never be usable by the many, as they are very costly, increased social inequality, already nearing a breaking point today, continues to rise. The serious risk is that of forming a parallel society made up of the richest segment of the population that progressively detaches itself from the non-empowered poorest. (M. Sandel, *Against Perfection. Ethics in the age of genetic engineering*, Milan, Vita e Pensiero, 2008).

## ► In lieu of a conclusion

Business historians say that, until the beginning of the twentieth century, the concept of the *firm as association* was dominant, that is, as a social organization whose existence was linked to an act of will of a sovereign authority. This is because the nature of the firm

– as medieval jurisprudence taught on the basis of Roman law – is that of a company, i.e. an entity formed by a number of persons who have been incorporated into a legal personality distinct from the individuals involved, each of whom has limited liability with respect to the company. Limited liability is to ensure that the persons who manage the company, invest resources in it, or work within it are not personally liable to the company's creditors and, more generally, to the law. There are obvious advantages for the capital investor in the corporation, which allows the investor to own something without being personally liable for it and therefore liable to prosecution because of that ownership. On the other hand, managers must represent the corporation as a guardian represents the interests of a minor, because the corporation, as the result of a *fictio iuris*, has no will and no intentionality and is therefore not responsible for its actions. "Incorporation," Vetter notes, *"is the main legal instrument for ensuring the accumulation of capital. Without such an instrument, only an accumulation of money or treasure would take place, but not of capital. Ultimately, since it is the state, as sovereign authority, that gives life to the company-enterprise and since the state pursues public objectives, it follows that the company with legal personality legitimizes its existence only to the extent that it proves to pursue public interests."*

A first radical change from this approach was recorded towards the end of the 1920s when Adolf Berle and Gardiner Means, with their scientific authority, launched the thesis, which later became famous, of the separation between ownership and control of the company. As a result, the corporation would be an entity which pursues private interests, not public. Such a change in perspective does not happen without leaving some ruins in the field. Just think, for example, of the bitter debate between Berle and E.M. Dodd, the former defending the new line of thought who eventually emerges as the winner, while the latter tries to maintain the old concept, according to which the manager, not the trustee of the shareholders, but guardian of the company, must take care of the interests of all stakeholders according to a logic of service. *"Business activities,"* wrote Dodd, in *Harvard Law Review*, X, 1932, *"are permitted and encouraged by law because they are a service to society, rather than a source of profit to its owners."* The new line of thought which inaugurated the doctrine of *shareholder value*, although lacking an adequate theoretical and, in particular, juridical foundation, ended up dominating almost unchallenged until the 1970s. Things changed when a series of new phenomena (stagflation, the oil crisis of 1973, poor stock market performance of large companies) obliged many scholars and businessmen to question the model of corporate governance that had remained unchallenged until then. In those years, Berle himself began to distance himself from his previous position. In his 1963 book *The American Economic Republic*, we read: *"Profit and the desire for power do not induce us to make great efforts to increase the capacity or expand the culture of other men. If the economic system depended only on the profit motive, it would eventually commit*

*suicide*" (p. 87). Shareholders, especially institutional ones (pension funds, investment funds), claim the right to remove underperforming managers by exercising their power to buy and sell shares in order to direct corporate policies.

It is at this point that mainstream economics comes to the rescue, launching the idea of the *firm as a commodity*, which as such can be bought and sold ad libitum according to convenience. The firm – as R. Coase wrote – is nothing more than a network of contracts (*a nexus of contracts*) between individuals or collectives, whose transactions are coordinated – as Alchian and Demsetz explain – in an efficient way by the price mechanism. It is on such an assumption that M. Jensen and J. Meckling (1976) elaborated the new theoretical model, the new bible for the theory of business: the maximization of value for the shareholder as a necessary and sufficient condition to maximize the overall wealth of the system. In fact, if the assumptions of the new model are accepted, the shareholders, as holders of the right to the residue, have every incentive to make things proceed well and thus maximize the value of the company. The model's conclusions are so alluring that figures of Milton Friedman's stature are literally dazzled by them (K.J. Cremers et al., "*Commitment and entrenchment in corporate governance*," *Northwestern University Law Review*, 110, 2016).

What assumptions allow Jensen and Meckling's principal-agent model to achieve such a miraculous result? The first is that the shareholders own the firm; the second is that they, as owners of the firm, are entitled to the residual; finally, the shareholders are the chief executive who hire the manager as an acting agent to run the firm on their behalf. Unfortunately, the result promised by the authors cited above *would be* assured were it not for the fact that the three assumptions are all false. As L. Stout (*The shareholder value myth*, San Francisco, Berrett – Koehler Pu. 2012), a renowned business jurist, accurately demonstrated, it is not true that shareholders own the firm, since the firm owns itself as a legally independent entity. Likewise, it is not true that shareholders have an exclusive right to the residue, which instead belongs to the company, so much so that it is the Board of Directors (BoD) who decide whether and how much profit is to be distributed. Finally, the managers have fiduciary duties towards the company and not the shareholders, since the BoD comes into existence before the principal agent: in other words, the shareholders cannot be, legally, the chief executive. The manager, in fact, has a fiduciary relationship with the BoD, not the shareholders. In a particularly effective study, J. Nelson (*Economics for humans*, Chicago University Press, 2006) convincingly defends two arguments. First of all, the fact that a company is a profit-making institution does not imply that profit should be its sole and only goal. Second, no provision of law, in any legal system in the world, obliges the enterprise to maximize profit. And therefore, the doctrine of maximizing shareholder value is devoid of any economic or legal foundation.

Yet, despite the force of such a conclusion, the myth – as L. Stout called it – of shareholder primacy remained the focus of attention in both research and corporate

practice until the outbreak of the great crisis of 2007-8, which I will address in the next chapter. Serious and vast have been the damages that uncritical adherence to such a myth has done the community, as well as to the shareholders themselves. “*This view*,” writes J. Nelson, “*requires managers to focus on the short term at the expense of long-term performance, discourages investment and innovation, harms employees and customers, and encourages companies to succumb to sociopathic and socially irresponsible behavior*” (Ib. p.VI). Otherwise, according to that myth, the manager is led to maximize the financial value of the company because, given the incentives, it is also the way to maximize his wealth. Out of any constraint of moral responsibility – as would be appropriate for a fiduciary acting on behalf of another party – the manager acts as if he himself is a greedy shareholder. This displacement of the manager’s value system (from impartial custodians of others’ interests to greedy calculators of their own interest) is at the origin of heavy negative externalities, as numerous corporate scandals have punctually confirmed.

Just one example suffices: the bursting of the subprime derivatives bubble in 2007 was an event that could not be foreseen by shareholders, but could have by managers. But managers had every interest in concealing that eventuality in order to collect the benefits of their contractually insured incentives. In order to prevent and disclose the impending risks, managers would have had to act against their own self-interest; that is, they would have had to disavow the assumption of *homo oeconomicus*, the assumption on which the whole framework of the principal-agent model is based.

What is the message to be drawn from the above? The philosopher John Austin coined the expression “*performativity of a scientific paradigm*” to describe the transformative influence on people’s behavior resulting from the affirmation of a certain paradigm. Paradigms don’t just suggest courses of action, they change people’s *mindset*, i.e., the set of beliefs and attitudes that guide human behavior. We read in *After Virtue* (1984) by A. MacIntyre: “*Managers themselves and most writers about management conceive of themselves as morally neutral characters, whose skills enable them to devise the most efficient means of achieving whatever end is proposed. Whether a given manager is effective or not is a quite different question from that of the morality of the ends which his effectiveness serves or fails to serve. Nonetheless there are strong grounds for rejecting the claim that effectiveness is a morally neutral value*” (p. 74). The above is an exemplary case – but certainly not unique – which shows how great the responsibility of those working in the economy is today. This is why the contribution that UNIAPAC can make in this regard is truly remarkable. As an expression of organized civil society, an association of entrepreneurs and managers such as UNIAPAC can make a formidable contribution to the realization of a neo-humanism capable of opposing the advance of the transhumanist project, without renouncing the obvious advantages that new technologies are capable of providing. ▀



# A REFLECTION ON THE FUTURE OF WORK IN COMPANIES IN THE FACE OF TECHNOLOGICAL TRANSFORMATION

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by Álvaro E. Pezoa

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## ► Introduction

The technological revolution that we are currently experiencing, most certainly the fastest in history, is producing transformations that affect not only our own lives, but the future of humanity as well. This revolution produces changes in not only in the economy, politics, society and daily life, but even in those things once deemed to be fundamental constants of the human species: our physical and mental abilities, longevity, etc.<sup>1</sup> Artificial intelligence (AI), big data, automation, robotics, 5G, the Internet of things (IoT), blockchains, neuroscience, genetic engineering and increasing scientific and technological knowledge are all interrelated in this phenomenon. Advances and innovations come about quickly and all at the same time. These are, in short, changes consisting of successive or parallel waves of qualitative and quantitative leaps in knowledge and their practical application. The implications of what can rightly be referred to as a “whirlwind” of novelties and possibilities are huge for all areas of human activity. The opportunities it creates are so thoroughgoing that at times they seem unimaginable, while at the same time the concomitant risks do not seem to be in any way diminished. The world of work is only one area affected. However, without a doubt, it is one of enormous importance. Taking the vision of human work as laid out by Pope Francis in *Laudato si'*<sup>2</sup> (LS) as a point of departure, in the following pages we seek to explore how the world of work might undergo modification due to the unparalleled technological transformation that we are currently experiencing, the opportunities for improvement that can reasonably be expected from the same, and the concomitant risks that must to be evaluated in order to deal with both creatively and in a timely manner. In his encyclical letter LS, primarily in chapter 2, Francis discusses the concept of work focusing on two fundamental ideas and draws our attention to three dangers currently looming over the world of work. On the one hand, he reminds us of the subjective dimension inherent to work, understanding it to be both a path leading to personal development and, ultimately,

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1. González, F: “Prólogo” in VV.AA.: La era de la perplejidad: repensar el mundo que conocíamos. Madrid, BBVA, OpenMind, Penguin Random House Grupo Editorial, 2018.

2. [http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\\_20150524\\_enciclica-laudato-si.html](http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html)



sanctification as well. On the other hand, he sees work as a productive activity capable of contributing to the common good, and highlights the need for those engaged in business to view their work as a vocation that is noble, creative and productive that should be put to the service of all. The three dangers he sees in the world of work have to do with the loss of jobs as a result of automation, the loss of meaning in work, and the danger inherent to an economy focused on consumption.

## I ► Work in the Social Doctrine of the Church

In accordance with the teaching of the Social Doctrine of the Church (SDC), Francis points out that *“man is the source, the focus and the aim of all economic and social life”* (LS 127), and that, for this very reason, *“We need to remember that men and women have ‘the capacity to improve their lot, to further their moral growth and to develop their spiritual endowments.’ Work should be the setting for this rich personal growth, where many aspects of life enter into play: creativity, planning for the future, developing our talents, living out our values, relating to others, giving glory to God. It follows that, in the reality of today’s global society, it is essential that ‘we continue to prioritize the goal of access to steady employment for everyone,’ no matter the limited interests of business and dubious economic reasoning”* (LS 127).

Relatedly, it seems relevant to note that throughout the encyclical one can find different meanings for the word “work.” Among these, and arguably the most important in accordance with what Saint John Paul II taught, has to do with its role in personal development, the transformation of the created order and as a path of sanctification. This meaning is at the core of the SDC’s teaching on work and finds its most elaborate expression in the encyclical letter *Laborem excersens*<sup>3</sup> (LE) from 1981, promulgated by the Polish Pope. According to John Paul II, work has an objective dimension having to do with the product created or service delivered, which refers to the object resulting from the activity of work and is inherently connected to its technical nature. He expressly states, *“If the biblical words ‘subdue the earth’ addressed to man from the very beginning are understood in the context of the whole modern age, industrial and post-industrial, then they undoubtedly include also a relationship with technology, with the world of machinery which is the fruit of the work of the human intellect and a historical confirmation of man’s dominion over nature”* (LE, 5). *“This universality and, at the same time, this multiplicity of the process of ‘subduing the earth’ throw light upon human work, because man’s dominion over the earth is achieved in and by means of work. There thus emerges the meaning of work in an objective sense, which finds expression in the various epochs of culture and civilization. Man dominates the earth by the very fact of domesticating animals, rearing them and obtaining from them the food and clothing he needs, and by the fact of being able to extract various natural resources*

3. [http://w2.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf\\_jp-ii\\_enc\\_14091981\\_laborem-excersens.html](http://w2.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_14091981_laborem-excersens.html)

from the earth and the seas. But man 'subdues the earth' much more when he begins to cultivate it and then to transform its products, adapting them to his own use. Thus agriculture constitutes through human work a primary field of economic activity and an indispensable factor of production. Industry in its turn will always consist in linking the earth's riches-whether nature's living resources, or the products of agriculture, or the mineral or chemical resources-with man's work, whether physical or intellectual. This is also in a sense true in the sphere of what are called service industries, and also in the sphere of research, pure or applied" (LE, 5). Francis, on his part, makes use of the very example of Jesus and Saint Joseph, in addition to several saints and devout individuals, especially the contributions of Saint Benedict, who integrated manual work into his spirituality: "Saint Benedict of Norcia proposed that his monks live in community, combining prayer and spiritual reading with manual labour (*ora et labora*). Seeing manual labour as spiritually meaningful proved revolutionary. Personal growth and sanctification came to be sought in the interplay of recollection and work. This way of experiencing work makes us more protective and respectful of the environment; it imbues our relationship to the world with a healthy sobriety" (LS 126). Christianity has developed not only a positive vision of work – in contrast to the theory of divine punishment – but, what's more, a spirituality of work: "Together with the awe-filled contemplation of creation which we find in Saint Francis of Assisi, the Christian spiritual tradition has also developed a rich and balanced understanding of the meaning of work, as, for example, in the life of Blessed Charles de Foucauld and his followers" (LS 125). In points 127 and 128 of LS, he states that man is not only able to embark on a path of personal progress by means of work, but has been called to work since creation itself. "While it may seem that in the industrial process it is the machine that 'works' and man merely supervises it, making it function and keeping it going in various ways, it is also true that for this very reason industrial development provides grounds for reproposing in new ways the question of human work. Both the original industrialization that gave rise to what is called the worker question and the subsequent industrial and post-industrial changes show in an eloquent manner that, even in the age of ever more mechanized 'work', the proper subject of work continues to be man" (LE, 5). This is so much the case that, "The development of industry and of the various sectors connected with it, even the most modern electronics technology, especially in the fields of miniaturization, communications and telecommunications and so forth, shows how vast is the role of technology, that ally of work that human thought has produced, in the interaction between the subject and object of work (in the widest sense of the word). Understood in this case not as a capacity or aptitude for work, but rather as a whole set of instruments which man uses in his work, technology is undoubtedly man's ally. It facilitates his work, perfects, accelerates and augments it. It leads to an increase in the quantity of things produced by work, and in many cases improves their quality" (LE, 5).

In addition to its objective dimension, work also has another dimension of a subjective nature. *“Man has to subdue the earth and dominate it, because as the ‘image of God’ he is a person, that is to say, a subjective being capable of acting in a planned and rational way, capable of deciding about himself, and with a tendency to self-realization. As a person, man is therefore the subject of work. As a person he works, he performs various actions belonging to the work process; independently of their objective content, these actions must all serve to realize his humanity, to fulfil the calling to be a person that is his by reason of his very humanity”* (LE, 6). This subjective dimension is closely connected with the ethical nature of work: *“And so this ‘dominion’ spoken of in the biblical text being meditated upon here refers not only to the objective dimension of work but at the same time introduces us to an understanding of its subjective dimension. Understood as a process whereby man and the human race subdue the earth, work corresponds to this basic biblical concept only when throughout the process man manifests himself and confirms himself as the one who ‘dominates.’ This dominion, in a certain sense, refers to the subjective dimension even more than to the objective one: this dimension conditions the very ethical nature of work”* (LE, 6).

Without a doubt human work has an ethical value, which is completely and directly linked to the fact that the person who carries it out is a person, a conscious and free subject, that is, a subject that makes decisions that concern himself. This truth, which in a certain sense constitutes the fundamental and perennial core of the Christian doctrine on human work, has had, and continues to have a preeminent meaning in coming to terms with the important social problems that have been of interest to entire epochs of people (cf. LE, 6). Christian teaching on the subjective dimension of work was recovered and elaborated on especially by Saint. Josemaría Escrivá. The spirituality associated with *Opus Dei* came about expressly to make known, and this in the middle of the twentieth century, that work not only represented an opportunity for the development of various human qualities of the individual who carried it out, but was at the same time a fundamental way by which he contributes to the common good of society. And what is more, by sanctifying it, that is, offering his work to God, work came to be at the same time both a means of personal sanctification and an opportunity to collaborate in the sanctification of others, namely, those with whom one interacts in the context of work<sup>4</sup>.

Taking into consideration the distinction between objective and subjective work, *LS* also emphasizes a conception of work understood as a productive activity capable of contributing to the common good. Related to this emphasis is an understanding of work as employment (a job), which must then be complemented with the first emphasis, the objective and subjective dimensions of work. Francis specifically points out, *“We were*

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4. For a better understanding of the spirituality of work as evidenced in Saint Josemaría Escrivá, the author recommends Illanes, J. L.: *La santificación del trabajo: el trabajo en la historia de la espiritualidad*. Palabra. Madrid, 2001; and in particular, chapter III, pp. 81-183.

*created with a vocation to work. The goal should not be that technological progress increasingly replace human work, for this would be detrimental to humanity. Work is a necessity, part of the meaning of life on this earth, a path to growth, human development and personal fulfilment. Helping the poor financially must always be a provisional solution in the face of pressing needs. The broader objective should always be to allow them a dignified life through work. Yet the orientation of the economy has favoured a kind of technological progress in which the costs of production are reduced by laying off workers and replacing them with machines. This is yet another way in which we can end up working against ourselves. The loss of jobs also has a negative impact on the economy 'through the progressive erosion of social capital: the network of relationships of trust, dependability, and respect for rules, all of which are indispensable for any form of civil coexistence.' In other words, 'human costs always include economic costs, and economic dysfunctions always involve human costs.' To stop investing in people, in order to gain greater short-term financial gain, is bad business for society" (LS, 108). In the words of Saint John Paul II, "It is also a fact that, in some instances, technology can cease to be man's ally and become almost his enemy, as when the mechanization of work 'supplants' him, taking away all personal satisfaction and the incentive to creativity and responsibility, when it deprives many workers of their previous employment, or when, through exalting the machine, it reduces man to the status of its slave" (LE, 5).*

## **II ► Technological transformation and employment**

Thus established in light of Christianity, the aforementioned extremely rich conception of work can be appreciated because the primary danger about which Francis warns us is the scourge of unemployment. Contrasting these ideas with reality, and by taking a close look at the world today, we can see that the automation and robotics associated with AI and big-data allow us to see how the rapid replacement of tens of millions of people in the world by "*machines*" is taking place. In principle, all routine and standardized jobs face a "*death threat*".

Sophisticated technological devices will be able to do certain jobs faster and more efficiently and at a lower cost, therein avoiding the innumerable complexities that work performed by human beings inevitably entails. The reasons to think that there will be large sectors of unemployment in certain regions of the world and reduced global economic activity performed by humans are, therefore, numerous. This said, there are those who argue that, to the contrary, the creation of new heretofore unknown tasks will compensate for and even overcome the decrease of many other tasks existing today. There is a lack of consensus on the matter, however. As is true of questions characterized by uncertainty, expert analyses make a wide range of predictions ranging from the frankly pessimistic to the enthusiastically optimistic. On this point, it is relevant to determine what a realistic final scenario might be in terms of the outcome of the addition and

subtraction of jobs, and thereby come up with a plausible approximation of how long the concomitant period of adjustment might be before a certain state of equilibrium is reached or at least a final state that is not worse than the initial one. An estimated duration of few years versus several decades, for example, are quite distinct matters. The corresponding individual, family, social and global impact will be radically different depending on the way in which two variables are worked out in practice, namely, the quantity and timing of changes in employment. What is more, it should be noted that once aggregate numbers are arrived at, it will nonetheless be necessary to complement these with specific geographical predictions based on regions and countries on the one hand, and by areas of economic activity on the other. Herein it is highly possible that different realities will evidence significant inequalities one from another. The underlying concerns, in any case, are, what will happen to people who lose their source of employment due to these changes, and how will their families as well as society at large be affected? The situation described here will force countries to adopt measures to deal with the processes associated with changes in employment. Massive and focused training that will give citizens the ability to perform new types of tasks, as well as the implementation of public policies of solidarity to support those who remain unemployed for long periods of time would seem to be among the predictable number of upcoming challenges for political states and their governments. The business sector will at first face the difficult test of having to adapt to new economic-commercial scenarios that technological transformation will bring about. It is highly probable that there will be businesses that will eventually disappear and business models as well that will undergo radical changes, at the same time that many new businesses will be created, many of which it is impossible to imagine at present. In this scenario, companies will be responsible for taking on the responsibility of investing in the training of their human work teams so they can perform new or different tasks, while at the same time developing plans that soften the impact for those employees who, in spite of the efforts that corporations make on their behalf, will finally have no choice but to be let go if the companies hope to remain competitive. It does not initially appear ethically plausible to think that business organizations can simply ignore the needs of their internal members as they make adjustments to the composition of their payrolls, even when this is economically possible and legal. In the social and market dynamics on the horizon, businesses will be called upon to act with redoubled effort in the realm of social responsibility. For other business organizations, it will in be matters having to do with social responsibility that will confer or increase their social legitimacy. Human wellbeing, companies, and the social order will in this context all be at stake.

Following, and in turn, accepting the logic behind the papal letter *LS*, it would be appropriate to expect a special effort from the business world to try to keep all the jobs it can in place. In a situation wherein sources of employment are disappearing, a

call such as this necessarily entails highlighting the importance of using business acumen and drive in order to create new concrete spaces for people to work productively. However, we should also think of complementary alternatives especially if, as is predicted to be the case, the use of emerging technology will be accompanied by significant increases in labor productivity. If this in fact takes place, it will be feasible to think about reducing working hours while at the same time maintaining workers' income levels. In this case, the challenge for businesses will be twofold. First, it will consist primarily of ensuring that the content of work-associated activity continues to be humanly enriching, while collaborating with civil society and the state in order to create or promote multiple activities related to personal development individuals can participate in such as volunteering, sports, culture, the care of others, etc., thereby making use of the increased free time they will have.

Although in what we write here we are, in effect, attempting to predict the challenges that employers and senior executives will have to face regarding the impact on the world of work that the developing technological revolution will entail, it is nonetheless essential to note here that in the same scenario(s) workers and trade union organizations will also be called upon to play a crucial role, namely to actively cooperate with the former in order to bring about the necessary conditions within companies to make the adjustments that will be required to maintain and increase the overall number of jobs. This collaborative spirit will become increasingly necessary in a labor market replete with changes and uncertainties. A disposition towards a mutual understanding between "capital" and "workforce," as internal company relations have primarily heretofore been understood, but which might possibly be overcome in the future, is in the present work posited to be an inevitable imperative in order to face both the current and upcoming reigning realities of the labor market.

Taking an additional step in his encyclical, Francis enters fully into the realm of the practical. He ventures to propose concrete lines of action, such as that "In order to continue to be able to provide employment, it is imperative to promote an economy that favors productive diversity and business creativity" (LS, 129). Concerned that all continue to have the possibility of access to decent employment, he states, *"For example, there is a great variety of small-scale food production systems which feed the greater part of the world's peoples, using a modest amount of land and producing less waste, be it in small agricultural parcels, in orchards and gardens, hunting and wild harvesting"* (LS, 129). However, he recognizes the objective difficulties present in world markets in order to create a space for these activities and associates them with the existence of economies of scale and large companies that take advantage of them: *"Economies of scale, especially in the agricultural sector, end up forcing smallholders to sell their land or to abandon their traditional crops. Their attempts to move to other, more diversified, means of production prove fruitless because of the difficulty of linkage with regional*

and global markets, or because the infrastructure for sales and transport is geared to larger businesses” (LS, 129). Not only this, he also claims that “Civil authorities have the right and duty to adopt clear and firm measures in support of small producers and differentiated production” (LS, 129). How might it be possible to act in such a way that the activity of numerous small entrepreneurs will not be threatened and, with it, corresponding jobs not be destroyed? This is the incisive implicit question the Holy Father leaves for us to ponder. No one can remain indifferent to this question, nor in the face of his proposal in this regard: “To ensure economic freedom from which all can effectively benefit, restraints occasionally have to be imposed on those possessing greater resources and financial power. To claim economic freedom while real conditions bar many people from actual access to it, and while possibilities for employment continue to shrink, is to practise a doublespeak which brings politics into disrepute. Business is a noble vocation, directed to producing wealth and improving our world. It can be a fruitful source of prosperity for the areas in which it operates, especially if it sees the creation of jobs as an essential part of its service to the common good” (LS, 129).

Continuing with the implications of our line of argumentation, it is truly not an easy matter to predict with any degree of certainty what the so-called “Fourth Industrial Revolution” will look like, which will unavoidably be characterized by automation and digitalization, in terms of its effect on the concentration or decentralization of economic activity. Of course, it would not be beyond the realm of possibility to think that an emphasis on technological innovation and the requirement for significant financial and intellectual capital will in consequence tend to strengthen the processes that lead to an increased concentration of economic power towards developed countries and large business corporations. However, it is also plausible to consider that human initiative will allow the use of the same technology to generate multiple applications of the same, thereby giving rise to an endless number of services that could be provided by medium and small entrepreneurs. Future socioeconomic realities, as always, seem to be open to the intervention of human freedom in history. Without seeking to slight negative views and even those doomsayers who manage to keep some grasp on reality who posit that the enormous technological development that humanity is currently experiencing could inevitably lead to leaving the world in the hands of a few powerful privileged holders of such technology and its concomitant use on a global scale, it is also possible to imagine a different scenario wherein these great advances are made increasingly within the reach, in terms of both access and price, of everyday citizens which will in turn make possible the realization of various smaller-scale works in shared community spaces in response to necessity and the fruit of inventiveness. In any case, it will be governments who must first engage in creating legal-economic frameworks that avoid excessive and pernicious concentration of economic activity while at the same time forestalling further damage to large companies as a result of such measures.

Based in general terms on the dynamics of the prevailing free market economic model, it would seem virtually impossible to expect dominant economic agents themselves to freely opt to leave space for, much less encourage the activity of minor players. For something of this nature to come about, a substantial modification in the way in which the operations of the world economic order are understood or a radical change in the motivations underlying the decisions and actions of the majority of business owners and senior managers would have to be made. It is highly possible that both changes would have to take place in tandem.

Above all, it is necessary to make clear that the essential element to be safeguarded must be that technology be at the service of the person, so that the company by means of the use of technology helps create employment and collaborates to deliver solutions to the real problems of citizens.

### **III ► Technological transformation and the human significance of work**

The second concrete aspect in which Francis sees potential danger is the possible loss of the deep human significance of work. Assuming that in every work-related action a corresponding internal personal transformation is produced, he sees a clear risk that individuals are on a path towards a hollowing out of the intrinsic value of the act of working. This phenomenon has previously caught the attention of different thinkers and popes as well, in turn giving rise to the concept in sociology known as alienation, as understood by Max Weber and Saint John Paul II: *“When the ability to contemplate and respect is damaged in the human being is damaged, the conditions are ripe for the meaning of the work to be disfigured as well”* [101]. Herein the emphasis is not placed so much on the existence or availability of decent jobs as much as the way in which man appreciates the value of the work he carries out. Will his work be an activity that will allow for wholistic human fulfillment and be a source of deep life-giving meaning and a path of sanctification, or rather, will it become a task, at best focused only on the attempt to secure essential material goods and, at worst, one that will directly contribute to distancing the person from his inner growth and moving him even further away from a personal encounter with God? The question is not trivial when setting about to assess what the ongoing technological revolution might eventually mean for mankind. The dominant tenor that the response to this question takes will be crucial for the future destinies of both mankind and society.

The tacit question in these papal concerns leads to a profound questioning, that is, if foreseeable technological advances will tend to increase or decrease the primacy of the subjective dimension of work over the objective. That is to say, will these advances facilitate the process of interior development of mankind as the result of the action of working? Will these continue to be more important than their external result, or will they rather help the latter to prevail, thereby devaluing the hoped-for inner



transformation of work that leads to human flourishing? A first attempt at answering this question would seem to offer a somewhat bleak picture.

In a world “dominated” by intelligent machines, with an enormous capacity to learn and process data, it would not be unheard of to think that many people could be displaced and subjugated to the same, performing jobs devoid of meaning and wherein they function as mere servants or slaves of cybernetic devices. It is a possibility that cannot be entirely ruled out, and this is even less the case when considering the situation from the perspective of (good) science fiction. However, at least in terms of a near future horizon, it is rather foreseeable to envision that men and women will gradually be freed from more routine and less “value-added” tasks in order to focus on performing more complex tasks that will require of them a greater contribution of knowledge and use of intelligence, decision-making capacity in the face of unexpected circumstances, and the application of the so-called “soft skills” (educational, artistic and cultural, interpersonal care and hospitality, the spirit of service, and leadership, etc.). If this were to prove to be the case, far from getting worse, the possibilities of human growth by means of work could, in fact, improve. Carrying out more complex activities which require higher levels of human development is, in principle, also potentially an opportunity for increased human flourishing, at least in terms of purely earthly considerations. A much greater uncertainty is trying to predict if technological advances will open new doors for the spiritual-religious growth of mankind, or in effect, prove to be the opposite. The consideration of elements that far exceed the possibilities and purposes of this paper come into play here, although something will be said about the subject later in reference to the third danger that, in Francis’ opinion, threatens work. It will be in the aforementioned context where companies will have to make their contribution by offering the maximum possible number of employment opportunities, maintaining those previously existing jobs while generating new ones replete with alternatives for human improvement. Leaving the most routine and those tasks easiest to operationalize to technological devices, business corporations will have the possibility, and the need, to deploy people in activities where they can contribute more decisively to their objectives, entrusting them with those functions where their capabilities exceed those of the latest machines. For this to take place, it will prove essential to invest in the training required to effectively and efficiently perform these tasks. In fact, it is entirely foreseeable that in coming years companies will be forced to increase their efforts related to training in order to adequately cope with new challenges. The most likely result that will accompany the process of technological change will be that companies will promote the increased availability of more complex tasks, which will in turn require a more holistic development on the part of those who perform them, especially in terms of requirements for knowledge and intellectual skills; although not necessarily those of a spiritual-religious nature.

While it is true that employers will have to be especially concerned with training, thereby giving their employees the opportunities and time necessary for these purposes, it is also true that workers will have to be attentive, proactive and committed in requesting and taking advantage of training, knowing that their future employability lies in training. In this sense, a great social challenge ahead will be that we will all have to adapt to a world characterized by even more change and in which, in all probability, companies and jobs will be created and destroyed at a dizzying speed. For this reason, it will almost certainly be the case that the search for labor flexibility and adaptability will become an unavoidable task for the societies of the future. Governments, trade associations, companies, unions and workers will have a shared task to undertake in this arena in order to cope with the vicissitudes of labor during the Fourth Industrial Revolution to any reasonable degree of success.

#### **IV ► Technological transformation and the economy of consumption**

The third call for our attention that Francis makes in *LS* regarding work is related to the evil that he sees associated with an economy focused on consumption. This is probably the dimension in which there is the least degree of hope that the advances of technological transformation will result in restraining patterns of consumption, or virtuous improvement. It is rather the case that the opposite scenario is to be expected. In principle, technological transformation will most likely increase people's faith in themselves, in their own abilities, far from making their weaknesses more evident and, in this way, bringing them closer to God. From a material point of view, it should make it easier for people to access a greater number of goods, more often than not at an economic cost potentially less than those currently in place, in such a way that the possibility of acquiring economic goods would be expected to become increasingly within reach for millions of individuals. In addition, as it is highly probable that the amount of free time people have will increase for a large percentage of the population, it is also reasonable to venture that, *ceteris paribus* the other variables that may come into play, the propensity to consume will also be increased by this factor as well. "*Consumerism*" as commonly referred to having to do with the chaotic tendency towards the consumption of material goods and entertainment, seems to be triggered by a certain spiritual emptiness, by a lack of transcendent vision of life, by forgetting God. The ever-widening access to consumption puts within reach and facilitates not only a process of deranged consumption, but it can also be presumed that this same process will help to deepen man's security in himself, thereby separating him from the experience of the transcendent. Thus considered, companies as organizations or institutions, will apparently have little to say in the task of promoting spirituality in the lives of their employees, that is, if we look at these realities strictly in light of their technical-economic operations. As always, the difference in this matter can be

brought about by business leaders (business owners and senior management) who will have their own deep spiritual and religious motivations. However, there is nothing to indicate that the Fourth Industrial Revolution is going to influence this dimension in any positive way. Reflections in this regard (including those have been made above) lead us to think that, in itself, said influence will be neutral or even negative.

## **V ► The Vocation of the Business leader and the New evangelization**

It is certainly the case that this assumption implicitly leads to highlighting the moral imperative that “*the new evangelization*” in fact reach those managers who today, as never before in history, have an extraordinarily significant impact on the entire global social order. This is the case given the crucial role that business organizations have come to play in terms of their centrality and influence in spheres of world power. As may be appreciated, consequences of enormous repercussion for the world of work and world society might, or might not, follow in the wake of this reality. This missionary task of both businessmen and women is of the greatest importance and, at the present time, could well be carried out by recognizing the imperative need to look after sources of employment and the content or nature of work itself. Raising awareness of this reality among these individuals based not only or primarily on economic grounds, but on theological-doctrinal, anthropological and sociological foundations, looms large as a great, yet essential, challenge. Were this not to prove to be the case, under the reigning absolutist economic rationality, focused on maximizing personal or corporate benefits to the detriment of everything else, it is virtually impossible to entertain the notion that the analyzes carried out in business corporations will be informed by the appropriate variables, that is, to include considerations of consequences and events holistically and, for this reason, that the results of these investigations will in turn help to head off falling into fatal reductionisms that lead to, due to short-sightedness or blindness, the making of erroneous decisions with grave repercussions for millions of people and numerous nations. People who exercise business leadership “*are called to engage with the contemporary economic and financial world in light of the principles of human dignity and the common good*.”<sup>5</sup> Francis, as previously mentioned, considers the company a noble vocation and “*calls business people to discover the intrinsic value of all God’s creatures... to see each person as a ‘subject who can never be reduced to the status of object,’ and to create jobs ‘as an essential part of their service to the common good.’*”

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5. Turkson, Cardinal Peter K.A.: “Foreword to the 2018 English Edition” in *Vocation of the Business Leader: A Reflection*. Dicastery for Promoting Integral Human Development (ed.); John A. Ryan Institute for Catholic Social Thought of The Center for Catholic Studies., University St. Thomas. Vatican City / Minnesota, USA, September 2018, p. 1.

*“By so doing, business leaders can carry on God’s creation and serve it faithfully.”<sup>6</sup> The objective hierarchy of values must always be respected, without converting means into ends. And the economy is a means for the good of people. Profits should be sought, but with the ultimate desire to serve others and the common good, conscious of a world and of times that are full of needs.”<sup>7</sup>* The expected effects of the “Fourth Industrial Revolution” and “Digital Transformation” constitute, perhaps, the most enormous and relevant of these requirements to be faced at the present time. There is work to do! ■

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6. Cfr. *Ibid.*, p. 1, where he cites LS, 81 and 129.

7. Cfr. Echevarría, J.: *Dirigir empresas con sentido cristiano*. EUNSA. Barañain, 2015, p. 50.



# NEW TECHNOLOGIES AND THE NOBLE VOCATION OF THE BUSINESS LEADER

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by Rolando Medeiros

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## SUMMARY

This paper analyses how business – through the three pillars of its service to the common good: Good work, Good goods and Good wealth – can positively contribute to the ethical deployment of new technologies: artificial intelligence, robotics and other technological innovations. These three pillars provide the foundation for transforming day-to-day business into a noble vocation.

**T**he main challenge of business in the 21<sup>st</sup> century is to become a driving force in the comprehensive development of humankind: *of the whole man and of every man*. Nowadays, businesses need to play a more significant role to: help address socioeconomic changes; face the great challenges of the present and the future; and support the implementation of more intelligent, sustainable and comprehensive growth plans. This can be pursued by creating quality jobs, and by making the economy more inclusive, with better labour markets, greater environmental conscience, and through the ethical use of technology. Business should be at the service of people and aimed towards their common good, while helping to shape a better society. At the same time, ethics should be the compass that guides the actions and activities of business leaders. These vitally relevant social responsibilities are at the core of S.S. Francisco's call in §203 of *Evangelii Gaudium* where he states that "*the dignity of each human person and the pursuit of the common good are concerns which ought to shape all economic policies. At times, however, they seem to be a mere addendum imported externally in order to fill out a political discourse lacking in perspectives or plans for true and integral development. It is irksome when the question of ethics is raised, when global solidarity is invoked, when the distribution of goods is mentioned, when reference is made to protecting labour and defending the dignity of the powerless, when allusion is made to a God who demands a commitment to justice. At other times these issues are exploited by a rhetoric which cheapens them. Casual indifference in the face of such questions empties our lives and our words of all meaning.*" He concludes this paragraph by masterfully summarising the meaning of the noble vocation of the business leader: "*Business is a vocation, and a noble vocation, provided that those engaged in it see themselves challenged by a greater meaning in life; this will enable them truly to serve the common good by striving to increase the goods of this world and to make them more accessible to all.*"

Consistent with the above, in the encyclical *Laudato si'* S.S. Francisco criticizes the new technocratic paradigm and the forms of power derived from technology that call to seek other ways of understanding the economy and progress. He points to the loss of that sense of responsibility for our fellow men and women upon which all civil society is founded stating that our immense technological development has not been accompanied by a development in human responsibility, values and conscience. Likewise, he affirms that a technological and economic development which does not leave in its wake a better world and an integrally higher quality of life cannot be considered progress.

More recently, in his message to the World Economic Forum in Davos in January 2018, S.S. Francisco reaffirms these concepts warning us about how recent technologies are transforming economic models and the globalized world itself, which, conditioned by private interests and an ambition for profit at all costs, seem to favour further fragmentation between states and institutions and greater individualism, rather than to facilitate approaches that are more inclusive. He calls for economic models to observe an ethic of sustainable and integral development, based on values that place the human person and his or her rights at the centre. In addition he states that artificial intelligence, robotics and other technological innovations should be so employed that they contribute to the service of humanity and to the protection of our common home, rather than to the contrary, as some assessments have unfortunately predicted. Science, technology, and especially the free market and democracy have allowed the world to make unprecedented achievements, which are among the greatest of human civilization. These achievements must be defended and appreciated. Nevertheless, they must still be subjected to critical analysis in order to correct existing imperfections, to learn from mistakes, and to become aware of any risks or to uncover any misuse of its institutions. Nowadays, there are many problems that have arisen due to an almost deification of these key institutions. We often demand much more than they are capable of providing. The irresponsible use of the freedom these institutions have granted humans has led to a crisis of meaning, confusion between means and ends, and an emphasis on rights while forgoing subsequent obligations.

We have forgotten that *Homo Sapiens* are the animal that searches for meaning. One thing large institutions do not do in the modern world is provide meaning. Science tells us how, but not why. Technology gives us power, but cannot teach us how to use it. Free market gives us options, but lacks relevant directions on how to make these decisions. Liberal democratic states give us freedom to live the way want, but refuses by principle to help us choose. Likewise, business provides us with work opportunities, but does not always allow us to reach our potential: to fully develop ourselves in and with our work. As a result, the 21<sup>st</sup> century has granted us a maximum amount of options with a minimum amount of meaning.

The deification of institutions and the subsequent loss of meaning highlight the associated risks of this new technocratic paradigm and the forms of power derived from developments in artificial intelligence, robotics and other technological innovations. These advances give us a glimpse of the not so far away future, and the consequences of automating labour and people's ways of life. Forecasts of great changes with significant social impacts generate expectations of a different and better world. However, alongside these hopes are concerns and fears about the dominant power that could be wielded by technological constructs, such as the increasingly more sophisticated bots, robots, androids and other forms of artificial intelligence. It is imperative, therefore, to establish an ethical framework of reference to guide the design, production and use of these technological constructs.

How can business help establish an ethical framework that fosters the creation of a better world and quality of life that in all ways is superior because of these new technologies? Can business contribute to the quest for meaning of those who work in and with them? *The vocation of the business leader (2012)*, a document produced by the former Pontifical Council for Justice and Peace, states that business leaders are called to engage with the contemporary economic and financial world in light of the principles of human dignity and the common good. This reflection offers business leaders, members of their institutions, and various stakeholders a set of practical principles that can guide them in their service of the common good. Among these principles, we can highlight the principle of meeting the needs of the world with goods that are truly good and truly serve without forgetting, in a spirit of solidarity, the needs of the poor and the vulnerable; the principle of organising work within enterprises in ways that respect human dignity; the principle of subsidiarity, which fosters a spirit of initiative and increases the competence of the employees who are thereby considered "co-entrepreneurs"; and, finally, the principle of the sustainable creation of wealth and its just distribution among the various stakeholders.

These principles can be summarized by three pillars through which business contributes to the common good: Good work, Good goods and Good wealth. These three pillars provide the foundation for transforming day-to-day business into a noble vocation. Humanity is at the threshold of an era in which technological constructs appear ready to set off a new industrial revolution, which would probably affect all levels of society. Therefore, it is paramount to scrutinize the design, production and use of these constructs through the lens of these three pillars in order to imbue them with greater nobility by considering ethical consequences without hindering innovation.

Given the great dynamic complexity of this issue, the main challenge is its unpredictable evolution. Since technological innovations are uncertain and involve unimaginable spheres and scopes, regulations and frameworks should be dynamically rethought and revised as innovations come into existence. The starting point, therefore, should



be to establish certain unbreakable principles so that each of these three pillars of “good” can be achieved and maintained.

In general terms, the framework of ethical directives should be based on the principles of beneficence (technological constructs should benefit humankind), non-maleficence (the doctrine of first do no harm – technological constructs should not harm people), autonomy (the capacity to make independent and informed decisions on how to interact with a technological construct), and justice (technological constructs should be affordable and their benefits should be fairly distributed). This ethical framework should also be based on respect for basic human rights such as human dignity, equality, justice and equity, non-discrimination, informed consent, private and family life, and data security; as well as on other principles such as non-stigmatization, openness, and individual and social responsibility.

At the same time, technological research should be undertaken with caution and should strive to predict potential impacts technological advances could have on security and take all appropriate safety precautions, while promoting progress in support of society and the environment.

In terms of the three pillars mentioned above, some of their essential elements are:

## **A ► GOOD GOODS**

This pillar refers to designing and producing goods that are truly good and services that really work. The principle of the universal destination of goods and the right to their common use underlie this concept.

Technological constructs should be at the service of humanity: they should respect human dignity and autonomy, both physical and psychological. Their design, implementation and use have the potential to transform our way of life and forms of work; increase efficiency, conservation and safety levels; and improve the quality of services in the most diverse areas. Nevertheless, they should meet the following minimum requirements: i) they should not injure a human being or, through inaction, allow a human being to come to harm; ii) they must obey orders given by human beings, except where such orders contradict the previous point; iii) they must protect their own existence, as long as this protection does not conflict with the previous two points.

For new technologies to meet these requirements, it is necessary to ensure (among many other things) that their design, production and use protect:

- Humans from any harm technological innovations could cause focusing on enhancing rather than replacing human capabilities and, if failures arise that cause harm, being able to determine why;
- Human freedom from technological innovations, guaranteeing human control over them and paying special attention to the problems that developing emotional links between humans and new technologies could cause to human beings;

- Humanity from being manipulated by technological innovations, protecting privacy and data usage, and preventing new technologies from somehow monopolizing relations among certain groups and, therefore, disrupting social ties.

Ultimately, all research and development in these fields should be characterized by the openness, reversibility and traceability of their processes.

## **B ► GOOD WORK**

This pillar refers to organizing work so that workers can develop their skills and talents. The goal of creating products and services cannot be achieved at the expense of good work and the integral development of workers (that is, the subjective dimension of work). The impact of the new industrial revolution over many jobs that are currently performed by humans but that will be done by technological constructs, in the near future, is not only predictable but a current reality. The idea of humans being replaced by the latest technological innovation is real; therefore, it should be addressed with urgency and from different angles.

On one hand, technological advances cannot be stopped, nor should we try to artificially protect jobs “by decree.” To pursue this misconception would only lead to the loss of competitiveness as well as losing jobs. Moreover, technological innovations also create jobs that force people to use their more human faculties: creativity, intelligence, judgement, leadership, team effort and ethics. On the other hand, work automation could free people from monotonous and routine tasks, allowing them to devote themselves to more meaningful ones. In other cases, it could lead to benefits at an organizational level, such as boosting work safety through the use of robots for dangerous and hazardous tasks currently performed by human beings. The key, then, is not to replace but to adapt the workforce to the new types of work.

Therefore, the greatest challenge is to ensure the employability of those who work. This requires significant effort in terms of education and training to improve the redistribution of the types of skills that will be needed in the future. It also involves major reforms in the labour market to make it more flexible to allow it to reassign workers to other types of employment. These challenges do not absolve businesses from responsibility. Business has a lot to contribute to the better and greater employability of workers. This is a responsibility business cannot avoid, if it is committed to create and maintain “good work.” Business can do much more than just contributing to training, preparing and reassigning its workers so that they are able to face the challenges posed by new technologies. The challenge of being “employable” goes beyond constant training and continuous learning of professional skills and competencies. First and foremost, business is a community of people and, as such, a school that teaches a series of human virtues that will become increasingly necessary in the world of labour: solidarity, industriousness, respect,

excellence, honesty, justice, etc. Business should make room for the integral human development of those who work in it. At the same time, this development is a great contribution to workers making them better equipped to face the challenges of the new industrial revolution, so that they can take them on with better and greater employability.

On the other hand, when considering automation opportunities, business should take into account that human contact is one of the main aspects of human relations. Replacing the human factor with machines, no matter how intelligent, could dehumanize and destroy a source of social interaction that is impossible to replace completely. In many cases, this replacement can lead to devastating consequences that affect its capacity for success in the long term. As such, new technologies pose a much greater challenge to business leaders. In order to achieve real, long-term benefits through the use of innovations, they must exercise their talents, skills, creativity and experience, to prevent social interactions from becoming dehumanized —both within the company and among its stakeholders.

However, new technologies also offer opportunities for innovative business models that open doors to new perspectives and labour markets. This is the case of the *gig economy*: the creation of temporary jobs to perform specific tasks or projects. In these cases the issue goes beyond the mere provision of a service. Often an employer cannot afford to hire a fulltime worker to complete a certain task and there are also people who are willing to work part-time or even prefer this type of employment, and digital applications bring them all together. This new type of work not only allows for greater participation in the workforce, but also makes it possible to better rise to challenges related to flexibility imposed by the new industrial revolution that is underway.

Lastly, it is imperative to closely analyze and supervise the medium and long-term evolution of employment, paying special attention to job creation, relocation and loss in the various relevant sectors. By doing so we can identify the fields where jobs are being created and lost as a result of a greater use of technological constructs.

## **C ► GOOD WEALTH**

This pillar refers to creating sustainable wealth and distributing it fairly. The principle of fair distribution calls for wealth to be allocated to create “appropriate relations” with those who participated in its creation.

Artificial intelligence, robots and other technological innovations should be created for the good of mankind and to benefit the greatest number of people, since it is important to reduce the risk of exclusion. Therefore, it is essential to establish basic ethical principles that must be respected when developing, programming, implementing, and using technological constructs, in order to guarantee that they are at the service of humanity. As such, the benefits are more widely distributed, avoiding potential obstacles to inclusive distribution.

Respecting the principle of justice refers to fairly distributing the benefits associated with technological constructs and making them affordable to all. These new technologies must benefit and support as many people as possible and, likewise, the economic prosperity emanating from them must be widely shared, to the benefit of all humanity. Meanwhile, these technological innovations must be developed only to the service of widely shared ethical ideals and to the benefit of all humanity, more than to the benefit of one state or organization.

On the other hand, artificial intelligence, robots and other technological innovations have the potential to greatly contribute to the good of mankind. The AI for Good Global Summit took place in Geneva, Switzerland, in June 2017, with world experts convened by the UN. This meeting highlighted the importance of new technologies to bridge social gaps, reduce poverty and hunger, improve health and medical care, and prevent child malnutrition. For example, one of the most interesting initiatives presented at the summit included the use of artificial intelligence to measure and evaluate with greater precision the living conditions of the three billion people who still live in poverty, and develop public policies to address this situation. At the same time, the summit discussed ways to democratize AI solutions around the world.

Likewise, the study *Artificial intelligence and life in 2030*, published by the University of Texas, the Allen Institute for Artificial Intelligence, Microsoft, and academics from Harvard, MIT, Columbia and UC Berkeley, confirms the potential contributions of artificial intelligence to inclusive and sustainable development. The research paper highlights that these technological innovations could help the economic development of low-income communities to be more efficient and that data mining could help to better allocate public resources. For example, algorithms could connect restaurants to food banks and avoid food wasting, etc. Artificial intelligence has also transformed modern medicine. In the AI for Good Global Summit, UNICEF presented a project it is developing to diagnose malnutrition from photographs and videos of children. Finally, by analyzing a large volume of data, artificial intelligence could help improve predictions, prevent crimes, and support governments to better serve people.

In this way, artificial intelligence, robots and other technological innovations could greatly contribute to generating “good wealth”.

## ► CONCLUSION

Businesses can contribute to meeting the UN goals for sustainable development, particularly, as analyzed above, goal number 8: *to promote inclusive and sustainable economic growth, employment and decent work for all*.

Through the three pillars of service to the common good (Good work, Good goods and Good wealth), business can help with the ethical deployment of new technologies, such as artificial intelligence, robotics and other technological innovations. Thereby,

ensuring that their associated technological and economic development contribute to a better world and a completely superior quality of life. This allows us to view development as true progress.

When companies are run by leaders driven by a more comprehensive sense of life and who exercise their leadership to build more humane corporate cultures, businesses are able to appropriately deploy these three pillars and work as an economic engine, generating a development aimed at serving society and protecting our world. As such, business plays an integral role in generating material wealth for a larger number of people. They serve the common good through their efforts to multiply the world's goods, including those derived from artificial intelligence, robots and other innovations, and make them accessible to all. In this way, the role of the business leader is transformed into a noble vocation. ▀

# FINANCE AND PEOPLE AT WORK IN 2030

11

## AFTER LAUDATO SI' AND FROM THE PERSPECTIVE OF SUSTAINABLE DEVELOPMENT GOALS

by Pierre de Lauzun

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This document will examine how finance has contributed to the changes in the relationship between the economy, people, and work from the perspective of the Sustainable Development Goals and after the release of Pope Francis' encyclical, and more widely in terms of the Catholic church's social doctrine. It will concentrate on the situation in developed countries and the possible role of market finance.

### I ► Diagnosis

#### 1. Pope Francis' analysis

##### ► MAIN DIAGNOSIS: SYSTEMIC EXCLUSION

Pope Francis' assessment focuses on the issue of exclusion. As he points out in *Evangelii Gaudium*<sup>1</sup> 52 : *"At the same time we have to remember that the majority of our contemporaries are barely living from day to day, with dire consequences... It is a struggle to live and, often, to live with precious little dignity."* He continues by forcefully pointing in 53: today we also have to say "thou shalt not" to an economy of exclusion and inequality. Such an economy kills. How can it be that it is not a news item when an elderly homeless person dies of exposure, but it is news when the stock market loses two points? This is a case of exclusion. Can we continue to stand by when food is thrown away while people are starving? This is a case of inequality... As a consequence, masses of people find themselves excluded and marginalised: without work, without possibilities, without any means of escape... It is no longer simply about exploitation and oppression, but something new. Exclusion ultimately has to do with what it means to be a part of the society in which we live; those excluded are no longer society's underside or its fringes or its disenfranchised – they are no longer even a part of it" He then criticises "trickle-down" theories (54), *"which assume that economic growth, encouraged by a free market, will inevitably succeed in bringing about greater justice*

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1. Apostolic exhortation hereafter referred to as EG.

and inclusiveness in the world. This opinion, which has never been confirmed by the facts, expresses a crude and naïve trust in the goodness of those wielding economic power and in the sacralised workings of the prevailing economic system.”

According to Pope Francis, this is the result of choosing money over humanity. In 55, he states: *“One cause of this situation is found in our relationship with money, since we calmly accept its dominion over ourselves and our societies.”* Consequently, while the earnings of a minority are growing exponentially, so too is the gap separating the majority from the prosperity enjoyed by those happy few. This imbalance is the result of ideologies which defend the absolute autonomy of the marketplace and financial speculation. Consequently, they reject the right of states, charged with vigilance for the common good, to exercise any form of control (56).” And in 57: *“Ethics has come to be viewed with a certain scornful derision. It is seen as counterproductive, too human, because it makes money and power relative. It is felt to be a threat since it condemns the manipulation and debasement of the person. In effect, ethics leads to a God who calls for a committed response which is outside the categories of the marketplace.”*

So, one of the principle sources this attitude is moral. This point is developed in *Laudato si’*<sup>2</sup> 123: *“The culture of relativism is the same disorder which drives one person to take advantage of another, to treat others as mere objects, imposing forced work on them or enslaving them to pay their debts... It is also the mindset of those who say: Let us allow the invisible forces of the market to regulate the economy, and consider their impact on society and nature as collateral damage. In the absence of objective truths or sound principles other than the satisfaction of our own desires and immediate needs, what limits can be placed on human trafficking, organised crime, the drug trade, commerce in blood diamonds and the fur of endangered species?”* But he adds an important point, which shows the limits of political action: *“We should not think that political efforts or the force of law will be sufficient to prevent actions which affect the environment because, when the culture itself is corrupt and objective truth and universally valid principles are no longer upheld, then laws can only be seen as arbitrary impositions or obstacles to be avoided.”*

## ■ A DOMINANT PARADIGM

*Laudato si’* goes further. In 106: *“The basic problem goes even deeper: it is the way that humanity has taken up technology and its development according to an undifferentiated and one-dimensional paradigm.”* This issue is visible in *“the scientific and experimental method, which in itself is already a technique of possession, mastery and transformation.”* He continues *“It can be said that many problems of today’s world stem from the tendency, at times unconscious, to make the method and aims of science and*

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2. *Laudato si’* encyclical, hereafter referred to as LS.

technology an epistemological paradigm which shapes the lives of individuals and the workings of society. (107)”. By worshipping profit, “The economy accepts every advance in technology with a view to profit, without concern for its potentially negative impact on human beings. Finance overwhelms the real economy... Some circles maintain that current economics and technology will solve all problems... They may not affirm such theories with words, but nonetheless support them with their deeds by showing no interest in more balanced levels of production, a better distribution of wealth, concern for the environment and the rights of future generations. Their behaviour shows that for them maximising profits is enough. Yet by itself the market cannot guarantee integral human development and social inclusion. (109)” Subsequently, (204) “The current global situation engenders a feeling of instability and uncertainty, which in turn becomes ‘a seedbed for collective selfishness’. When people become self-centred and self-enclosed, their greed increases. The emptier a person’s heart is, the more he or she needs things to buy, own and consume.”

#### ► A CALL FOR DRASTIC CHANGE

Given this situation, the Pope calls for drastic action. In EG 202, he posits: “Welfare projects, which meet certain urgent needs, should be considered merely temporary responses. As long as the problems of the poor are not radically resolved by rejecting the absolute autonomy of markets and financial speculation and by attacking the structural causes of inequality, no solution will be found for the world’s problems or, for that matter, to any problems.” Therefore, (204) “We can no longer trust in the unseen forces and the invisible hand of the market. Growth in justice requires more than economic growth, while presupposing such growth: it requires decisions, programmes, mechanisms and processes specifically geared to a better distribution of income, the creation of sources of employment and an integral promotion of the poor which goes beyond a simple welfare mentality.” Because: “The private ownership of goods is justified by the need to protect and increase them, so that they can better serve the common good; for this reason, solidarity must be lived as the decision to restore to the poor what belongs to them.” (189). Yet “this means education, access to health care, and above all employment, for it is through free, creative, participatory, and mutually supportive work that human beings express and enhance the dignity of their lives. A just wage enables them to have adequate access to all the other goods which are destined for our common use” (192).

One especially needs to think beyond financial calculations. That is why “It is not enough to balance, in the medium term, the protection of nature with financial gain, or the preservation of the environment with progress. Halfway measures simply delay the inevitable disaster. Put simply, it is a matter of redefining our notion of progress. A technological and economic development which does not leave in its wake a better world



*and an integrally higher quality of life cannot be considered progress.” Even though “In this context, talk of sustainable growth usually becomes a way of distracting attention and offering excuses. It absorbs the language and values of ecology into the categories of finance and technocracy, and the social and environmental responsibility of businesses often gets reduced to a series of marketing and image-enhancing measures” (194).*

Here, the Pope underscores the importance of acting locally and at grassroots level. In 144, he states: “Society, through non-governmental organisations and intermediate groups, must put pressure on governments to develop more rigorous regulations, procedures and controls...” Because “A change in lifestyle could bring healthy pressure to bear on those who wield political, economic and social power. This is what consumer movements accomplish by boycotting certain products. They prove successful in changing the way businesses operate, forcing them to consider their environmental footprint and their patterns of production. When social pressure affects their earnings, businesses clearly have to find ways to produce differently” (206).

## ► WHAT DO POPE FRANCIS’ WARNINGS TELL US?

Pope Francis’ assessment leads him to highlight the severity of the changes underfoot by describing them as ‘exclusionary’. He then goes further, identifying which is the main reason behind the direction, priorities, and functioning of the economic system that uses people as tools. This includes and goes beyond financialisation. The Pope condemns a system of collective values, and more profoundly, an anthropology and a conception of humankind. Either the changes we have just described happened spontaneously and we have done nothing to stop them or at least deal with them properly; or they were provoked by the priorities of stakeholders and society. Furthermore, he deems the actions that simply add a social or environmental chapter to the existing book to be insufficient. Economic action and priorities need to be completely rethought from A to Z. Finance has a major role in this overhaul, particularly because of the importance it gives to profit, through finance’s measurement tools and its pressure on the market.

## 2. New factors in economics: globalisation, socio-political divides, financialisation, and technology

It is important to clearly list the changes that are underway before delving into what can specifically be said or done about them. What will the future of work look like and what role can or should the private sector play in this process of change, especially in terms of leadership and entrepreneurship?

## ► FEWER JOBS, AND MORE INSTABILITY AND UNEMPLOYMENT

Work as we know it is changing. In developed countries, the previous model of full-time and salaried jobs guaranteed for life is being seriously challenged but has not altogether disappeared. On one side, people move more and more over the course

of their careers, because of the lesser reciprocal allegiance between companies and employees. On the other, independent contracting and self-employment are gaining traction. They are often confused with entrepreneurship but are quite different. For many people, the prevailing rhetoric of marketing oneself has reached its limits. Stress, uncertainty, and the risk of failure often lead to breakdowns. At the same time, an increasing percentage of the population is unemployed, either temporarily (young people) or in the long-term because of insufficient or ill-adapted training, age, or the inability to get a job soon after redundancy.

Also, increasing globalisation means that more than ever, the actual income of entire communities depends on them being a part of production and distribution chains over which they have little control. Those systems can sometimes turn against the people in those communities, which can be bad both for their social recognition and for the remuneration of their work. This is particularly true in developing countries, where the initial producer is paid little when compared to the product's end price.

At the same time, work, be it as an employee or independent worker, is still the main source of income for the vast majority of people; even more so if we factor in economic development in least developed countries. Overall, a significant portion of the world's population has been able to get out of poverty largely thanks to economic development. From that perspective, the very real insecurity of a part of the population pointed out by the Pope should be contrasted with an undeniable material progression. The contrast between insecurity and more opportunities is not as black and white as the Pope describes, even though he does point out an undeniable reality.

#### ► A GROWING DIVIDE WITHIN NATIONAL COMMUNITIES

Plus, the continuous expansion of welfare since 1945 has stagnated in developed countries because the level of public expenses is now deemed too high. Thus, the disconnect between income and work has reached its limits. Furthermore, the sense of solidarity is waning within national communities, since the part of the population that has benefitted from globalisation rejects more tax increases (and often wants taxes to be reduced), as those people feel that they pay a much greater share than people who are lower on the income ladder. That said, for the vast majority of people, their real income is due to their membership in a national community; either because individual productivity is dependent on the environment in which people work, or because of social or fiscal distribution. Either way, globalisation applies a constant disruptive pressure on that reality.

Another recent related phenomenon is the inequality gap. This gap is considerable in most developed countries, and even more pronounced in countries like the US. In this case, jobs are still available, but the actual value of remuneration has dropped, at least in relative value.

The risk is to progressively create different paths of destiny for different groups within the same country. Divergent paths can be drawn geographically, according to region or even neighbourhood (as demonstrated by French demographer C. Guilly). When that happens, a division appears within the population according to how people identify themselves (the divide can be drawn for instance according to national and local lines on the one hand, and international or European on the other), or according to their background, job or access to technology (digital divide). Divisions can be exacerbated in cases of significant migrations as migrants are a third factor and are felt to be in competition with local working classes. Consequently, there is a growing divide between the “elites” and most of the population. This causes a political break, as we see with the resurgence of “populism”, but also a break in culture and language and sometimes a loss of influence from the elites.

Therefore, it is important to underscore the key role that one’s political community (nation) is a primary forum for one’s belonging and for expressions of solidarity. Its relative weakening is not a factor of social progress. Quite the contrary, because without national solidarity, most people are weak and defenceless against globalisation and other ongoing changes. From that perspective, open markets and free distribution of goods and capital – which are generally beneficial – cannot be an absolute imperative. Political decision-makers must take the social, political, and economic balance of their constituents into account, and regulate that balance.

## ► FINANCIALISATION AND A MATERIALISTIC CULTURE

Added to this is the concept of financialisation. This word covers three related but very different ideas: 1) excessive role of finance or of financial considerations in the decision-making process; 2) The excessive expansion of the financial sector; and 3) Finance’s one-track direction towards shorter and shorter-term gain (rated according to short-term stock market results). After taking these 3 factors into account, critics of financialisation feel that it is the main reason for the worsening situations discussed above (ex: divides, inequality, and vulnerability), and fuel the changes that cause them. The fact is that in the last 35 years, finance, its share of national product (and its salaries compared to other sectors) has evolved much faster than most other economic activities. At the same time, the financial market has been applying more and more pressure, partly due to its very short-term vision. That said, there is no definitive evidence that finance is the only reason for the changes described above. Particularly, the anthropological context (particularly as described by Pope Francis) goes well beyond finance. Financialisation is often confused with the desire for gain or consumption. Both of these phenomena are much wider, and typical of contemporary culture. That said, it does not mean that there does not need to be a discussion about the specific role of finance and what can be done to solve the problems to which it has contributed.

## ► SPECTACULAR TECHNOLOGICAL PROGRESS THAT HAS NOT NECESSARILY CREATED JOBS

Another particularly important aspect to consider is the possible impact that current technological changes have on jobs. Digitalisation's explosive development affects individuals in their daily lives and the hierarchy of companies (to wit: the emergence of the GAFAs in less than 20 years). It seems, though, that the corresponding job creation has been limited, and for the most part focused on low-qualified jobs (e.g. delivery jobs). Many reports correctly underscore the risk of destroying massive numbers of existing jobs – including relatively qualified ones – down the line; particularly with the arrival of Artificial Intelligence (AI). In the past, technical advancements created employment, whether direct or indirect; but it remains to be seen if that will continue (at least not everywhere, because of the new reality of globalisation). It is plausible that a great number of employees will lose their jobs if corrective action is not taken. It is also not clear if education will be enough to counter the trend (even if it will play a key role), because it's not sure that affected people will be able to make the necessary qualitative progress; nor that enough jobs will be created. Plus, even if the situation were to be fixed in the long run, the breach could be tremendous in the interim and add to the aforementioned effects, especially in countries that are not ready or do not take proper action. In other words, there could be significant effects of exclusion, and national communities could be ripped apart. Obviously, this issue affects the whole economy, including the public sector and local communities, but companies and people working in finance cannot be indifferent because of their position as the cornerstone of the economy.

## II ► Possible action and the role of private finance

### 1. What should be done?

#### ► UN OBJECTIVES – A REMINDER

Let us recall the UN Sustainable Development Goals for 2030, particularly Goal # 8 (To promote inclusive and sustainable economic growth, employment, and decent work for all). The goals fall under 3 categories: growth and productivity, care for the environment, and full worker-friendly employment. To this we should add a fourth: access to financial services. First of all, it calls to “Sustain per capita economic growth in accordance with national circumstances”; “Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and work-intensive sectors”; and to “Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation”, especially SMEs, “including through access to financial services”, while focusing on both the environment and employment. As regards employment, the SDGs state: “*By 2030, achieve full and productive employment and decent work for all women and men, including for*

young people and persons with disabilities, and equal pay for work of equal value". Also, to fight against degrading types of work, to "Protect work rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment", with particular emphasis on youth employment. Finally, "Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all".

If we compare the (unquestionable) goals with developments thus far, especially the most negative ones, we cannot accept the downward slide we see. Instead, we must *favour the creation of qualified, high productivity, and adequately and fairly compensated jobs through growth, initiative, innovation, and properly adapted policies*. Some of them are not relevant to this discussion (e.g. educational policy). On the other hand, the central role of finance – especially from a critical perspective like Pope Francis' – is particularly important.

## 2. The role of finance in a more ethical economy

### ► HUMAN AND ETHICAL ECONOMY – BACK TO FUNDAMENTAL DATA

#### ► Moral or ethical economy

We cannot achieve a healthy, sustainable economic life without a healthy conception of man and a healthy anthropology. It is especially important to rethink the concept of profitability. In the end, profitability is the proper efficient use of resources; but that requirement only becomes important in the end, because a firm's results are just a final measure and nothing else. Furthermore, no firm can function with profit as its sole objective. We can see this with its internal functioning. Firms would have a hard time functioning if everyone worked only with their own immediate interests in mind. In fact, things would stall pretty quickly, or would at least have a hard time getting the best out of their employees, because the motivation of individuals and human societies goes way beyond just financial results; so, it does not make sense to limit ourselves to them. The fact is that we spend most of our adult lives working in companies. Because of that, we cannot consider remuneration as the only form of compensation we get from work; from a rational point of view we have to offer much more. *So, the idea of profitability itself means that one must extensively account for the human factor in all its richness and variety. This means extolling true ethical values and a notion of the good and evil we do to others.*

Obviously, on an individual case basis, it is possible to earn more money with an unethical behaviour than with an ethical behaviour. There are many examples of this in finance. But the most important thing is regular, repeated behaviour over the long term. Over time, we finally run again into people we have treated well or poorly; and it is the same in the market. These people often remember what has been done to them, and take it into account, which is why it is better to behave ethically. Immorality ends poorly in the long run. We could object there is competitive pressure, which could

lead us to behave unethically in specific cases, because if we do not, we would have to withdraw from the market and maybe from any activity. It is a genuine issue and those situations are a major reason why shared public or professional rules should be established. Nevertheless, this should not distract us from the underlying logic.

We hear a lot of talk about ethics today, but the meaning remains vague. It seems important to refer to the basic facts. The first is that the economy is at the service of human beings, so judgement should be made in accordance with their comfort, and full development in mind. From that point of view, an essential first step is individual autonomy for all. We know that all things being equal, an economy based on initiative and decentralisation (so private property) is more efficient. More importantly, human beings are creatures of initiative and responsibility, as long as they are members of a community. Naturally, this does not exclude collective action and regulation, on the contrary. It is important to remember that behaviour and morality are human conditions, of people who live and act in the context of society, or community. Thus, it is important for the community and its members that people are motivated by concern for the common good. These two points are essential and linked together. *Independent individuals must work together for the good of all.*

Consequently, it is a fallacy to reduce the motivations and justifications of economic activity in purely monetary terms, especially individualistic ones. Thinking in purely economic terms is missing the point of economics itself.

### ► Ownership and business

Ownership is the decision-making main tool in economics, and especially finance. Owners are the ones to decide on an asset's economic and financial use. In a decentralised market economy, private ownership in its many shapes and forms is necessary to give individuals and communities the wherewithal to carry out their action and independence. It is also the way for people to harvest the fruit of their actions. In that way, ownership is essentially justified. At the same time, ownership from the perspective described above does not mean that one should do with one's assets as one will. Since morals and ethics are about doing what is good, it is important to always consider the best use for one's property. In that context, the issue of capital and ownership of corporations is important. Nevertheless, there are different possible forms of ownership.

In any case, companies play a key part in economic life, from an ethical standpoint as well. Entrepreneurship is one of the most important social roles for the common good. Any company fulfils three criteria: 1) its goal is to produce goods and services in exchange for a given price; 2) this is done through the firm's human community (a specific and limited community, but a community nonetheless); and 3) it is in a certain sense the centre of a person's life. So specifically, it is both a community of people and a legal entity that is owned, generally as an incorporated company.

Also, a company is a part of society, and as such has a social (ethical) responsibility towards all its stakeholders (employees, environment, clients, suppliers, and local and greater communities). Everyone, but especially owners (no matter what type of ownership) and managers contribute to that responsibility. Thus, holding to purely financial considerations does not absolve them of their responsibilities.

### ► Work

A last essential point is the fact that businesses are made of people, who should be respected, along with their work. They should therefore be included in the company's joint mission; however, modern businesses have real competitive advantages but a major fault. They are more exclusionary than other human societies before. Social inclusion in our society is more dependent on having a job than in other types of societies, and joblessness is a major factor of social exclusion. For that reason, universal employment is a critical goal. That said, a legally guaranteed job does not make sense in a dynamic economy (except for specific exceptions in the public sector); so, dismissal should be reasonably flexible (but only carried out when absolutely necessary). Those who have been made redundant should be supported in their efforts to find another decent job. Flexisecurity accepts flexibility in employment but includes a safety net for those who must change jobs. It is preferable to a system where some benefit from job security while others are condemned to a lack of it. Such a system requires commitment to retraining people if necessary; including from the firm that employs or can employ them. It is also important to give meaning to work, which comprises employment (source of remuneration and security), a career (and with it social inclusion), and a calling. The latter gives people a sense of morality. Having a calling is critical, because it provides individuals with purpose and meaning; on the condition that they do not automatically believe that their job is for life. Because of the changes in economic life, its place in our societies is not a given. Dealing with the issue does not depend solely on regulations, so it is important to have a humanist view of management; but this means that owners and investors should behave in a humanist way. Here again this consideration has to be integrated with financial ones.

### ► Remuneration

Remuneration plays a key part, not just in terms of fairness, but also for what remuneration serves to compensate, which results from the firm's objectives (including non-financial ones). We have seen that this is not the only source of satisfaction; but it is an important economic factor for a working person. Remuneration should be in line with the person's contribution (commutative justice) and place in society (distributive justice). The former means that compensation should be commensurate to the service provided. The latter means that each person should be compensated in accordance with their place in the firm, which varies according to the firm and their position or contribution. This includes the collective meaning of pay and inclusion in society in general.

Consequently, remuneration cannot only be determined by the labour market. It must account for workers' participation in joint projects and the need to meet their families' needs. The government also plays a part when collecting taxes or distributing benefits. Obviously, it is also important to consider competition. Salaries have to be tenable and not cost the firm too much. A good executive, therefore, does not only look to the market when determining salaries (which reflects average situations), but thinks in terms of the most efficient organisation and strategies so as to pay the most satisfactory salaries. Likewise, a business that has a human touch and actively thinks of its employees' well-being, their future (both material and in compensation), and family obligations is the best possible environment for them. It is a place where people want to be and invest themselves, and in the long-term it is more efficient.

### ► PERSON-FRIENDLY FINANCE?

In this context, what is the role of finance? To allocate available money which is not consumed but saved for possible use, such as investments. It then decides between possible investment options to select and fund those that will yield the best results (in the general sense, according to several criteria) against a given acceptable risk. No risk is not an option, because the return on investment comes in the future and there is no guarantee that the project will make good on its commitment or promises. Refusing risk is opposition to change, so it is actually a greater risk because by doing so we are not getting ready for the future.

### ► The principles

However, one does not invest in an abstract world, but in actual communities made up of people. That is why one needs to look at a bigger picture that described above, such as ethical considerations and how the human factor affects the project in question. One must reintroduce any economic act in the overall framework of human relations, and especially communities and institutions. Governments (or other powers) sometimes limit or orientate investments because of those considerations. The best example is the national context. Sometimes, governments may decide to let produce or trade certain goods with other countries (which includes flows of capital and investments) for the common good. Obviously because of the important part that national solidarity plays in people's economic status. Ethically, that consideration is laudable per se, though it depends on the authorities having the proper skills and motivations.

Naturally, this also applies to the financial sector. Though money is fungible, the investors' perspective is not so, – if they take into account their own responsibilities towards the community which lays behind their wealth and/or where they live. Conversely, the idea of a world capital market in which all of the world's capital could be invested in any project makes sense, because doing so takes full advantage of the purely financial aspect (in theory). However, actually being able to act freely at that level is neither a



right nor necessary. Not only do holders of capital not necessarily have the skills to do so, but that money is the fruit of work and is linked to assets in a given community. Thus, asset holders cannot always justify investing their capital anywhere they see fit. It should be decided on a case by case basis. Obviously, when in doubt, freedom is the best option; and restrictions to it ought to be clearly motivated and justified.

### ► The current situation and possible directions to take

Many have criticised the role of finance in today's economy. Their criticism focuses on two points: 1) the exclusive consideration of purely financial (and some say, questionable) criteria, i.e. the remuneration of capital; and 2) the dominance of transactions on the financial market, which would lead to limiting oneself to the very short term. Since the 2007-2008 recession, we have seen that this criticism is true in a significant way; but it does not eliminate the rationale for finance. One can just conclude that financial instruments are not absolute tools. They cannot give certainty, nor 100% control of risk. They only reflect the general state of visible possibilities at a given moment. And it is fair to condemn any social practice or prejudice that leads owners to completely exempt from any non-financial consideration. That said, the negative effects that money can bring about go back further than the last 20 years. There is no obligation to restrict one's vision to just the short term, or to regard publicly traded companies as sources of quick returns through takeovers, restructuring, stock buybacks, or judge everything on the bases of share prices at any given time. But although it is justified to condemn a certain ideology and today's general practice, the instruments are not responsible per se. The bad consequences stem from a shared value system that permeates bodies and organisations; the end result being that money is valued more than people. Undeniably, a market needs structures and rules; but first it reflects the value system of its stakeholders. That is where we find society's fundamental values. On top of that, there are not enough measures that let corporations and participants to offer an alternative relationship that is based upstream on other priorities and that favour long-term relationships, which calls for measures to rein in short term oriented market trading. We must also keep in mind that funds invested in that manner are generally managed by professional money managers. They are heavily guided by the instructions given to them by the people whose money they handle. Ethically minded considerations were the catalyst behind Socially Responsible Investment (SRI) and Corporate Social Responsibility (CSR). Done right, they should become the generally accepted forms of investment, provided that the right investment criteria are used. For that to happen, there should be more ambitious frames of reference than what is currently used. Currently, SRI includes diverse and generally narrowly interpreted realities. Some people think that it just has to do with sustainable development, which is legitimate but incomplete, because a slave-based economy could be sustainable as well. There have been some

UN-sponsored international agreements to that end, such as Kofi Annan's Global compact (2002), which addresses human rights, fighting corruption and respecting the environment. The Principles for Responsible Investment of 2006 mention them, but are focused on environmental, social, and governance issues. It is a good start, but it remains narrow in scope and a little vague. Such initiatives should include ethical relationships with all stakeholders in the corporation, going beyond the SRI basics (environment, governance, and labour relations). To that should be added the nature and the human significance of manufactured products, the quality of relationships with clients, suppliers, and with the countries where they do business, and even the price structure. Obviously, to do that, it may be beneficial to look into other types of collective management that have a different type of *modus operandi* and work with different criteria; and modes of joint investment should have a wider and deeper range of priorities. All this would require establishing new analytical criteria, a process which is still in its early stages.

## ► RECENT PONTIFICAL FINANCE-RELATED DEVELOPMENTS

The Vatican has recently published *Oeconomicae et pecuniariae quaestiones* (June 2018) with the support of Pope Francis. It is a major, unprecedented paper in the history of the Catholic church's social doctrine. Up until now, finance-related papers have been quite limited. Pope Francis already underscored elsewhere the shortcomings of the current financial system, without going into too much detail.

### ► Overriding themes

Two important themes are the central importance of ethics and the need for regulation. The centrality of ethics is especially important in the financial realm, and the paper points out the practical drawbacks as well as the more worrisome tendency to forgo all ethical considerations. It also stresses two limits of markets, which are their incapacity to self-regulate (which contributed to the market crash) and to yield ethically satisfactory results. It concludes that we are dealing with a false, individualistic anthropology that reduces individuals to mere consumers, and workers to production tools. By nature, humans need relationships. Economic and social activities concern different aspects of humanity that go beyond immediate pecuniary interests; thus, the economy is less important than the fulfilment of individuals, in their relationships and within their community. Chapter 10 of *Oeconomicae et pecuniariae quaestiones* states: *"No profit is in fact legitimate when it falls short of the objective of the integral promotion of the human person, the universal destination of goods, and the preferential option for the poor... For this reason, progress within an economic system cannot be measured only by quantitative and profit-driven standards, but also on the basis of the well-being that extends a good that is not simply material. Every economic system is legitimate if it thrives not merely through the quantitative development of exchange but rather by its capacity to promote the development of the entire person and of every person."* Ignoring this

leads to inequality and exclusion. The paper points out that the global financial crisis was a lost opportunity to make ethical progress, because the dominant ethical views were not questioned. That is why chapter 23 highlights the importance of Corporate Social Responsibility, both internally and externally. Ethics is all too often seen as extrinsic, and companies are supposed to exist just to serve shareholders. This is what brings to reward greedy and unscrupulous employees (with remuneration and bonus structures) and excessive risk-taking. The paper also boldly states that there is room for a virtuous circle between profit and solidarity. It highlights that *“from the intrinsic connection that exists between economic reasoning and ethical reasoning, a good can indeed spring forth, that may benefit all humanity.”*

### ► The problem of the market

The market as such is not questioned. In Chapter 8, *Oeconomicae et pecuniariae quaestiones* points out that markets are founded on human freedom and concludes that because of that they are subject to ethics. In other words, economic freedom is important, but if it is not based on an ethical foundation, it can have negative effects (like domination) that negate the economic activity itself. Chapter 19 stresses that the market should be viewed as a large organism, so *“the health of a system depends on the health of every single action performed.”* At the same time, *“markets, as powerful propellers of the economy”* (13) cannot produce the human qualities and virtues they need, nor can they correct their negative impact (e.g. environmental or social effects). Chapter 21 states: *“Experience and evidence over the last decades have demonstrated, on the one hand, how naive is the belief in a presumed self-sufficiency of the markets, independent of any ethics, and on the other hand, the compelling necessity of an appropriate regulation that at the same time unites the freedom and protection of every person and operates to create healthy and proper interactions, especially with regards to the more vulnerable.”* In Chapter 15, it adds: *“The financial dimension of the business world, focusing business on the access of money through the gateway of stock exchanges, is as such something positive.”* However, these effects can in fact be quite bad if there is speculation (as in the case of high frequency trading) because it attracts too much capital and is alienated from the real economy. Plus, the capital-to-work power ratio shifts to the detriment of the latter, *“and becomes merely a means of exchange within asymmetrical social relations,”* which engenders a wasteful and exclusionary culture.

Thus, 17 argues: *“the speculative intention, often in today’s economic-financial environment, risks supplanting all other principal intentions that ground human freedom.”* In one way, it is the tip of a much bigger iceberg, as the paper describes the predominant vision: *“words such as ‘efficiency’, ‘competition’, ‘leadership’, and ‘merit’ tend to occupy the entire space of our civil culture and assume a meaning that ends up in impoverishing the quality of exchanges, reducing them to mere numerical coefficients.”*

## ► Specific questions

The text brings up several areas where the system's current dysfunction is particularly worrisome – but that are not relevant to the scope of the present paper. Nevertheless, it focuses intensely on the internationalisation of finance and the need for concerted international and possible binding action.

Especially, in 33, it focuses on the role individuals play both as consumers and investors in the supply and demand of goods. It states: *“Someone spoke of the proposal to ‘vote with your wallet’. This is in reference to voting daily in the markets in favour of whatever helps the concrete well-being of all of us and rejecting whatever harms it. They must also have the same considerations towards the management of their savings, for instance, directing them towards those enterprises that operate with clear criteria inspired by an ethics respectful of the entire human person, and of every particular person, within the horizon of social responsibility. Furthermore, in general, each one is called to cultivate procedures of producing wealth that may be consistent with our relational nature and tend towards an integral development of the human person.”*

## ► FINANCE AND PEOPLE IN 2030

### ► What role will ethics play?

What exactly can be done in the coming years? Remember that we are thinking in the long-term. If we go back 12 years, we hit 2006, that is before the world financial crisis. 12 more years we were in 1994, which was not so different from today. What changed was the crash of 2008 – a major crisis – but apart from that, progress has been relatively stable and limited. Although the crisis raised fundamental ethical questions, their impact has been limited. There has been especially a rise in prudential regulations, and a huge focus on compliance. The creation of compliance-based regulations focused on respecting literally what is prescribed, but no real thought was given to a code of ethics. If we go even further back in time, between the early 90s and 2006, there was even less ethical change in finance. It means that what in hindsight led to the crisis raised few questions before that, or that they had only a limited impact. At the time, the prevailing idea was that “greed is good”, a sort of anti-ethics. But of course this does not explain alone the spiral of events that led to the crisis. We also mentioned the significant but seldom acknowledged link between ethics and efficiency, whose importance becomes apparent only with time. That is why it is not surprising that the obsession with short-term gain in the years leading up to the crisis is correlated with a dwindling concern for ethics and social responsibility. At the time, this phenomenon was exacerbated and justified by scholars who focused on (and even exaggerated) the importance and reality of ‘efficient markets’: if the market continuously synthesises all available data, why look for something else?

*The proper timeframe for ethics is very long-term, which is why it is unrealistic to expect sudden changes, unless another major crisis takes shape.* More broadly, the question

about what the ethics of finance will be in the future is to a large extent a question about what society will be at that time. Once again, the ethical question refers to what one could call a conception of Good with a capital G, the ethics of the common Good that should predominate in the future.

### ► Finance and remuneration

The issue of remuneration has a particular meaning in the context of finance, since one of its major drawbacks is the scale of wagering that it can entail. What I mean here is the possibility of earning a great deal of money in a short period of time on a debatable basis (under-estimating risk or having ethically unhealthy practices) without an appropriate counteracting device. This device has to do with your responsibilities, image, or core business in the long-term. The same holds true for business executive compensation. Princely salaries are rarely questioned afterwards, when it becomes known that the company's apparent gain was actually temporary or did not exist.

This is an especially important issue, but why? It is often said that compensation for people in finance is immoral because it is completely disproportionate to the service provided and social contribution. I would break down the argument at three levels. First, the fact that financial market activities are highly compensated is not absurd, per se, because by dealing with huge sums, the activity itself brings to it. The second layer of analysis deals with the bigger issue of people who are paid (what others perceive as) disproportionate amounts, even if what somebody earns is not necessarily taken from others. At the very least, it is an overpaid activity that draws talent away from other sectors where their skills could be put to much better use. An important point here is that financial activity is inherently risky, and risk cannot be measured immediately. That is why compensation should include fair participation in the activity's actual risk. Otherwise, it is unfair. Risk, however, is not easily measured in the moment, rather over time. If we look back at the situation in 2008 from this perspective, the fact that banks (and the government in the background) were taking the risk, while individuals (executives and traders) were reaping the rewards was outrageous. *There should be a clear principle – beyond a certain point, the people who earn a lot of money in risky activities should be held responsible in the long-term and for all of their assets.* That used to be the rule in the past for partners working in Wall Street firms.

Beyond individuals, the fundamental issue is profit. Beyond remuneration, is the level of profit collectively justified? In other words, are the markets working satisfactorily or not? If we compare profits from the financial sector with that of companies in other industries, we see some strange distortions. They were proportionate between 1929 and 1987. Then, the financial sector exploded until the collapse of 2007-2008, and partly corrected itself after. Data about remuneration of finance people for the same period show a parallel overcompensation in finance, as compared to other industries.

It would not make sense to justify this by some spectacular growth of productivity in the financial sector. There is a direct link with deregulation, however. This analysis is supported by the fact that we can see the same disconnect in the years before 1929, when there was an artificial creation of apparent wealth that did not represent real added value. It could be called a predatory situation, which calls for stricter regulation. So, a key issue is to determine if that kind of practice is going to come up against hurdles in the future, and especially if those involved could be held accountable. Some measures have been taken (3-year bonuses, partial compensation in shares, and some lawsuits filed after the crisis esp. in the US). Things are heading in the right direction but have not gone far enough. The issue of executive compensation and especially accountability has not been properly addressed. Some steps have been taken, but they have not yielded great results yet. To hold executive accountable, there needs to be practical solutions and more systematic measurement mechanisms.

### ► Corporate structure

A lot of thought has been put into the role of companies, with many proposals and few accomplishments. I will focus on traditional commercial corporations with shareholders, then I will discuss socially responsible investment.

It seems ethically reasonable to consider two ideas. On the one hand, a company is the property of its shareholders, who are responsible for it. On the other hand, a company is not a thing or an object with which shareholders can do whatever they want. Agency theory (a company exists only for the financial benefit of shareholders) is not acceptable in this respect. Therefore, it is important that shareholders understand their responsibility towards the company. In a commercial firm at the beginning, a person or group of people get together and pool assets (equity) and later effort (entrepreneurship) in a new legal entity with a moral personality and agree to be responsible for the risks they take. Thus, it is fair and reasonable for them to be the owners, and they own the fruits of their action. Nothing (except maybe the law) prevents them from organising their property differently if they supply equity (or buy out someone else's share), and the future of their investment is linked to the company's results – otherwise it would be a loan. So, owners are compensated if there are positive results (profits) and could disappear if the company's net assets fall into the red. Furthermore, the model of a commercial company with a high equity level is much less risky for the company and more virtuous than one with debt, and it connects the shareholders to its future. All the other stakeholders have only claims on the company, including its employees, and if it goes bust, these claims remain. So, it is not surprising that the person who should bear most of the risks of the company is the person who makes most of the decisions and is accountable for the profits and losses as owner. Ergo, the model of a commercial company (with shares) is legitimate, even if it is not the only model.

But that does not exonerate it from ethical considerations. Acknowledging the shareholder status of a commercial business does not mean that one can *ipso facto* ignore the fact that the said shareholders (even if they are the sole owner) have created a separate moral person. By law, the proprietor does not have the right to grasp the company's assets directly. The proprietor must make sure that the company's objective does not get mixed with their own interests. Ethically speaking, it means recognising the human connection and the commitments that go with it.

It is particularly important to define the new business' *social objective* – which goes beyond shareholders' pecuniary interests – because managing any asset should take a wider view than just money. Any company should have a founding charter, included in its bylaws, and explaining as much as possible its role in society ('raison d'être') and its duties as it identifies them. Any shareholder when they buy a share would know that this is the internal rule of the company, which they have to accept – except if the bylaws change. One must also question how to get that founding charter respected – this is where Colin Mayer's analysis<sup>3</sup> makes sense. In particular he proposes to establish a committee of trustees in charge of that role; this idea is particularly interesting.

In a remarkable book<sup>4</sup>, Harry Korine and Pierre-Yves Gomez present the wide array of possible relationships between and amongst shareholders and business leaders. For owners and executives, it is not just a simple rational choice in maximising resources. Opinions can diverge significantly between shareholders, whether they be family members, stable and big shareholders, pension funds, traders, or activists. The authors also point out the risks of having scattered shareholders. They stress the importance of appropriate mechanisms and note that the effect of these measures will vary depending on the participants. They also underscore the naivety of the type of proposals that are the rage in governance and Boards of Administration these days, which ignore serious potential conflicts of interest. In many cases, such as Enron, they had a proper governance, with disastrous effects. That is why, as Colin Mayer<sup>5</sup> reminds us, regulations are not enough. Instead of correcting behaviour, they incite to find ways of working around them. Compliance is often in fact avoidance.

Taking action means first strengthening long-term ties between businesses and shareholders. There are potentially three main courses of action, which may be combined. The first is to favour long-term investment. It is indeed difficult to overtly compel investors (especially people in finance) to less liquidity by enticing them to hold shares for a certain amount of time. There are several ways to incite them to

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3. Colin Mayer, *Firm Commitment (Why the corporation is failing us and how to restore trust in it)*, 2013, Oxford University Press.

4. Harry Korine, Pierre-Yves Gomez, *Strong Managers, Strong Owners (Corporate Governance and Strategy)*, Cambridge University Press Delhi 2014.

5. Colin Mayer, *Firm Commitment*, op. cit. p. 60.

do so, or to draw consequences from the different degrees of commitment towards other people's investment. For example, to award voting different rights based on the duration of commitment, either after the fact, or with an advance agreement. The US has several voting rights measures for different categories of investor. Colin Mayer suggests that an investor who commits to 5 years should have 5 times more rights than a 1-year investor, and an investor who makes no time commitment should get none. The second way consists of structuring shareholders so as to encourage a stable core group (e.g. the founding family, founders in general, or shareholders who have signed an agreement; it can be through accrued voting rights or veto rights). A third one would be to discourage overtly hostile takeovers if they question the company's line or chart (if it is sound). This can also be done with external measures, such as: government intervention, pressure from the company environment (esp. in Germany) and/or financial mechanisms (e.g. US "poison pills")<sup>6</sup>. These measures can vary from company to company, and are not only ethically sound, but often necessary.

Which leaves the question of the uninvolved shareholder of a publicly traded company, who can sell out at any time. Is it justified? But in order to do that, they have to find a buyer who is willing to buy their shares. In other words, when a share is sold, the investor risk remains as well as the corresponding rights, but it is borne by someone else. As we pointed out, the fact is that it can lead to abuses such as concentrating too much on the short-term and financialisation, among others. There are two ways to get around this: 1) as we mentioned, reducing voting rights; and 2) developing SRI (which we will now elaborate).

### ► Socially responsible investment

If we seek a more human finance, a second fundamental issue is investor priorities. This calls for projects and businesses that are more respectful of the human dimension. Any market – including the financial market – is based on supply and demand. Consequently, the priorities of buyers and sellers is a major factor. If managers, including pensions funds that deal with 40-year investments are benchmarked on quarterly results, you cannot expect long-term thinking. Likewise, if they are only judged on their monetary results (stock market trends), it is unreasonable to expect ethical and human considerations to be a priority.

This is a vast topic. Progress has been made and there is more awareness, at least as regards the 3 official ESG criteria: environment, social, and governance. We can see this with the environment and some social causes like child work, and governance. SRI funds are in the minority, but the impact of these issues goes beyond their relative weight. The rest of the market cannot remain indifferent. In a way, the backlash from a bad image is worse than in 2008, so it is reasonable to think that the movement will

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6. In case of takeover new shares are automatically issued in favour of existing shareholders.



continue to gain traction. Some questions remain, like verification and measurement. Information is not always available (despite reglementary requests), and the data are hard to evaluate in a way similar to classical financial analysis. As we have seen, true ethics should be wider in scope than just ESG and include the company's relationship with their clients and suppliers and the nature of their products. Recently, there has been an increase in awareness, and we hope it will continue to gain in scope and influence.

One of the other issues that should be taken into account when considering ethics in finance is fair pricing. What I mean by this is making sure that stakeholders (whether they be in the market, financial market, or involved in the exchange of goods and services) are fairly compensated (and according to the principles of ethical trade). One cannot help but question how retail prices are calculated, and the ethical and economic justifications when one breaks down the final price of a product for sale in western stores or outlets and see the actual producer's wage; which is often an small percentage of that final price. The quest for justice should oblige financial people to reflect on this, because they have to qualify the final price. Does the remuneration fairly account for the work of the person who actually made the product? This is the basis for the principle of fair trade.

### ► Debt and equity

Another area in which there is little awareness of community responsibility and a general disdain for the future is our addiction to debt. There is a steady increase in public debt (compared to GNP, for example) and (tax) legislation that favours company debt to the detriment of equity. Ethically, all other things being equal, stock is preferable to debt because it is a long-term investment (if someone sells, another person buys), connected to the firm (since such an investor bears some of the firm's risk), and send strong signals to the management. Shareholding is (or should be) a good means to get businesses to pay greater attention to people's well-being. Pension funds are the most natural buyers of stocks (because of their long duration); but some countries do not have many of them, and we do not see much development in their direction (although they are much needed). Not only progress is not being made in this field, but some new regulations and practices since the recession have even had a negative effect. To wit: MIFID in Europe penalises so-called high-risk investments, including stocks, and there has been a decrease in the number of traded companies.

Debt is the other major method of financing. It can be risky for the debtor and the economy in general when there is too much of it. This is called leverage. All major financial crashes were in fact debt crises. Debt is undeniably useful to finance that part of an investment which is safe enough for the repayment to be practically certain; but its role should be limited. It is based on a legal obligation to repay, which should be respected; but when the borrower (business, individual, or nation) is strangled by debt, it should be restructured and reduced to a reasonable level.

If we put aside short-term market trading “investors”, those who invest in stock look more to the future than others, because their investment’s profitability is only certain in the long-term. Furthermore, businesses tend to think more in the long-term than governments. They are the ones that build the future and create lasting wealth. Only a strong shareholder base gives them the means to achieve that. That is the reason why shareholders have their place in the running of a business, even if other stakeholders should also have their say. From that perspective, it is the most moral investment, as long as shareholders exercise their rights in the right way.

### ► Technology, globalisation, and ethics

New ethical questions are coming to light, like those related to new technologies, such as the internet, AI, and transhumanism. We have yet to measure their impact. Obviously, these issues go well beyond the realm of finance, but it is concerned in two ways: 1) because of its role as a hub for investments; and 2) due to its specific role in their development. Take the example of big data. The major goal is to get consumer information. Finance – specifically banks – is well-placed to both develop and use this data. And it is a major issue for human beings.

Finally, another factor will continue to give a new dimension to ethical considerations: globalisation. There is first the issue of the diverse ways ethics is understood, from country to country. For example, the rise to power of countries like China – whose traditional culture and political system put it in a framework of quite different ethical priorities and practices, compared to western countries. Beyond that, there is the growing issue of the connection between economic activity (including financial) and the diverse communities of people. Much evidence points to the fact that our world is growing increasingly more complex than what scholars believed in the ‘90s to be a simplification of the world stage, leading to “the end of history”. In fact, along with accelerated globalisation, we are witnessing a trend of re-territorialisation. Subsequently, the idea of a homogeneous world where capital flows free from constraint or accountability is faced with quite different local societal trends. Local communities will make demands to major players and decision-makers with regards to financial activity. This implies a double ethical dimension: how should the new demands be handled? How does one deal with questionable demands? This is not just a product of developing countries, as the US has shown, and this evolution is not limited to Donald Trump.

In conclusion, for the future of work the next 12 years will be critical and undoubtedly extraordinarily complex from ethical, human, and other perspectives. They will be decisive for the future of work; but it confirms the important role that people in finance will play as they will have to make work a central focus in their considerations. ■



# CONTRIBUTIONS TO THE CREATION OF WORK CULTURE 4.0

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by ACDE (UNIAPAC Uruguay)

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## EXECUTIVE SUMMARY

The current document provides a summary of ACDE's reflections on the creation of a fairer and more humane work culture suitable for the fourth industrial revolution.

The main objective of this reflection was to identify the key elements to be included in such a culture and how to facilitate them.

It begins with basic ideas on culture and work, and then highlights some tendencies of work culture in Uruguay.

The core of this reflection revolves around the values that should be promoted, the role of the business leader and the company in the creation of work culture, and the objectives and ethical principles that they should be built upon.

## ► Introduction

Reflecting and acting on issues related to work culture is one of ACDE's main concerns and gave rise to a public conference by the Minister of Labour and Social Security, Ernesto Murro, and Cardinal Daniel Sturla<sup>1</sup>. The results of this meeting were further analyzed by the different commissions and work groups of the association.

The following is a summary of those deliberations.

### 1. Key concepts

- **Work** is a human right, a constitutive aspect of the meaning of life, and a requirement for personal development and fulfillment, which leads to the creative transformation of the individual and their environment while procuring a livelihood for themselves and others. At the same time, it is a duty and a responsibility, since it helps to maintain and foster common wellbeing. The greatness of work lies within this concept, which is known as its "subjective dimension."
- **What is work culture?** "Work culture<sup>2</sup>" refers to the set of distinctive, spiritual and material, intellectual and emotional features. It encompasses the traditions, values and beliefs of a society or social group in relation to work.

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1. Conference organized by ACDE, October 29, 2015.

2. We refer to UNESCO's definition of culture.

## **Groups and organizations are agents of socialization and promote “work culture”.**

Individuals socialize and acquire attitudes, knowledge, values and beliefs in social organizations and groups. It is within the family setting that individuals learn the first models and values of work through examples from life and by helping with household chores. These notions are later and simultaneously affected by the educational system through attendance, schedule and study requirements. At the same time, behavioral models and patterns are disseminated through the media; while work habits are then shaped by the different types of work and companies. The role of the various agents in this socialization process is not linear; they interact with each other throughout a person's life.

The state, through its many institutions, organizations, companies, policies and laws, and its direct and indirect influence over every single one of these agents, affects all of these aspects.

The educational system, the state and the media are agents that disseminate culture. While families, organizations, companies, etc. are the settings where work culture is practiced, lived in and shaped in all its aspects.

## **2. What is the goal of this reflection?**

We all think that, one way or another, it is possible to have a positive impact, “to make a difference”, through conscientious work. However, how well is this feeling represented in our daily work? Is it really a conviction? What elements characterize the work culture of Uruguayans today? What components should they include? How do we facilitate them?

Although it is not the only factor, our work culture has contributed to the development of a fragmented society. It is through work that people socialize, and it is through this reality that business executives, workers, governments and other stakeholders have to advance towards a more developed, just and caring society in both the public and private sectors. To meet this goal, we must work together while making our best contribution to the establishment of good relationships based on dialogue.

One of ACDE's guidelines is to create a work culture, in line with Uruguay's comprehensive and inclusive development, aimed at:

- Contributing to reduce and eliminate inequalities and gaps related to work, education, geographical location, age, gender, and groups.
- Promoting constant learning and creativity in public and private organizations.
- Fostering communication, respect of other people's work and study, regardless of their position.
- Creating work environments and structures that promote humanizing relations through companionship and solidarity.

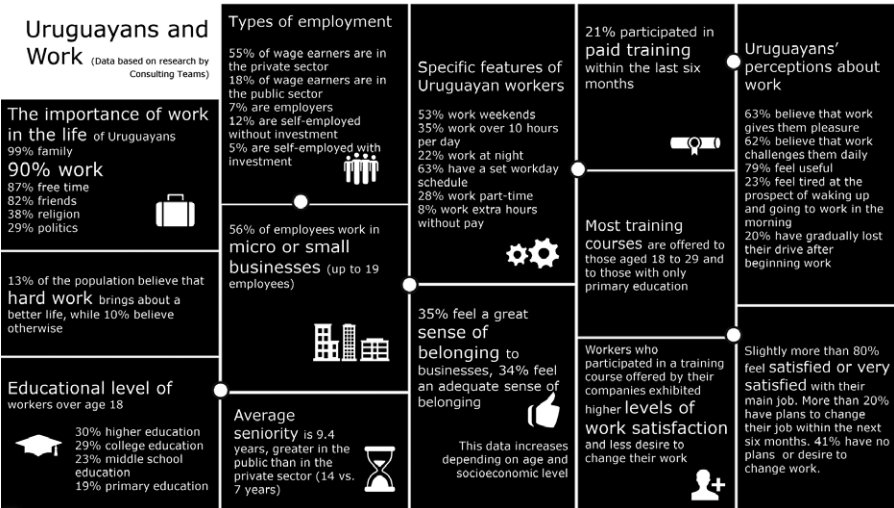
- contributing to the creation of a more developed, productive, innovative, and cohesive country; with social justice, fair rent, better wealth redistribution and quality of life.
- improving the structure of opportunities and accessibility to the labor market, under decent work conditions as per the International Labour Organization (ILO), with rights and responsibilities.

As a society, we were able to create a country and work culture. It is up to governments, workers and business executives to continue contributing to this collective foundation while identifying the common goals required to achieve the type of work culture we envision.

## I ► Work culture trends in Uruguay

During a presentation about Uruguayans and Work at a 2016 conference organized by the ACDE, consulting teams highlighted that workers cannot be defined as a homogenous group. Therefore, they concluded that rather than having ONE work culture, each institution, organization and group has its own culture. “This poses significant challenges to the bodies responsible for designing and managing public (social and labor) policies, to the organizations coming up with human resources management policies, and to the groups of workers.”

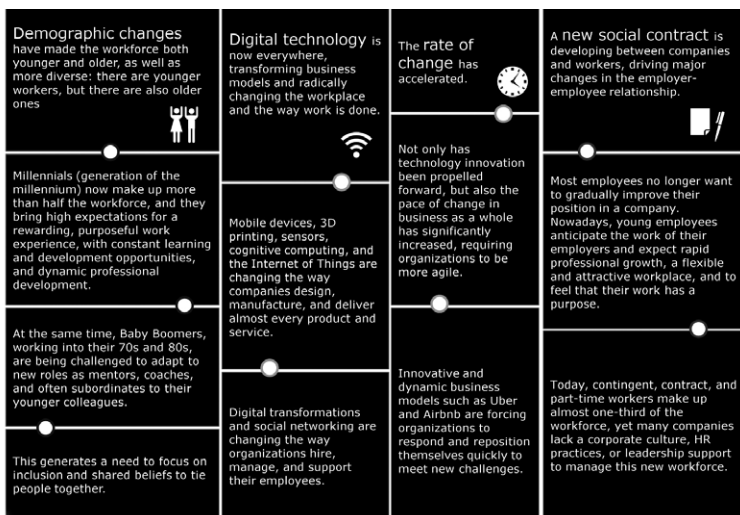
Some of the data discussed in the conference is presented below.



On the other hand, what are the global trends in terms of labor? To answer this question we refer to a report by Deloitte that we summarized as follows:

## Global labour trends that impact work culture

(Global Human Capital Trends, Deloitte, 2016)



## 1. Culture 4.0 for production 4.0

We are currently taking part in a technological revolution that is transforming all relationships of the individual with themselves and their environment. This extends to the world of labor (the diversity and ubiquity of communication allows for telework; the assignments, tasks and jobs are being replaced by robots and software; artificial intelligence, etc.). Likewise, this revolution requires different skills, competencies, attitudes, habits, new contractual agreements and legal frameworks, etc., so that business leaders and workers are able to become part of this ever changing world. The fourth industrial revolution generates and demands a different type of work culture, one that provides the title to the current document.

## II ► Values for the creation of Work culture

In order to move forward together to create a work culture that meets the objectives mentioned in our introduction, the various stakeholders must first reach an agreement in terms of the goals and values to be fostered.

First, it is essential to uphold the rights and responsibilities of the members of the labor community that are established in diverse regulatory frameworks and to help develop these.

In addition, we recommend that all stakeholders and socialization agents design a work culture that includes the following values:

### 1. Sense of accomplishment

The work culture that should be promoted must consider a person in their entirety, as an end and not as a means. We are not machines; we are people who work, dream, and

have feelings and histories and plans. We belong to a family and to a social, cultural and economic environment; and we need to feel a sense of accomplishment in all our aspects. Our work, our freedom to choose it, and the way we perform it all play important roles in achieving this potential. When work is carried out under decent conditions that contribute to our overall development, and is in line with the meaning of our lives, it dignifies us and helps us feel a sense of accomplishment. Therefore, we must create the proper conditions so that people feel valued and recognized in their entirety, and can choose their work according to their vocation. This challenge involves the creation of tools on the part of schools, companies and organizations to favor such decisions.

## 2. Justice

Justice is built upon the concept of the universal right to use the goods of the earth, which in turn is based on the principle of the universal destination of goods. Each person must have access to the level of well-being necessary for their full development. The right to the common use of goods is the first principle of the entire ethical and social order, and the characteristic principle of Christian social doctrine.<sup>3</sup>

This principle is an invitation to develop an economic vision inspired by moral values that help remind people of the origin or purpose of these goods, so as to bring about a world of fairness and solidarity, in which the creation of wealth can take on a positive function.<sup>4</sup>

The universal destination of goods requires a common effort to obtain the necessary conditions to achieve the comprehensive development for every person and for all peoples. In this way, everyone can contribute to making a more humane world, “in which each individual can give and receive, and in which the progress of some will no longer be an obstacle to the development of others, nor a pretext for their enslavement.”<sup>5</sup>

Business leaders exercise their creativity to organize the talents and energies of labor and to assemble capital and other resources from the earth’s abundance to produce goods and services. When this is done effectively, well-paying jobs are created, profit is generated, the resulting wealth is shared with investors, and everyone involved excels. Yet creating wealth is not restricted to financial profit alone, but instead is closely linked to the broader notion of wellbeing: the physical, mental, psychological, moral and spiritual well-being of others.<sup>6</sup>

As creators of wealth and prosperity, businesses and their leaders must find ways to make a just distribution of this wealth. In terms of employees, this should be carried out following the principle of the right to a just wage; in terms of customers and

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3. *Compendio de la Doctrina Social de la Iglesia* [Compendium of the Social Doctrine of the Church], numeral 172.

4. *Compendio de la Doctrina Social de la Iglesia* [Compendium of the Social Doctrine of the Church], numeral 174.

5. *Compendio de la Doctrina Social de la Iglesia* [Compendium of the Social Doctrine of the Church], numeral 175.

6. *La Vocación del Líder Empresarial* [Vocation of the Business Leaders], numeral 51.



suppliers, by fixing and paying fair prices; in terms of owners, by providing just returns; and finally in terms of the community by paying fair tax amounts.<sup>7</sup>

Justice can be defined by three principles: giving each person what they are entitled to, favoring the weakest, and providing access to equal opportunities.

### 3. Solidarity

Solidarity requires an understanding of the needs of others, putting ourselves in other people's shoes, and translating this into concrete actions that help them develop and meet their needs.

Solidarity is often understood as a horizontal process, among peers, or as circumstantial support to a cause. Here, however, we refer to solidarity as the support one provides to a person in need of help, without expecting anything in return. As such, solidarity is not exclusive to workers or business leaders, but rather refers to the universal solidarity of the human race. According to this understanding of work culture, solidarity involves all the actors within the work environment (employees, employers, government bodies, etc.) and extends far beyond a group of associates or merely a group who think alike.

Such solidarity cannot exist without justice. Similarly, justice cannot be limited to meeting legal responsibilities since, as discussed in the previous section, there is no justice without favoring those who are most in need. Likewise, there is no solidarity without justice.

There are many people who are willing to carry out charity... but are unable to do the one thing they have to do; that is to pay their workers a good salary that is sufficient to live like people... Although it might seem paradoxical, it is easier to be benevolent than fair. However, benevolence without justice will not bridge the gap between boss and worker<sup>8</sup>.

Solidarity should not be understood as doing for workers what they must do for themselves, or to give as a favor what the other must receive as a right<sup>9</sup>. On the contrary, solidarity begins by truly considering the individual worker while fulfilling obligations (not only legal, but also the human obligation of prioritizing the creation of opportunities for those who are most in need). This can be accomplished by employing empathy to understand the individual worker's specific situation, by being flexible in terms of mutual obligations to go a step further (without expecting anything in return) and by providing the most appropriate support to meet the person's needs. These needs can often simply be a sympathetic ear, more opportunities, or emotional or financial support. These actions must always foster human development and encourage each person to do the best they can for their own growth and that of their family, environment and community.

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7. *La Vocación del Líder Empresarial* [Vocation of the Business Leaders], numeral 55.

8. *La práctica de la justicia. "Humanismo Social."* [The Practice of Justice. "Social Humanism"] San Alberto Hurtado Cruchaga s.j., Fundación Padre Hurtado, 4ª edición junio 2004.

9. *Ibidem*.

## **4. Integrity**

Being morally impeccable in all aspects of life is an ideal we must all follow without concessions. Nowadays, the business and labor world needs examples and lifelong commitments with the principles and values that match our human dignity and that can be seen in detail in our daily lives. Honesty and moral rectitude must guide our actions and decisions. This will often bring about a dilemma in deciding between the damages a decision might cause and what we believe to be true. Judgment can only be guided by honesty, human dignity and the common good.

## **5. Doing the best one can**

We are living in a society that continuously seduces us with comfort, with the notion of the “all inclusive” and valuing “the good life,” often synonymous with effortless wellbeing. These traits, characteristic of a consumerist culture, push us away from a work culture based on doing the best one can in order to accomplish significant results. They can even lead to the irresponsibility of not working and looking for other means of economic sustenance and personal realization that run contrary to individual rights and the common good. On the other hand, work that is carried out doing the best one can do provides us with the satisfaction of good results achieved with our own effort. When the result is not the one we expect, it provides us with the peace of mind of having done all that was possible to achieve the best result.

## **6. Quality**

For entrepreneurs, continuous improvement to achieve quality is an ethical duty that the company must carry out in order to be sustainable, to contribute to the common good, and to promote the development of its members.

Quality as a permanent goal requires keeping improvisation, complacency, and egocentrism at bay. It demands that we seek out further training, learn from other people’s knowledge and experiences, and forget about the old ways of doing “just enough”. It requires us to be more open, more sensitive, and more curious and proactive regarding ways to accomplish better results in our work.

## **7. Responsibility**

In order to promote our vision of work culture all members of the company have the responsibility to work and claim responsibility over their work, both for their successes and failures.

There are many obligations that form part of the responsibility of business leaders and that contribute to the work culture we want to create. These include: timely payment; compliance with tax obligations; the provision of safe working conditions and appropriate tools, information, training and recognition; dialogue and lending a

sympathetic ear; openness to member participation; the timely provision of information about the company's state of affairs; environmental protection; social sensitivity and establishing productive relationships within the work environment; not discriminating for any reason; and respecting the rights of workers, including their right to create unions.

On the other hand, some obligations that are part of the responsibilities of the workers include being punctual, meeting work safety and health standards, showcasing personal improvement and honesty, taking part in training, cooperating, being productive and proactive, not discriminating, and respecting everyone's freedom of expression and right to work.

## **8. Creativity and innovation**

One of the elements that characterize us as people is our creative capacity, our ability to find inspiration in the changing environment, in the growing demands of clients and competition, and in the skills of those who perform better than us. We have the ability to learn from different sources and challenge ourselves to do better each passing day, using our will, and our openness to learning and feedback.

This creative capacity also allows us to be entrepreneurial. For example, many workers and families develop companies with their own means of production and creativity.

Companies and labor relations must include incentives and recognitions to reward innovative ideas put at the service of generating shared value.

## **9. The genuine entrepreneur**

An entrepreneur is a worker who risks capital, and time and energy in a company, with the main objective of creating and leading the organization. The entrepreneur's social responsibility and importance are due to the key role they play. That is to say, other jobs, along with the company's products or services, the value it brings to society, its intellectual property, legacy and reliability all depend on the entrepreneur. Similar to fair wages for work, an entrepreneur deserves just returns.

For society to have the jobs, products and services it requires, there must be a sufficient number of entrepreneurs who are capable, hardworking, creative, innovative, and responsible, who possess the values described above.

Therefore, all social agents should foster and support the entrepreneur's vocation, training and activity. The work culture we propose has to be consistent with this notion, so we can have a society with sustainable development.

However, the entrepreneur cannot be solely responsible for creating the company's worth in terms of jobs, goods, services and community value. This will only be achieved if entrepreneurs and employees join forces. To the degree that this relationship is understood as one of co-creators, they will achieve better results for all participants in the work environment.

### III ► Creation of a work culture in the company

#### 1. The company as a community

As entrepreneurs, we understand that the goal of the company “is not simply to produce goods, but to exist as a community of men who attempt to satisfy their basic needs in different ways and represent a specific group at the service of the society as a whole”.<sup>10</sup> While the phrase “community of men” is not commonly used today to speak about economics, it is the best way to express what might be meant by a company and corporation. The etymologies of the words “company” and “companion” (Latin *cum* and *panis*) literally mean “sharing bread”. The etymology of the word “corporation”, from the Latin “*corpus*”, literally means a group of people “united in one body”.

If we want to create a culture of good work, we have to begin by humanizing work, and by fostering integration, knowledge and assembly among company participants. At the same time we must support their personal interests and create environments where each boss, coordinator, middle manager or director speaks with their colleagues, not only about work but also about family and personal challenges, and shares their joys and listens to their concerns. This requires training all personnel levels to listen to, support and develop the staff. An organization open to listening and dialogue is built upon the accessibility examples set daily by its entrepreneurs and leaders. In this way, they contribute to a work culture based on dialogue, which builds teams and communities, and fosters the development of each person according to their idiosyncrasies.

Specifically Christian business leaders are called upon to bring our spirituality to work within the noise, the people and the complex work environments; overcoming the danger of a divided life, while following the guidance of God in a complex and stressful world where difficult decisions are made. It is from this position that we can ask ourselves “What would Christ do if he were here in my place?” At this level, in addition to speaking about rights and responsibilities, we speak about charity and forgiveness.

If we ask ourselves, both at a personal level and within our work community, how we are able to achieve a culture of good work in these and other areas, we will probably find many positive actions that we could encourage and improve.

#### 2. Culture in the company<sup>11</sup>

Business culture has become one of the most important business topics of 2016. CEOs and HR leaders now recognize that culture drives people’s behavior, innovation and customer service: 82% of survey respondents believe that culture is a competitive advantage.

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10. San Juan Pablo II, *Centesimus Annus* 35.

11. Taken from “*Tendencias Globales de Capital Humano 2016: la nueva organización, un diseño diferente*” [Global Human Capital Trends 2016. The new organization: Different by design], Deloitte University Press.

Culture can determine the success or failure of a business during times of change: mergers, acquisitions, growth, and product cycles can either succeed or fail depending on the degree that culture is aligned with the business' objectives and strategies. Just as the entrepreneur and general manager are ultimately responsible for business strategy, they are ultimately responsible for business culture as well. In addition, there is the responsibility of union leaders, who can facilitate or impede the cultural changes needed by the company and its members.

In order to foster a change in culture, everybody needs to be involved: business leaders and workers, unions and chambers, governments and education organizations, all uniting their efforts in favor of common goals.

In short, leaders must understand that their beliefs and actions are the primary drivers of the organization's culture. In the "new organization", leaders must drive cultural change and reinforce the necessary behaviors. But before any cultural transformation can take hold, we must identify the practices that need to change and then use all the tools available today to evaluate and align business culture with business goals.

### **3. Three great objectives and 6 principles for work culture in the company<sup>12</sup>**

Respect for human dignity and the common good are foundational principles that should inform the way we organize the labor and capital employed and our innovation processes. The main purpose of individual businesses and commercial systems is to address the relevant needs of everyone who is linked to or served by a business. In particular, the work culture we want to create has three main great objectives, each of which is supported by the basic principles briefly summarized below:

- Addressing genuine human needs through the creation, development and production of goods and services;
- Organizing good and productive work;
- Using resources to create and to share wealth and prosperity in sustainable ways.

#### **1. MEETING THE NEEDS OF THE WORLD THROUGH GOODS AND SERVICES**

Business is inherently other-centered: a business joins together people's gifts, talents, energies and skills to serve the needs of others. This in turn supports the development of the people who do the work.

##### **► Principles**

- I. Businesses contribute to the common good by producing goods that are truly good.
- II. Businesses should support people in need, who would otherwise be marginalized and underserved.

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12. "La Vocación del Líder Empresarial", documento del Pontificio Consejo "Justicia y Paz", 2012 [Vocation of the Business Leaders, Pontifical Council for Justice and Peace 2012].

## 2. ORGANIZING GOOD AND PRODUCTIVE WORK

The grandeur of human work not only leads to improved products and services, but also develops the workers themselves. *“Work is for ‘the person’ and not the other way around.”* Employees are not mere “human resources” or “human capital.” Consequently, work must be designed for the capacities and qualities of human beings, and we must not simply require that people adapt to their work as if they were machines. Leaders need to have the ability and responsibility to select and develop the right person for the right job. That is, the job which is most appropriate according to their skills and competencies, and that at the same time allows for personal growth.

Good work must be sufficiently well-organized and managed to be productive; thus, guaranteeing the sustainability of the company and job positions with adequate pay for the workers. Moreover, reward structures should make sure that those workers who do engage in their labor in a sincere way also receive the necessary esteem and compensation from their companies.

The more participatory the workplace, the more likely each worker will be to develop their gifts and talents. Employees should have a voice in their work, especially in the day-to-day work. This fosters initiative, innovation, creativity and a sense of shared responsibility.

While some companies communicate their strategy and objectives to their workers, there is always more that can be done when the workers’ expectations or interests are not incorporated into a company on a medium and long-term basis. This can be accomplished by improving communication and making the workers full participants, based on trust, honesty and a genuine interest in the workers.

The principle of subsidiarity (allowing each person and group to accomplish what they can with their own efforts and abilities, in contrary to centralism, bureaucratization, and unjustified control) offers business leaders great insights. Specifically, this principle engages business leaders in three related responsibilities:

- To define the scope of autonomy and decision making at every level in the company as widely as possible;
- To provide employees the needed tools and training and to ensure that they have the knowledge and skills to carry out their tasks. Selection and continuous assessment processes play an important role in reaching the goal of striving for excellence, doing the best one can, which leads to gaining the most from what I do. Assessments can also provide valuable insight to adjust training programs to develop people’s technical and labor skills, as well as the so-called “soft skills” (social abilities linked to emotional skills). In growth cycles, the entrepreneur must show diligence in ensuring that all members of the company, thanks to the later, can acquire and perfect their general and specific competencies, verifiable in terms of personal development

and increasing competitiveness within the organization and also in the labor and professional market. In times of crisis, responsibility ethics require employing the largest number of people possible.

- To establish a work culture of trust so that those to whom tasks and responsibilities have been given will make their decisions with genuine freedom. The company informed by subsidiarity nurtures mutual respect and shared responsibility among all personnel. It allows employees to clearly appreciate the link between good results and their sincere engagement.

#### ► Principles

- III. Businesses make a contribution to the community by fostering the special dignity of human work.
- IV. Businesses that embrace subsidiarity provide opportunities for employees to exercise their gifts, as they contribute to the mission of the organization.

### 3. CREATING SUSTAINABLE WEALTH AND DISTRIBUTING IT JUSTLY

Profit is an indicator that a business is functioning well. When a firm makes a profit, it generally means that the factors of production have been properly employed and corresponding human needs have been duly satisfied. A profitable business, by creating wealth and promoting prosperity, helps individuals excel and realize the common good of a society. Yet creating wealth is not restricted to financial profit alone. The very etymology of the word “wealth” reveals the broader notion of “well-being”: the physical, mental, psychological, moral and spiritual well-being of others. The economic value of wealth is inextricably linked to this wider notion of well-being.

#### ► Principles

- V. Proper management of resources contributes to sustainability.
- VI. Businesses are just in the allocation of benefits to all stakeholders: owners, employees, customers, investors, suppliers, and the community. ▀

# EMERGING TECHNOLOGIES IN HIGHER EDUCATION AND THE WORKPLACE : AN ASSESSMENT

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by Dr. Corinne Mellul

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## ► Introduction

In March 1964, a group of prominent American thinkers calling itself the “Ad Hoc Committee on the Triple Revolution” sent a report to then president Lyndon B. Johnson in which they warned that the transformations brought about by “cybernation,” or, as they put it, “the combination of the computer and the automated self-regulating machine” would result in “a system of almost unlimited productive capacity, which requires progressively less human labor.”

The report thus identified automation as the potential gateway to a dramatic revolution. The other two revolutions referred to in the name of the committee were, respectively, nuclear weapons and the civil rights movement. The accompanying letter expressed the authors’ concern that Americans and their leaders were “unaware of the magnitude and acceleration of the changes going on around them,” and that, if the recommendations in the report were not adopted, the nation would be “thrown into unprecedented economic and social disorder” (*see A1, Cover letter to the Triple Revolution Report*).

Among the policies recommended to the U.S. government for tackling the wave of automation in the labor market that the authors foresaw was the implementation, over time, of a guaranteed income for all Americans, employed or not.<sup>1</sup>

Earlier still, in 1949, Norbert Wiener, an MIT mathematician, wrote an essay (which for mundane reasons never made it to publication) for the New York Times on the subject of “what the ultimate machine age is likely to be.” In it, he explained that “roughly speaking, if we can do anything in a clear and intelligible way, we can do it by machine.” He also stated that the machines that were then “on the verge of being built” would “control entire industrial processes” and “even make possible the factory substantially without employees.” “*These new machines,*” he claimed, “*have a great capacity for upsetting the present basis of industry, and of reducing the economic value of the routine factory employee to a point at which he is not worth hiring at any price.*”<sup>2</sup>

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1. John D. Pomfret, “Guaranteed Income Asked for All, Employed or Not,” *The New York Times*, March 22, 1964.

2. John Markoff, “In 1949, He Imagined an Age of Robots,” *The New York Times*, May 20, 2013.



Several decades followed, in which it was easy to dismiss such warnings and view their authors as doomsayers who had turned out to be flatly wrong. Through the 1950s and 1960s, most of the West went on to experience unparalleled economic prosperity, with unemployment rates that governments in many countries across the world, including in Europe, can only dream of today. In addition, history had indeed witnessed other periods of transition from one production mode to another, which had also had their critics and Cassandras, and humankind had by and large adjusted. To limit the query to the not-too-distant past, it is worth remembering that the technological advances of the Industrial Revolution in the 19<sup>th</sup> century were still barely imaginable at its dawn, in 1815.<sup>3</sup>

However, though it would presumably not occur to many observers of history today to lament the advent of the Industrial Revolution, it is also worth pondering on the fact that the technological innovations that era brought about which directly affected manufacturing – the core of the Industrial Revolution, in particular the textile industry that, even prior to that time, had been a large employment pool in England and other European countries – substituted machines for human labor through countless manual tasks and jobs within just a few decades. The result in labor terms was a massive loss of jobs not only in Europe (with the Luddites in Britain starting to destroy machinery as early as in 1811 and eventually leading, among other factors, to the emergence of labor unions) but, more tragically, also in India and later China, which had been England's traditional centers of textile manufacturing and where millions were left unemployed, with many actually starving to death.<sup>4</sup>

Thus the transition into the industrial age was, by all accounts, not a smooth one, including in economic terms. Though many additional jobs were eventually created by the Industrial Revolution and the new era brought about not only unprecedented productivity but also, over decades, a remarkable improvement in living standards in the West, real wages stagnated for almost half a century in 19<sup>th</sup> century England.<sup>5</sup> It also took roughly a century and a half from the start of the Industrial Revolution to see the modern welfare state and the vast improvements it brought in the social conditions of employed and unemployed people take hold. Nor did the entrenchment of the welfare state in the West after the Second World War mean the consolidation of relative prosperity for workers. As Norbert Wiener and the authors of the Triple Revolution report had foreseen, automation and robotization did begin to spread in industry from the 1970s (albeit not with the dire consequences on labor they had envisaged), once again boosting productivity to unprecedented levels, while over the same period, in the United States in particular, real wages stagnated again, reaching a

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3. Richard J. Evans, *The Pursuit of Power: Europe 1818-1914*, Preface (U.K.: Penguin Books, 2016).

4. Sven Beckert, *Empire of Cotton: A Global History* (U.S.: Vintage Books, 2014).

5. "Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation," McKinsey Global Institute, December 2017, p. 33.

peak in 1973 and never quite returning to the same level after the sharp drop caused by the oil crisis. Measured in 2013 dollars, average wages for production and nonsupervisory workers were in fact 13 percent lower in 2013 than in 1973 (*see A2, Productivity growth vs. compensation growth in the U.S., 1947-2009*).<sup>6</sup>

The backdrop to the wave of automation and robotization that affected industrial labor during that period was of course the emergence of globalization. Economists are still debating whether Western economies lost more jobs to the former or the latter during those decades, though the emerging consensus today seems to be that automation was the main culprit.<sup>7</sup>

The question, therefore, may well be whether lessons can be learned from history to assess the potential impact of the latest wave of automation, which now involves not only robotization but the exponential expansion of artificial intelligence (AI), on the labor markets of the future.

Current assessments of what proportion of existing jobs may be lost in the coming years to robotization and AI (technologies that have begun to merge) vary widely, showing anywhere from a 14 to 54 percent automation impact on jobs.<sup>8</sup> It might, however, be a telling sign that sales of industrial robots worldwide went up 29 percent in 2017 compared to 2016, while according to an estimate by the International Federation of Robotics the operational stock of industrial robots worldwide will have more than doubled by 2020 compared to 2014 (*see A3, Growth and forecasted growth in operational stock of industrial robots 2008-2020*).<sup>9</sup> As in the past, forecasts among the vast literature and media articles devoted to the subject are fairly neatly divided between, on the one hand, doomsayers who predict the end of human work as we know it with dire consequences of unprecedented economic inequality, and, on the other, fierce advocates of the AI revolution who foresee a world in which people, finally rid of the menial and repetitive aspects of work, will be free to unleash their

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6. Martin Ford, *Rise of the Robots: Technology and the Threat of a Jobless Future* (U.S.: Basic Books, 2016).

7. See, for example 1) Daron Acemoglu, David Autor, David Dorn, Gordon H. Hanson and Brendan Price, "Import Competition and the Great U.S. Employment Sag of the 2000s," *Journal of Labor Economics*, Vol. 34, No. S1 (Part 2, January 2016), in which the authors estimate that 2.4 million American industrial jobs were lost solely to the rise of Chinese imports between 1999 and 2011; 2) Jean-François Jamet, "Où va l'industrie européenne ?," *Questions d'Europe* no 82, Fondation Robert Schuman, December 3, 2007, where the author shows that 2.8 million jobs across the EU were lost to relocation and outsourcing to Asia between 1996 and 2006; on the other end of the argument, i.e. automation has caused more job losses than globalization, see 3) Michael J. Hicks and Srikanth Devaraj, "The Myth and the Reality of Manufacturing in America," Center for Business and Economic Research, Ball State University, June 2015, in which the authors demonstrate that of the 5.6 million manufacturing jobs the U.S. lost between 2000 and 2010, 85 percent were eliminated through automation rather than international trade; and 4) Loukas Karabarbounis and Brent Neiman, "The Global Decline of the Labor Share," *The Quarterly Journal of Economics*, Oxford University Press, vol. 129(1).

8. Darrel M. West, "Will robots and AI take your job? The Economic and Political Consequences of Automation," TechTank, The Brookings Institution, April 18, 2018.

9. World Robotics Report 2018, International Federation of Robotics.

creativity and devote more time to leisure. Regardless of the substance of forecasts, many reports ask, in reference to the past: is this time different?

There is one immensely significant dimension with respect to which it can already be said that yes, this time is different. Both the Industrial Revolution and the wave of automation that began to soar from the 1980s in an increasingly globalized world overwhelmingly affected manual jobs, whether in agriculture or in industry. The AI revolution, in contrast, has already begun to spread to occupational sectors that require middle – and high-skilled workers, in other words workers with a college education.<sup>10</sup>

It therefore seems safe to assume that institutions of higher learning across the world are now facing a challenge of unprecedented proportions in the phases of their modern era development.

Over the last few decades, globalization has already significantly refashioned the sense that many universities across the world have had of their core mission. Increasingly, colleges and universities have become a marketplace where they behave as competitors who endeavor to draw in students that they view as consumers. The – evidently economic – rationale behind this rapid shift clearly defines college education primarily as a pathway to future job security and high earnings for enrolled students. Students themselves have in recent decades consistently viewed higher education as just that promise – though this perception has begun to sour.<sup>11</sup> Critics see this evolution as a deplorable shift from the tradition of a scholarly education whose quintessential function for centuries has been to pass on knowledge and encourage a spirit of inquiry among the young in attendance, even if the growing demand in government for educated officials that developed from the 13<sup>th</sup> century in Europe introduced early on the objective to train students toward a broad range of occupations.<sup>12</sup>

The development of digital technology that has penetrated higher education over the last decade – as it has every other dimension of human life and the labor market in particular in many countries across the world – seems to render the need for a reassessment of the mission of colleges and universities even more acute than the wave of internationalization of higher education already has. The digital revolution poses a double challenge to higher education: in the methods and practices of learning and of teaching, and in the very substance of what is taught in view of the disruption that emerging technologies are bringing to the labor market. Countless questions arise today in the minds of university administrators and faculty, and in societal debates at large: What should a college education contribute to students at a time when most

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10. See, for example Jeffrey J. Selingo, "Are Colleges Preparing Students for the Automated Future of Work?," *The Washington Post*, November 17, 2017, and Nancy Gleason, "Higher Education Must Prepare for the Rise of Machines," *Times Higher Education*, The World University Rankings, March 30, 2017.

11. "Not What it Used to be," *The Economist*, December 1st, 2012.

12. R.W. Southern, *The History of the University of Oxford* (UK: Oxford University Press, 1984).

observers of evolving labor trends and education experts agree to predict that the future of work will make the very idea of a life-long career obsolete and replace it with life-long learning? How will college education remain relevant? Will it? As more and more universities and governments begin to focus on and invest in the STEM (Science, Mathematics, Engineering and Mathematics) fields, what will become of the Humanities and the critical skills their teaching is supposed to impart? How will colleges and universities survive in an increasingly competitive, increasingly global environment?

These are some of the questions that this report seeks to investigate, through a focus on both the context and the loci in which this revolution is playing out. Part One explores the global framework that has made these questions relevant by examining the commoditization of higher education. Part Two provides an overview of the penetration of digital technology and AI on and off campuses to date and seeks to assess developing trends in the transformation of higher education. Part Three focuses on the labor market to gauge the impact of emerging technologies on labor markets to date, review developing trends and attempt to determine what skills will be in demand tomorrow. In providing an overview of and some reflections on the disruptions to come in higher education, the author of this report does not claim to possess or offer specific expertise in the emerging technologies per se. Rather, the intention is to explore the subject through a social science lens, with a view to informing and encouraging fruitful debate among the managing teams of universities that are members of the International Federation of Catholic Universities, and, hopefully, also among those that are not.

## **PART ONE ► The global context: the commoditization of higher education**

In 1979, Edward Fiske, a former New York Times education editor, wrote an article for *The Atlantic* where he described what he viewed as “the most traumatic change now under way in American higher education: the shift from a seller’s to a buyer’s market.” He recounted how, faced with the prospect of a demographic squeeze, American colleges and universities were increasingly resorting to marketing strategies and techniques designed by and for the corporate world, and to “importing” foreign students to boost enrollment. He stressed the need to “consider whether selling education is significantly different from selling cars or soap” and pointed out the perils involved in seeing colleges and universities adjust programs to meet the needs of the “market” and lower evaluation standards to ensure that the students they had enrolled at such great costs would indeed graduate. “Inherent in the marketing approach to institutional survival,” he warned, “is the assumption that whatever will sell is right.”<sup>13</sup>

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13. Edward J. Fiske, “The Marketing of the Colleges,” *The Atlantic*, October 1979.

Though advertising the merits of the education provided by their institution was in no manner a novel concept for colleges and universities at the time, it is now clear that the late 1970s and early 1980s were the beginning of a new era – one in which, irrespective of demographic trends, the need to turn an institution of higher learning into a brand name that would also attract a growing number of international students would become key to enrollment and endowment success, or, simply, to survival.

## **1. Internationalization and globalization**

As shocking as such practices may have appeared to Fiske at the time, many universities across the world, yielding to the growing forces of the globalized market, have since then gone far beyond, in adopting not just policies of strategic planning and marketization borrowed from the corporate world but also entire business models. One broad impact of this evolution has been an increased focus on curricula that translate into employability for students and the embracing of internationalization strategies that include, *inter alia*, overseas partnerships, the development of branch campuses, and catering to increasingly diverse and increasingly international cohorts of students.

Understanding the transformations of the past few decades in higher education requires spelling out the distinction between internationalization and globalization. An internationalization process implies the development by a college or university, situated in a given national context, of relations with other institutions situated abroad within their own cultural, social and economic national systems. Such strategies remain fully in the control of universities that engage in them. In contrast, the process of globalization transcends national boundaries and entails dynamic forces and movements to which universities are submitted and on which they become dependent. More than internationalization, globalization puts on institutions of higher learning a type of pressure that poses multiple challenges to their governance bodies, which struggle to retain a modicum of distinctive identity, character and values. Many universities have responded to globalization by rescaling their activities and engaging in franchises, joint ventures and the quest for foreign direct investment. The role of national states remains significant in that states continue to determine the funding system for higher education and to contribute to its budget while granting recognition of diplomas and setting national-scale performance standards. However, this often adds pressure on academic institutions to seek international expansion.

## **2. From administration to governance**

These transformations have in turn upended the definition of university administration. In his classic 1986 book on the subject, Burton Clark identified the concepts of knowledge, beliefs and authority as key to the understanding of how universities are organized. He defined the structural dimension of universities, regardless of national system, as a “triangle” of coordination (that, he underscored, could generate tensions within

the institution): one, market-like, between the educational offer and the demands of students and families; one between the university and the state authority; and one between the faculty corps and the professional administration.<sup>14</sup>

As business concepts began to penetrate academic institutions in the move toward the “entrepreneurial” university, the authority of the third pair, the “community of scholars” on one hand and the administration on the other, which together had constituted historically the core of the university, began to decline. The boundaries between universities and other institutions in the society at large began to blur while external – increasingly international – stakeholders, virtually absent in the early 1980s, began to acquire an increasingly decisive role, in particular as board members. Over time, the concept of “university administration” was replaced with that of “governance” – a mode of management that entails much more complex decision – making processes because it opens to a much broader community that often joins the local to the global and can include “industry, professional bodies and the media.”<sup>15</sup>

The five propositions formulated by Gerry Stoker in 1998 to define the concept of “governance” remain a sound analytical framework to envisage what the governance of globalized universities is today.<sup>16</sup>

### 3. Commoditization

With the end of the Cold War, history may not have “come to an end,” as proposed in the early 1990s by Francis Fukuyama, but it imposed on the world a single economic model.<sup>17</sup> Propelled by the IT revolution, globalization has been both the process whereby this model was spreading across the planet and the end result of the imposition of this model across the planet. As trade, communications, finance and people were beginning to move more freely through national borders, the forces of the market and the dominance of the principles they conveyed – transactional relations, the pursuit of profit, consumption as the overarching goal proposed to the global society – went on to assert themselves universally. Prompting nations to increase their international competitiveness, globalization has compelled governments to prioritize the production of a highly-skilled labor force and the investment in research and development – pathways to gaining a

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14. Burton R. Clark, *The Higher Education System, Academic Organization in Cross-National Perspective* (U.S.: University of California Press, 1986).

15. Graham Baldwin and Rick Wylie, “The Governance of a Globalised University, Towards Global Localisation,” Rick Wylie (ed.), *Higher Education and Regional Growth: Local Contexts and Global Challenges*, Policy Network (U.K.: Rowman and Littlefield International, 2018), p. 90.

16. These five propositions are: 1) a set of institutions and actors drawn from both within and without the institution; 2) relations of power dependence between these institutions; 3) several networks of actors; 4) management and techniques that aim to steer and guide rather than rely on authority; 5) blurred boundaries and responsibilities among institutions and actors. See Gerry Stoker, “Governance as Theory: Five Propositions,” *International Social Science Journal* 50 (1998).

17. Francis Fukuyama, *The End of History and the Last Man* (U.S.: Macmillan, 1992).

competitive edge in a competitive world. This has reshaped education policies and, inter alia, induced institutions of higher learning to adapt to the needs of the global market. The process, however, went much further, altering the delivery of higher education in three major ways. First, as most dimensions of individual and social life in the developed world were becoming commodified, so higher education began to be approached by universities and the society at large as the “selling” of a service to “customer” students, thereby causing a leading segment of the higher education sector to start “drifting into a market-oriented system” where education would be seen as a “commercial product to be bought and sold like any other commodity.”<sup>18</sup> Second, the so-called “commercialization” of higher education came to be understood as referring to both the growing connections between universities and the private sector, and the push to have public education institutions adopt or mimic the management mode of the private sector.<sup>19</sup> Third and perhaps most dramatically, education increasingly came to be viewed in social and cultural terms as a service worth purchasing if and only if it virtually ensured the means for students to successfully compete in the global economy, that is, to obtain profitable and lasting future employment.<sup>20</sup> To mention only one example, the University of Texas in an almost comical embodiment of this perception, has made available to students a digital tool that allows them to see how much they can expect to earn ten years after graduation depending on the major they will choose.<sup>21</sup>

This is of course in stark contrast with the time-old conception of knowledge as worth pursuing for its own sake and for the public good it potentially generates that the learning and teaching activity – and the university as a whole – have been grounded in since Greek Antiquity.

While there is no sound argument to be made on behalf of a higher education that would provide no economic benefit, the broad significance of this trend must be clearly understood. One of the crucial transformations under way in this context is the alteration of the teacher-student relationship. Nothing in the tradition of the pedagogical endeavor had allowed any observer before to imagine that teachers were in the business of “selling” educational contents to students. As pointed out by James Turk, an instructor’s role cannot be compared to that of a sales assistant selling a product and aiming to “please customers.” It is, rather, “to challenge students, to provoke new ways of thinking, to

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18. Frank Newman, Lara Couturier and Jamie Scurry, *The Future of Higher Education: Rhetoric, Reality, and the Risks of Market* (U.S.: Jossey-Bass Publishers, 2004).

19. James L. Turk (ed.), *The Corporate Campus: Commercialization and the Dangers to Canada's Colleges and Universities*, Introduction: What Commercialization Means for Education (Canada: James Lorimer and Company Ltd., 2000).

20. See Tatjana Takševa, “The Commercialization of Higher Education as a Threat to the Values of Ethical Citizenship in a Global World,” *UCFV Review*, 2.1, 2008, pp. 8- 27.

21. Katherine Mangan, “A New Tool Breaks Down Earnings Potential for Different Majors. Here’s What You Need to Know,” *The Chronicle of Higher Education*, April 6, 2018.

make students uneasy with what they have taken for granted.” This, Turk points out, “can be a difficult and unsettling process – the opposite of what is to happen to a retail customer who is to be placated and soothed into buying a product.”<sup>22</sup>

Yet commoditization has prompted universities to introduce and expand systems of learning outcomes measurements that aim to quantify the benefits of education to students, thereby mimicking the methods used in the market to assess performance – of products in terms of customer satisfaction, of employees in terms of productivity, of corporations in terms of meeting sales objectives, etc. Jerry Muller argues that the “metrical canon” relies, wrongly, on the belief that it is both possible and desirable to substitute numerical indicators of comparative performance based on standardized data for judgment acquired through personal experience and talent. Indeed, he warns, in the field of education, this trend, extended in the United States to primary – and secondary – education level, while it consumes a vast amount of federal resources, has not had the expected result of boosting overall educational achievement.<sup>23</sup> In addition, Daniel Koretz shows that while the metric-based approach has had a minimal net effect on student learning, it has had a demoralizing effect on teachers, whose career progress has become dependent on the students’ own measurement of their performance.<sup>24</sup> The ultimate embodiment of the university as a marketplace where performance can be measured and rated as that of any commercial enterprise is of course the now predominant diktat of world university rankings – a metric whose methodology and even underlying principles have long been the object of controversy both in the society at large and within institutions of higher learning.<sup>25</sup>

It can safely be argued that the broad outcome of education, unless it is expected to be nothing other than a framed diploma that opens the gate to a lucrative job, does not lend itself to easy and instant quantification. Well beyond the provision of a pathway to work, college education has carried a time-old tradition of self-development ultimately aimed at enhancing the civic virtues of individuals and their sense of responsibility to the collective – be it the sum of their fellow human beings, the community, the nation, or – now – the world. One of the most significant challenges faced by higher education today is that of deciding what share of students’ learning should address these unquantifiable and vastly unmarketable benefits.

Another, even more dramatic, transformation produced by the commoditization of higher education may well be, ultimately, the status of knowledge itself. Market-driven forces, bolstered by growing supranational convergence of higher education policies

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22. Turk, *The Corporate Campus*, p. 6.

23. Jerry Z. Muller, *The Tyranny of Metrics* (U.S.: Princeton University Press, 2017).

24. Daniel Koretz, *The Testing Charade: Pretending to Make Schools Better* (U.S.: University of Chicago Press, 2017).

25. Alia Wong, “The Commodification of Higher Education, Colleges and Universities Have Become a Marketplace that Treats Student Applicants Like Consumers. Why?,” *The Atlantic*, March 30, 2016.



and forms of regulation combined with the penetration of university governance by private-sector stakeholders, are increasingly weighing on the question of what constitutes valuable knowledge in higher education. Universities are thus subjected to growing pressures to prioritize both academic fields and research through the lens of a utility calculus. Knowledge taught is hence veering away from the proverbial pursuit of “truth” toward what may suit or serve the interests of powerful market actors. In the developed world, this results in the increasing common public view that “liberal arts and value-based learning have gone out of vogue.”<sup>26</sup> Many books and articles in professional and general publications have indeed been decrying the demise of the humanities (See A4, Number of teaching jobs in English and foreign languages fields advertised in the MLA Job Information List 1975-76 to 2016-2017). They underscore the fact that liberal arts and the humanities provide students with multiple benefits. Philosophy, history, literature and other liberal arts disciplines, they argue, are falling prey to the economic rationale that has overtaken higher education and puts a premium on business, health, engineering, technology, security and other disciplines in demand in the economy. But the study of liberal arts and the humanities, they emphasize, do give students transferable skills that employers seek out, such as, inter alia, critical analysis, the ability to question assumptions, and language and writing skills. Unlike STEM fields that may impart a more tangible market value to a degree, these disciplines cultivate in students what is genuinely and uniquely human – qualities that machines will probably (or hopefully) never be able to possess.<sup>27</sup> The very fact that a market utility argument has to be made in defense of the preservation of liberal arts and the humanities is in itself an apt indication of where they stand as disciplines, not just among students but also in decision-making processes among university governance.<sup>28</sup> On the other hand, a rising academic current argues that it is technology itself that will save the humanities. A fledgling subset known as the Digital Humanities has begun to rise, premised on the idea that computational tools and methods applied to the deciphering of classic texts – thus with capabilities the human brain has never possessed – will shed entirely new light on great works.<sup>29</sup> Research carried out in academia, which has for so long been a symbol of excellence for institutions of higher learning especially in the United States, is also affected by

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26. Beth Potier, “Teaching or Research? Students or Consumers? Role of Money, Technology in Education Eyed,” *The Harvard Gazette*, October 18, 2001.

27. See Nick Anderson, “Going for the Hard Sell as Interest in English Major Declines,” *The Washington Post*, April 10, 2015; Steven Pinker, “The Intellectual War on Science,” *The Chronicle of Higher Education*, February 13, 2018; Stanly Fish, “Stop Trying to Sell the Humanities,” *The Chronicle of Higher Education*, June 17, 2018; Paul Jay, *The Humanities “Crisis” and the Future of Literary Studies* (U.S.: Palgrave Macmillan, 2014); George Anders, *You Can Do Anything: The Surprising Power of a “Useless” Liberal Arts Education* (U.S.: Little, Brown and Co., 2017).

28. Randall E. Stross, *A Practical Education: Why Liberal Arts Majors Make Great Employees*, (U.S.: Stanford University Press, 2017).

29. See, among multiple books, Steven E. Jones, *The Emergence of the Digital Humanities* (U.S.: Routledge, 2013).

the diktat of market rules. As public budgets aimed at supporting it dwindle away, its funding is increasingly provided by private corporate actors. The consequences for basic research, which does not offer the promise of a quick return on investments, have been dire, as funding goes to applied research that can lead to patents and commercialization.

#### 4. Financial impact

Globalization has also entailed profound transformations in the financing of higher education. As pointed out above, the expansion of private-sector funding that has made universities accountable to external, non-state actors just as the capacity of national governments to support higher education was declining has contributed to spread the view that a college degree is a commodity that, like every other, should come with a price.<sup>30</sup> This has translated, *inter alia*, into the increase of tuition fees in many countries where college education is not overwhelmingly public and free. It has also opened the playing field to a growing number of for-profit providers that have been enabled to operate across national borders. Within colleges and universities, it has, for example, prompted the growing use of adjunct faculty, who work part-time for lower wages and fewer benefits and now comprise the vast majority of instructors in American academia – a cost-cutting trend that further devalues the teaching activity (*see A5, Share of U.S. college and university faculty by tenure, 1969 and 2009, and A6, Trends in faculty employment status, 1975-2011*).

#### ► CONCLUSION

Globalization has had some positive consequences on the development of higher education. It has promoted education policies that broaden access to students of merit from socio-economic categories that were broadly left out before, and has fostered an “increasingly international and mobile academic profession,” as well as the creation of “global research networks.”<sup>31</sup>

Yet the commoditization of higher education remains a process driven by academic institutions situated in the West – North America, Australia and leading European Union countries – and more likely to benefit that part of the world. In that sense and in a number of other respects, such as the quiet lowering of evaluation standards for graduation, the assumed mission of fostering equality that commercialized higher education claims to have taken on comes across as arguable at the very least.<sup>32</sup>

Greater fears yet are rising of a future world ridden with soaring inequality as we stand on the threshold of the AI revolution.

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30. See Philip G. Altbach, “Why Higher Education is not a Commodity,” *The Chronicle of Higher Education*, May 11, 2001.

31. Philip G. Altbach, “Higher Education and the WTO: Globalization Run Amok,” *International Higher Education*, The Boston College Center for International Higher Education, No 23, Spring 2001.

32. Muller, *The Tyranny of Metrics*.

## PART TWO ► Emerging technologies on and off campuses: trends

This part first explores the changes that emerging technologies have already brought about in higher education and then proposes an assessment of changes to come.

To such a proposal it may be objected that, at a time when technological advances in the field of computers, automation and artificial intelligence are virtually occurring daily, a “now/in the future” approach constitutes a methodological hurdle rather than a path toward more clarity, simply because an “in the future” item may become a “now” item in a matter of weeks. There is merit in this observation, because the pace of technological innovation today makes it more difficult both to draw a sharp distinction between present and future, and to predict the future (provided that the latter has ever been less than difficult).

In the field of higher education, however, the trends observable today have been in the making for well over two decades, and there seems to be a broad consensus among experts as to at least what the very-near future will bring. Many universities across the world have been implementing some of the relevant fruits of technological innovations, and the perfect coincidence of transformations induced by the processes of internationalization and globalization explored in Part One with those generated by technology does lend credence to the endeavor to separate present and future for methodological – and indeed clarity – purposes. Absent technological advances in communication, in particular with respect to the production and circulation of data, there would have been, after all, no internationalization and globalization processes in higher education.

### 1. What has changed: the penetration of digital technology and AI on and off campuses

*“The world is going to university,”* The Economist declared in a 2015 article describing how mass higher education was invented in the United States in the 19<sup>th</sup> century and, after spreading to Europe and East Asia in the 20<sup>th</sup>, is now expanding through the rest of the world, with the exception of sub-Saharan Africa. Between 1992 and 2012, the global rate of college-age population at university grew from 14 to 32 percent, and the number of countries with a ratio of enrolled students above 50 percent from 5 to 54 (see A7, Increase in college graduates in South Korea, U.S. and OECD countries 1995–2016). *“University enrollment,”* the article says, *“is growing faster even than demand for that ultimate consumer good, the car.”*<sup>33</sup>

The paradox in this fact is that while countries across the world continue to draw inspiration from the American system, the merits of getting a university education are being increasingly questioned in the United States. Several reasons account for this

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33. “The World is Going to University,” *The Economist*, March 26, 2015.

growing skepticism, in particular the ever-rising costs of higher education to national budgets and families. Distrust clearly began to develop in the aftermath of the Great Recession of 2008. Graduates who then sought to enter the workforce were faced with the prospect of unemployment and underemployment at levels unprecedented in previous decades, and the perceptual impact of that crisis has proved to be long-lasting (see A8, Unemployment and underemployment rates for college graduates aged 21-24, 2007-2018). In the wake of the economic crisis, the belief that a college degree was a safe ticket to a well-paying job could no longer be taken for granted.

Though the global economy has vastly recovered over the last decade, this same belief is now being questioned again on a far wider scale and with a much broader impact for colleges and universities. The issue at stake today is no longer whether the economic outlook at the time of graduation will allow recipients of a tertiary education to rapidly obtain profitable employment, but to what extent, given the pace of technological changes in the labor market, this will even be possible. This concern arises after a decade in which, following the Great Recession of 2008, a new approach to higher education called the “student-success movement” grew to question the role of higher education, not only because of rising costs to families but also in view of low graduation rates and gaps in outcomes between students of different socio-economic and ethnic backgrounds.<sup>34</sup>

The learning experience in many universities across the world today is already dramatically different from what it was even a decade ago. It suffices to focus here on a handful of innovations that emerging technologies have made possible to grasp the significance of the changes in what “studying” means that have already taken place.

► **ONLINE LEARNING** ► Whether as part of the curriculum for enrolled students or as an offer geared to a wider public, online courses have been part of the learning practices in higher education since the early 2000s. The advantages they offer students enrolled at university are by now well known: flexibility, ability to follow courses without having to get to a classroom, the possibility to study when most convenient, etc. When they first emerged as an alternative to classroom learning, online courses, and indeed the full online colleges, both non-profit and for-profit, that then began to multiply, were indeed widely seen as a service that had the potential to revolutionize the meaning of higher education.

This was particularly true of massive open online courses (MOOCs), launched a decade later in 2011 with the awesome promise of democratizing university learning by allowing virtually anyone who wanted to take a college course to do so, in many cases at no cost. In just a few years, the MOOCs offer grew exponentially, from 3 initial

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34 “Student Success,” in *The Future of Learning*, *The Chronicle of Higher Education*, 2018, p. 11.

courses opening on line in October 2011 to 7,465 in June 2017.<sup>35</sup> (See A9, *Growth of MOOCs 2012-2018*) By the end of 2017, Udacity, one of the leading providers, had reached a total of 81 million cumulative learners.<sup>36</sup>

MOOCs have undoubtedly achieved some of the goals their creators had intended, such as making high-quality educational resources available to categories of people across the world who would not be able to attend similar courses in person. Yet they have not thus far, as first announced, revolutionized access to higher education – let alone “kill” university degrees as many enthusiasts had predicted they would when the first courses were going on line.<sup>37</sup> By 2013 or 2014, it was becoming apparent that completion rates for online courses were particularly low – ranging between 5 and 13 percent through various surveys.<sup>38</sup> Subsequent research showed that online courses were more likely to attract a demographic segment already well educated and employed, more male than female, and living in the developed world. In addition, a majority of distance learners were taking these courses out of intellectual curiosity or for work advancement rather than to acquire an essential education that they could have no other access to. A majority of beneficiaries were, in other words, part of the precise segment that the MOOCs offer did not primarily target, because they were a segment that was or had already been involved in higher education and were already doing well.<sup>39</sup> Accordingly, among enrolled students, online courses have also proved by and large to be handled more successfully by learners who were already better equipped to study than by those requiring pedagogical support.

It can therefore at the very least be said that, in terms of pedagogical progress, online courses have not brought about the promised revolution. They have also opened an entire dark side to higher education that the creators were apparently unable to foresee and that has to do with the integrity of students. Coursework on the internet has indeed multiplied the possibilities of cheating – now emblematic of the IT penetration in academia. Today, we live in an age of multinational cheating schemes that involve countless “essay mills” – services located in Asia or Africa that offer students to write their term papers or even take an entire online course (with a guaranteed top grade) for them, for a fee. With students in the developed world increasingly focused on getting the degree that gets the job and increasingly oblivious

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35. “Cumulative Growth in Number of MOOCs, 2011-17,” *The Chronicle of Higher Education*, August 13, 2017.

36. By the Numbers: MOOCs in 2017, Class Central, <https://www.class-central.com/report/mooc-stats-2017/>

37. “Will MOOCs Kill University Degrees?” *The Economist*, October 2, 2013.

38. See for example Maria Konikova, “Will MOOCs be Flukes?” *The New Yorker*, November 7, 2014, and D.F.O. Onah, J. Sinclair and R. Boyatt, “Dropout Rates of Massive Open Online Courses: Behavioural Patterns,” edulearn, the University of Warwick, United Kingdom, 2014. [https://warwick.ac.uk/fac/sci/dcs/people/research/csrmaj/daniel\\_onah\\_edulearn14.pdf](https://warwick.ac.uk/fac/sci/dcs/people/research/csrmaj/daniel_onah_edulearn14.pdf)

39. See for example, Gayle Christensen, Andrew Steinmetz et al., “The MOOC Phenomenon: Who Takes Massive Open Online Courses and Why?,” November 6, 2013, <http://dx.doi.org/10.2139/ssrn.2350964>

to the broad merits of higher education, essay mills have become a booming business that allows educated individuals in the developing world to make a decent living at writing papers that enable those students to cheat – an innovative way to perpetuate or even deepen North-South economic inequality. The classroom itself is no longer a relatively safe ground for evaluation: the rise of technology has bred social media sites and apps that provide answers to quizzes and exams taken in class on fact-based questions, or allow students who previously took the exams to pass on answers.<sup>40</sup>

More broadly, the availability of online resources that rely on crowdsourcing has changed the relationship that students have to the material and subjects they study, and poses significant challenges to instructors, who can no longer view themselves as sole legitimate disseminators of content. Natasha Jankowski, director of the National Institute for Learning Outcomes Assessment based at the University of Illinois and Indiana University, sums up in these terms the transformed teacher-learner relationship: “It’s about authentic demonstrations that are externally facing so students can be part of this data-rich environment and about how we’re helping each other collectively to move us from a ‘gotcha’ assessment to creating a developmental learning experience. It’s a different teaching-learning mentality.”<sup>41</sup>

While technologies such as virtual reality, augmented reality, and 3-D printers are making their way onto campuses, in particular in scientific disciplines, those that for now seem to dramatically alter the configuration of the academic path for a growing number of students across the world are systems of educational technology and the new science they are producing: Learning Analytics.

- **ED TECH AND LEARNING ANALYTICS** ► Over the last few years emerging technologies have spawned the exponential development of software and AI-aided, cloud-based technology – Ed Tech in short – that aim to adapt learning methods and customize curricula to fit each student’s ability to move forward at his or her own pace. These systems use analytics to assess competency in the different areas of the curriculum, and then let students take the time to reinforce weaker areas, thereby creating a customized curriculum. Still in the early stages of development, Ed Tech is promoted by its startup creators as having the potential to end the practice of instructors teaching to the classroom average while lower-level learners are unable to catch up and those with the better abilities remain disengaged. The promise is that by automating ability assessment and the tracking of learning difficulties, better outcomes can be obtained by each student and by the class as a whole. In the process, the instructor shifts from the role of knowledge provider to that of facilitator and problem solver.

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40. On the ways of cheating that technology has made possible, see “How Students Cheat in a High-Tech World,” the Focus collection of articles on the subject published in 2016 by *The Chronicle of Higher Education*.

41. Emma Kerr, “What a Controversy Over an App Tells Us About How Students Learn Now,” *The Chronicle of Higher Education*, May 15, 2018.

Away from the classroom and from online courses, the technology also helps students refashion their curriculum as they move forward toward graduation. A growing number of universities in the developed world are thus partnering with tech companies and investing resources in developing the online collection of student data that is needed to power Ed Tech – an activity known as Learning Analytics.<sup>42</sup>

Learning analytics consists in the collection of mainly two types of data: information about who incoming students are, such as demographics and performance in secondary education, and activity data as they move through the curriculum toward completion, such as how they are performing on course work and requirements, connections to the internet, comments posted on discussion boards, etc. Some systems track mobility on campus such as trips to cafeteria, the gym, the library or the tutoring center. Much as the tech giants collect user data on the internet to “enhance users’ internet experience,” i.e. concretely to direct to users advertising they are more likely to be responsive to, learning analytics gathers data that will make possible the personalization of the student’s learning process. The technology used includes prediction (Predictive Analytics) that allows the college to identify trouble spots and intervene to boost performance. Through language-based and visual methods, algorithms detect underlying patterns and relationships in the data to help pinpoint learning difficulties and strengths. With the tailoring of the learning process to every student’s singular learning personality as the ultimate goal, the educational focus in gathering data about students’ performance – which has of course always existed at university, mainly through evaluation – shifts from outcomes to process. Ben Maddox, chief instructional technology officer at New York University, defines learning analytics as the use of “data from, about and with students to improve the learning environment and to research how we see, identify and understand more about learning.”<sup>43</sup>

The broad idea is to remedy the “one-size-fits-all” approach that higher education has been traditionally grounded in, and to reduce or even close achievement gaps among students of increasingly diverse socio-economic and ethnic backgrounds so that more students can perform well at university, thereby increasing graduation rates. The overall societal goal, one might say, is one of social justice. As with any data collected by the Big Four tech companies, data collected via learning does pose the question of data protection and ethics, which analytics faculty and professionals are aware of. As is the case everywhere else on the internet, the students’ consent is obtained through the forms they sign upon admission. By and large, the consensus in the higher education community seems to be that, since

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42. Investopedia Academy, which offers online financial courses, see <http://www.investopedia.com/terms/e/edtech.asp> and Education Technology, an edtech news online magazine. Also see <http://www.edtechnology.co.uk/Article/what-the-edtech-learning-analytics>.

43. At Learning Analytics Summer Institute, June 11-13, 2018, Columbia University, NY.

the sole purpose of learning analytics is to help students “enhance their learning experience,” the risk of data misuse is very low to nonexistent.

## ► CONCLUSION

Learning management systems (LMS) are the range of software applications that power all these technology-based activities, from online courses to blended learning that combine both online and traditional learning, and flipped classrooms where the delivery of instructional content is carried out online and classroom time devoted to questions and debate. LMS provide platforms that teachers at primary – and secondary – education level use across the world to manage their teaching and are also an option for employee training and retraining. They have thus also penetrated the market of higher education, and were valued at 5.2 billion dollars as an industry in 2017, with projections of this revenue more than tripling by 2021.<sup>44</sup> Google, Microsoft and Apple have joined this vibrant market by offering free educational online tools.

In the promotional material disseminated by LMS professionals and at conferences and fairs in which they participate, great emphasis is consistently put on the fact that the human dimension remains at the core of every one of these innovations and of all pedagogical tools aimed at assisting students. Yet criticism of present performance is also rising – more often, naturally, from non-stakeholders. One major objection raised against the spreading use of these technologies is that by focusing on individual students who create an entire relationship with the associated devices and platforms, Ed Tech does not foster the development of social skills – one area in which AI is particularly weak – as interacting with teachers and peers in a physical classroom does. This of course mirrors the growing societal concern over young people spending more time nowadays interacting with a screen than with any human in their surroundings.

On a broader scale, while online courses have so far failed to live up to their democratization promise and it is too early to seriously assess the overall impact of educational technology on performance enhancement and graduation rates in higher education, the virtues of customized learning vs. traditional education delivered in “one-size-fits-all” format appear to be taken for granted among all stakeholders as well as an overwhelming segment of non-stakeholders. Lost in the debate is the fact that these technologies clearly aim to make the learning experience less constraining, more game-like, in short more to the taste of the individual student. This does raise the question of whether there is indeed sizeable progress in habituating young people to reject constraint, to grow intellectually and mentally in an educational landscape where the rewards of pain – of long attention spans that have to be devoted to understanding complex, not always immediately stimulating, material, of the sense of being somewhat

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44. Julia Boorstin, “A Lesson Plan from Tech Giants on How to Transform Education,” CNBC, DISRUPTOR/50, <https://www.cnbc.com/2017/03/28/microsoft-google-and-facebook-see-billions-in-future-of-education.html>



behind the best students in the class and having to invest efforts in catching up – are all but absent. Needless to add, arguments on behalf of such a “retrograde” view of education, and even questioning that seeks to shake up the assumptions behind the concept of customized learning, are barely audible in the current hype on the subject. They are, nevertheless, worth hearing.<sup>45</sup>

## 2. What’s under way: an assessment

Devoting even a minimal amount of attention to the ongoing debate among AI specialists and observers at large makes one thing clear: the window of predictability on the advances AI and other emerging technologies may make in the future, near or far, is extremely narrow. Any firm scenario that may therefore be proposed as to what the future of technology in education may look like in any number of years would not just be a bold proposition, but also one very likely to be wrong. Only one prognosis can be made with more than relative safety: no promise of disruption to the disruptive seems to appear on the horizon. It is therefore reasonable to envisage continuity.

■ **DISCERNABLE TRENDS** ► It is thus clear that technologies that are developing today on and off campus will expand, both in nature and geographically, as governments across the world increasingly invest in them and struggle for their higher education systems not to be outpaced. The trends underlined in the previous section will keep evolving as emerging technologies – such as for example the use of robots as chatbots to enhance tutoring and advising – take hold and eventually lose the adjective.

By most accounts, the learning experience of tomorrow will be more active and interactive and take place in an environment that blurs the boundaries between the traditional classroom and the world outside of it. It will be less of a self-contained activity and more of an exchange with the “real world.”

Already prominent among pedagogical strategies today is what is called “experiential learning,” a “process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting,” which includes “internships, service learning, undergraduate research, study abroad, and other creative and professional work experiences.”<sup>46</sup> This may be the way that students’ social skills, unaddressed, as seen above, by educational technologies, will be fostered and developed. “In the future,” says MIT’s Sanjay Sarma, learning will have to “take place everywhere, not just in the classroom or at school.” Learning processes will have to generalize the “practice of the flipped classroom, with shorter modules that take into account the fact that the average maximum attention span is ten minutes.”

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45. For an argument on behalf of “rigidity,” see Kathleen Lowrey, “Old-School Learning Provides Firmness in a Disrupting World,” *Edmonton Journal*, June 1st, 2017.

46. What is experiential learning?, Experiential Learning Center, University of Denver, Colorado.  
<http://www.ucdenver.edu/life/services/ExperientialLearning/about/Pages/WhatIsExperientialLearning.aspx>

Education will aim to develop in everyone an “instinct for learning, a culture where people are constantly learning.”<sup>47</sup>

The overall goal of learning strategies will be to develop competencies that allow students to adapt to any change through the waves of technological transformations they will experience in their future. To that end, teaching will no longer be focused on imparting knowledge but on helping students learn to learn, acquire a skill to learn that they will carry with them through their professional life, in which they will constantly have to learn and relearn. As Deloitte’s Janet Foutty puts it, the motto of higher education will shift from “learn to work” to “work to learn.”<sup>48</sup> In fact, Tom Galluzzo of IAM Robotics says, the education of the future will not necessarily consist in getting a degree but will emphasize getting hands-on experience with technologies.<sup>49</sup>

- **PREPARING TO FACE THE FUTURE** ► There is a prevalent sense among education experts and other stakeholders that higher education, often accused of poorly preparing students for the challenges of professional life because, among other things, the university is vastly disconnected from the corporate world, will no longer have the option to maintain this status quo in future years. As digital and AI-technologies, coupled with automation and robotization, are transforming the workplace at a pace never experienced before by humankind, introducing and even immersing students in the world of work during their college years will become an imperative. This already takes the form of various types of partnering between universities and companies or factories – a trend that college governance will have to follow and expand in the future.

In fact, what all forecasts are unanimous about is the prediction that the leading type of education in the future will be life-long learning – one of the solutions proposed to deal with the technological tidal wave that is rapidly rising. As viewed in Part One of this work, globalization and internationalization have already pushed universities to reshape their programs and curricula to meet labor market needs. The technological revolution will push them further in that direction in the coming years, with calls already rising to make college education closer to vocational training and apprenticeships.<sup>50</sup> This evolution will probably continue to take its toll on the humanities and liberal arts, but the imperative to remain competitive in the international marketplace will leave college governance with little choice to not follow suit.

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47. Sanjay E. Sarma, professor of mechanical engineering and vice-president for Open Learning at the Massachusetts Institute of Technology, EmTech Next 2018, June 4-5, 2018, MIT Media Lab, Cambridge, MA.

48. Janet Foutty, chairman and CEO of Deloitte Consulting, EmTech Next 2018.

49. Tom Galluzzo, CEO of IAM Robotics, EmTech Next 2018.

50. See for example Scott Carlson, “Why Colleges Need to Embrace the Apprenticeship,” *The Chronicle of Higher Education*, June 4, 2017.

Joseph Aoun, the president of Northeastern University, recommends a holistic strategy for higher education to keep students relevant in the labor markets of the future. He believes that colleges and universities should promote curricula that include experiential learning and together provide technology, data and human literacy – i.e. literacy in skills that are unique to humans such as innovation, entrepreneurship, communication, global thinking, team work, etc. He is among those who advocate a leading role in life-long learning for universities.<sup>51</sup>

One recent innovation that combines the concepts of higher education and life-long training might point the way toward sustained future relevance for universities: the “open-loop university,” created by Stanford University in 2014. Rather than a traditional degree obtained over four consecutive years, students can choose to accumulate six years of study whenever they want through their professional life. Michigan University went even further when it gave its MBA graduates the option to return for an executive-level program, free of charge, through their lifetime.<sup>52</sup>

These emerging and developing strategies for universities to maintain relevance in the world of tomorrow may come across as a tall order. Institutions of higher learning are often viewed as conservative bureaucratic machines that require time to adopt and adapt to changes. In the current context, there is the added problem that, in the future, technology and the way it is transforming the workplace may outpace any change that universities that strive to remain competitive will be able to put in place.

## ■ CONCLUSION

The expansion of education technology and increasing reliance of universities on it to reinforce their legitimacy, relevance and efficiency has already given rise to much criticism. Predictive analytics is only a fledgling trend among universities across the world. Even in the United States, only seven percent of universities have reported deploying these systems at institution level, though over half of all colleges are either piloting or expanding their use.<sup>53</sup> Yet fears already focus on the possibility that the classroom of the future may become too heavily dependent on these technologies, to the point that they will be allowed to prescribe not just how students learn but also what they learn.<sup>54</sup>

The adverse effect of digital and AI technology on social skills may also become an even greater issue as the use of devices and screens pervades the educational landscape the way it already has every dimension of young (and not-so-young) people's lives. In addition, in the obsessive drive to remain competitive and relevant, many universities

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51. Joseph E. Aoun, *Robot-Proof: Higher Education in the Age of Artificial Intelligence* (U.S.: The MIT Press, 2017).

52. Danielle Paquette, “In the Future, College Never Really Ends,” *The Washington Post*, June 6, 2018.

53. “Students Success,” *The Chronicle of Higher Education*, p. 13.

54. Nikol Rummel, Erin Walker and Vincent Aleven, “Different Futures of Adaptive Collaborative Learning Support,” *International Journal of Artificial Intelligence in Education*, June 2016, Volume 26, Issue 2, pp. 784–795.

seem to invest little in those skills that AI is said – for now – to lack, such as critical thinking, creativity and empathy – which, admittedly, are not easy to teach.

This is taking place at a time when the current student generation, already raised in complete exposure to the internet and mobile devices, exhibits, according to research, declining abilities in the kind of literacy that comes from reading – mindful knowledge acquisition, inductive analysis, critical thinking, imagination, and reflection.<sup>55</sup>

Meanwhile, there is no convincing evidence to date that these technologies improve student learning, and the “focus on quantifying classroom experience,” says Molly Worthen, an assistant professor of history at the University of North Carolina, “makes it easier to shift blame for student failure wholly unto universities, ignoring deeper socio-economic reasons that cause many students to struggle with college-level work.”<sup>56</sup>

Finally, at global scale, another reasonable fear to express is that of seeing the penetration of digital and AI technologies in higher education deepen the divide and economic inequality between North and South. Though free Ed Tech platforms are making it easier for teachers in schools with few resources all over the world to improve the quality of education at primary and secondary level, universities in the developing world may rapidly find themselves at further distance yet from a position in which they can deliver education that is up to par with international standards and prepares students for competitive jobs that will benefit national economies.

### **PART THREE ► The future of work**

What will automation do to jobs? This is the question that every stakeholder in and observer of the labor markets of today and tomorrow is raising these days. The answer, to say the least, remains elusive.

*“There are about as many opinions as there are experts,”* claims an article in the *MIT Technology Review*. It then provides a list of forecasts, some of which go as far as 2035, that make it clear that there is no consensus among the numerous institutions now engaged in offering projections about jobs to be created and destroyed by automation. Looking at any given target year that these forecasts put forth also makes it clear that no distinct trend emerges even there (see A10, Predicted jobs automation will create and destroy).<sup>57</sup>

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55. Patricia M. Greenfield, “Technology and Informal Education: What is Taught, What is Learned,” *Science*, vol. 323, January 2, 2009.

56. Molly Worthen, “The Misguided Drive to Measure ‘Learning Outcomes,’” *The Chronicle of Higher Education*, February 23, 2018.

57. Erin Winick, “Every Study We Could Find on What Automation Will Do to Jobs, in One Chart,” *MIT Technology Review*, January 25, 2018.

Putting some context around the issue requires an examination of what labor trends have been emerging and developing over the past decade as an earlier product of technology and global trade – in short, of what is now called the “gig economy.”

## **1. The new casualization of work**

As is often the case with neologisms, different definitions can be found for what the gig economy means. In simple terms, it is an economy where the form of labor that becomes pervasive is “a way of working that is based on people having temporary jobs or doing separate pieces of work, each paid separately, rather than working for an employer”<sup>58</sup>. The term “gig” in the sense that is used here appeared in 1926 in reference to jobs assigned for a specific time, and often to “an entertainer’s engagement.”<sup>59</sup> The more elegant name for roughly the same concept is the “collaborative economy.” At the core of all definitions lies the fact that jobs emblematic of the gig economy do not come with a permanent contract and are not permanent jobs. Nor do they come with the labor protections and benefits that have been typical of the welfare state. Their legal status is often blurry. They can be based on short-term contracts or done on a free-lance basis by independent contractors, and they now often involve online collaborative platforms intermediating work with individuals on line. The array of jobs in this category is very broad, ranging from delivery, ride hailing, restaurant and housecleaning jobs to translation, design and consulting (and outsourced essay writing). Gig economy workers in white-collar occupations are also referred to as “digital nomads.”

The gig economy has rapidly spread around the globe, bringing the opportunity of employment for young people in regions where youth unemployment is high such as parts of sub-Saharan Africa and Southeast Asia, or where steady employment for low- skilled youth is lacking such as parts of Europe. These jobs also help people with regular employment generate additional income. According to a 2016 Pew Research Center study, 24 percent of Americans reported earning money in the previous year from what is also called the “platform economy.”<sup>60</sup> Leading gig work platforms praise their business models as innovations that will create a revolution in labor markets because they “can help lift people out of poverty.” Enthusiasts believe that this “new world of work” can “have structural benefits on the global economy, such as raising labor force participation and improving productivity.”<sup>61</sup> Proponents of the gig economy point out the benefits of flexibility, autonomy and potential higher incomes that it provides to its workers. Critics, on the other hand, emphasize the casualization of labor that the

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58. Cambridge English Dictionary on line.

59. Merriam Webster’s Collegiate Dictionary, 10<sup>th</sup> edition, 1993.

60. Aaron Smith, “Gig Work, Online Selling and Home Sharing,” Pew Research Center, Internet & Technology, November 17, 2016.

61. Mark Graham, Vili Lehdonvirta, Alex Wood et al., “The Risks and Rewards of Online Gig Work at the Global Margins,” Oxford Internet Institute, University of Oxford, 2017.

gig economy has brought about, offering in most cases no minimum wage, no sick or overtime pay, no paid vacation and no health insurance.

As traditional employers increasingly turn to the digital platforms for extra staffing according to need and see an advantage in the lower labor costs the outlet affords, labor experts are concerned that this growing trend will jeopardize steady work based on permanent contracts. “We’re seeing only one trend here,” says Diane Mulcahy, author of a book on the subject, “which is that the gig economy is big and getting bigger. Companies will do just about anything to avoid hiring full-time employees.”<sup>62 63</sup>

Millennials’ participation in the gig economy is rising, and many value the alternative form of work it proposes more than traditional steady jobs.<sup>64</sup> Whether this, added to the economic factors already mentioned, indicates that the gig economy will indeed revolutionize the world of work remains an open question. A 2016 report compiled for the European Commission concedes that collaborative platforms have the potential to profoundly transform the labor market. But it also finds that, with a rate of 0.05 percent European Union workers involved in these jobs at present, there is no sign thus far that the gig economy is having a significant impact on the traditional labor market or on job creation and destruction in Europe.<sup>65</sup>

More broadly, the structure of work has been shifting away from the classical lifetime career or even long-term employment framework that had dominated labor markets for generations. In the age of startup glamour, steady long-term jobs may no longer be a primary objective even for young people with a college education. Within corporations, the structure of work is changing as well. Management no longer means handing down the rules and projecting authority but being a team leader. Skilled staff is increasingly hired on a project basis, and then moves on. Work is increasingly done elsewhere, anywhere, anytime, even by those who still belong to a company that has physical offices somewhere. Will this developing reconfiguration of labor coincide with the wave of AI, robotization and automation and thus result in a positive impact on labor, or will the two trends collide, with a compounding effect on job losses?

## **2. Robotization, automation, Artificial Intelligence: phase one**

AI was first envisaged as a human fantasy in science fiction novels and movies that began to multiply in the first half of the 20<sup>th</sup> century. It may, however, be argued that

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62. Abha Bhattarai, “Now Hiring, for a One-day Job: the Gig Economy Hits Retail,” *The Washington Post*, May 4, 2018.

63. Diane Mulcahy, *The Gig Economy: The Complete Guide to Getting Better Work, Taking More Time Off, and Financing the Life You Want* (U.S.: AMACOM, 2016).

64. Kelly Monahan, Jeff Schwartz and Tiffany Schleeter, “Decoding Millennials in the Gig Economy: Six Trends to Watch in Alternative Work,” Deloitte Insights, May 1st, 2018.

65. Willem Pieter De Groen, Ilaria Maselli, “The Impact of the Collaborative Economy on the Labour Market,” CEPS Special Report No. 138, June 3, 2016.

crafting automatons out of gold and bronze and assigning them various tasks such as guarding, serving or going to combat was a matter of routine for the gods of Ancient Greece.<sup>66</sup> The modern origin of AI is credited to Alan Turing, of Enigma codebreaking fame, who explored its mathematical possibility. The term itself was coined in the first academic conference on the subject at Dartmouth College in 1956. AI has thus been studied for decades, with advances in search and machine learning algorithms, and breakthroughs that for a long time elicited wonder only among scientists (*see A11, Artificial Intelligence timeline 1930-2000*).

Assessing the impact that automation and AI may have on future jobs could start with an analysis of what effect the penetration of robots has already had on industrial jobs – an activity sector that has been exposed to automation for several decades. Researchers Daron Acemoglu (MIT) and Pascual Restrepo (Boston University) did just that, in a 2017 study for the National Bureau of Economic Research titled “Robots and Jobs: Evidence from U.S. labor Markets.” In it, they focus on the effect that the increase in robot usage had on the employment rates of different areas and industries in the United States between 1990 and 2007, while controlling for the influence of other factors such as job offshoring and increased imports from China. They find that each new robot added caused the loss of 3 to 5.6 jobs in a commuting zone observed, and a drop of 0.25 to 0.50 percent in local wages. They see negative effects “on essentially all occupations, with the exception of managers [...]. Predictably, the major categories experiencing substantial declines are routine manual occupations, blue-collar workers, operators and assembly workers, and machinists and transport workers.” While the metrics of the impact may appear small, it must be noted that the authors adopt a restrictive definition of robots (fully autonomous, multipurpose), and that these are pre-AI era robots. In addition, they note that “interestingly, and perhaps surprisingly, we do not find positive and offsetting employment gains in any occupation or education groups.” Thus the job loss due to robot penetration was not compensated by job creation of another type. However, they assess that even under the most aggressive scenario, the fraction of U.S. employment being affected by robots is relatively small, at least for the time being. “There is nothing here,” they conclude, “to support the view that new technologies will make most jobs disappear and humans largely redundant.”<sup>67</sup>

Addressing elsewhere the subject of emerging technologies and how they affect labor, Acemoglu, like many other economists, distinguishes between enabling technologies,

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66. The hounds of Alcinoos, immortal creatures guarding the palace of King Alcinoos, and the twenty tripods of Olympus mounted on golden wheels and serving the gods gathered on Mount Olympus, all fashioned by Hephaistos, the god of craftsmanship and blacksmiths, are only two of many automatons described in Homer's *Iliad* and *Odyssey*.

67. Daron Acemoglu and Pascual Restrepo, “*Robots and Jobs: Evidence from U.S. Labor Markets*,” MIT Economics, <https://economics.mit.edu/files/19696>

which complement and increase the productivity of certain types of skills, and replacing technologies, which take over tasks previously performed by labor – each with very different labor implications. While enabling technologies are found to increase wages and labor demand because they increase workers' productivity, replacing technologies have the opposite effect. However, Acemoglu adds, many technologies combine enabling and replacing elements. Replacing technologies have already had a significant labor-reducing impact on jobs involving, inter alia, assembly tasks, switchboard operation, mail sorting, packing, stock trading, cash dispensing and operating machines. He points out that AI can be used not only for replacement but also for creating new tasks and functions, yet that at present the focus of investment is on the former rather than on the latter. However, if too many resources are directed at AI that replaces tasks and not enough at AI that creates new tasks, both labor and productivity, he warns, will suffer. On a final note, he warns that *"we are getting ready for the technologies of the 21<sup>st</sup> century with an educational system that was designed in the mid-20<sup>th</sup> century and has been going backwards ever since."*<sup>68</sup>

People across the world are now witnessing and experiencing daily the automation of tasks performed by humans only a few years ago – in automated check-out at retail stores, in e-commerce and through automated call-center systems, at hospitals and clinics. What has been the fate of workers thus replaced? Aggregate data at macroeconomic level on how many jobs have already been lost to digital and AI-powered automation is difficult to come by. But amid the warnings of major potential damage to labor in years to come, some voices have been rising to stress that we are already seeing significant labor disruption. Former U.S. Treasury Secretary and Harvard economics professor Larry Summers talks about "labor-substitutive innovation", which, he argues, has so far only vastly benefited the top one percent. He believes that we are "only in the early innings of such a wave".<sup>69</sup>

From the innings to the wave, the recurring question with the elusive answer remains: what future impact?

### **3. Impact of robotization, automation and Artificial Intelligence on the future of work**

Technological transformations have always resulted in short – to medium term job losses before economies could generate substantial job creation again. As seen in the introduction, the Industrial Revolution defined disruption, yet Western economies

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68. Massachusetts Institute of Technology, EmTech Next 2018, June 4-5, 2018, MIT Media Lab, Cambridge, MA. See also Daron Acemoglu and David Autor, "Skills, Tasks and Technologies: Implications for Employment and Earnings," Ch. 12 in *Handbook of Labor Economics*, Orley Ashenfelter and David Card (eds.) (U.S.: Elsevier B.V., 2011).

69. See interview in Jim Tankersley, "Robots Are Hurting Middle-Class Workers, and Education Won't Solve the Problem, Larry Summers Says," *The Washington Post*, March 3, 2015.



subsequently – mainly after the Second World War – went on to reach unparalleled productivity and prosperity, including for the working class. Could this disruption, in contrast, lead to a prolonged period of dire unemployment for millions or more and require decades for the global economy to adjust again?

As suggested above, experts and observers of the current transformations can be broadly sorted into an optimistic camp versus a pessimistic one. The former, in which members and leaders of the tech industry dominate, believes that this turning point in history will have compensation effects typical of the self-regulating power of the market comparable to those of similar technological revolutions in history. Among the pessimists, some conjure up the specter of human work as a whole made virtually obsolete. One main argument put forth by the pessimists is that this technological revolution is radically different from the previous ones. This trend has been embodied since 2013 by the seminal analysis of Frey and Osborne, in which the two Oxford University economists demonstrated that up to 47 percent of all American jobs could be lost to automation in the near future. They argued that what makes this wave of technological advances different is that machine learning (the ability of AI systems to learn independently from experience through data without being programmed for it) and mobile robotics allow machines to perform tasks that until now have been considered uniquely human – which goes far beyond the routine and repetitive tasks that AI has all but conquered. This new scope of automation includes cognitive actions such as self-driving and legal writing. This, the authors believe, will translate into automation that, unlike in previous waves of transformation, will not yield the compensation effects of sufficient job creation that had occurred over time in the past.<sup>70</sup>

In 2014, a year after the publication of this study, the subject of technology and unemployment dominated the World Economic Forum meeting at Davos. A Pew Research Center survey carried out at the summit showed that participants identified “structurally high unemployment/underemployment” as the second global risk of highest concern in a list of ten.<sup>71</sup>

One important driver of the fear generated by the AI revolution is that it is now believed that it will affect white-collar as well as blue-collar jobs, while the initial prevalent perception had been that, as in the past, the main impact would be on low – skilled jobs, so that at the very least the change, though daunting, would remain on known territory. Indeed, as early as 2012, Vinod Kholsa, a Silicon Valley investor, ventured to

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70. Carl Benedikt Frey and Michael A. Osborne, “*The Future of Employment: How Susceptible Are Jobs to Computerisation?*” Oxford University, September 17, 2013.  
[www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)

71. Jacob Poushter, “World Economic Forum Survey Identifies Top 10 Global Risks for 2014,” Pew Research Center, January 23, 2014.

predict that in health care AI would make 80 percent of doctors redundant.<sup>72</sup> Another prevalent forecast is that AI and robots will affect the developing world even more than the developed one, because, as automation gains ground in the West, industrial jobs outsourced to developing countries will collapse (much as what happened with the rise of the Industrial Revolution.) A 2016 United Nations report estimates that two thirds of all workers in the developing world could be replaced by automation.<sup>73</sup>

Though there seems to be a prevalence of research supporting the pessimists' camp, other studies have found that job elimination from automation was vastly overestimated. A 2016 OECD working paper establishes that automation and digitalization are unlikely to destroy a large number of jobs. It rejects the occupation – based approach of Frey and Osborne and suggests instead a task-based approach. It argues that the estimated share of jobs at risk should not be equated with actual employment losses for three reasons. First, automation is a slow process and technological substitution does not usually happen as expected. Second, workers can adjust to technological changes by switching tasks, which prevents unemployment. Third, technological changes also generate new jobs by stimulating higher competitiveness and demand for new technologies.<sup>74</sup> In addition, this year, the Brookings Institution analyzed 28 industries in 18 OECD countries from 1970 to 2018 and found that automation not only did not reduce the overall number of jobs available but even increased it, though it also showed that automation has caused wage stagnation by reducing the share of human labor in the value added to work.<sup>75</sup>

As the handful of research publications mentioned here from an overwhelming volume of analytical work produced on the subject over the past three decades makes clear, we are back to the original observation that forecasts of job losses to automation and AI in the coming years, and arguments made on behalf of one side or the other, far from dispelling the confusion, result in adding to it. This poses a major problem for a host of stakeholders in today's society such as, among others, policymakers, business owners and leaders, workers and, most significantly, for the higher education sector. Be that as it may, the next logical question is that of what skills will be in demand in the labor markets of the future.

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72. Vinod Khosla, "Do We Need Doctors or Algorithms?," Temin and Company, January 10, 2012.

73. "Robots and Industrialization in Developing Countries," UNCTAD, November 2016.

74. Gregory M.T. Arntz and U. Zierahn, "The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis," *OECD Social, Employment and Migration Working Papers*, No. 189, OECD Publishing, Paris.

75. David Autor and Anna Salomons, "Is Automation Labor-Displacing? Productivity Growth, Employment, and the Labor Share," BPEA Conference Draft, Spring, the Brookings Institution, 2018.

#### 4. Tomorrow's skills

Research, media articles and societal debates on the subject of how to prepare future workers for the challenges of the automating economy are also plentiful. Paradoxically though, they all seem to be pointing in similar directions – a surprising fact in view of the heterogeneous character of impact forecasts.

Most studies and prognoses converge to establish that broadly new skills will be necessary for people to either simply survive, or thrive – depending on one's outlook – in the digital and AI age. As seen above, a growing number of institutions of higher learning across the world are already undertaking major changes in the curricula they propose to students and in the guiding they offer through academic programs. However, by most accounts, many more educational transformations will be needed for well-paying work to remain a viable option in the years or decades to come, and these transformations of course do not solely involve colleges and universities.

Besides the lack of visibility in future labor trends, first and foremost among the factors that are putting educational and training institutions in a difficult position is the pace of technological advances. A 2015 Burning Glass Technologies report showed that the demand for data-science skills had tripled over only five years. It also concluded that many of the skills needed to remain in demand in the future labor markets – such as, inter alia, organization, communication, negotiation, and writing, analytical and computer skills – were skills that could be learned throughout a professional path.<sup>76</sup>

Earlier this year, the McKinsey Global Institute published an extensive report on future skills (*see A12, Automation and AI will change the skills needed in the workforce*). The study quantifies time spent on 25 core workplace skills today and in the future in the United States and five European countries, focusing on five activity sectors: banking and insurance, energy and mining, healthcare, manufacturing and retail. It proposes five key findings, three of which apply to the skill supply side. First, the demand for technological skills (least in demand today) will surge by 55 percent until 2030, followed by emotional skills (e.g. leadership, managing others). Second, the demand for basic cognitive skills (e.g. data input and processing) and manual skills (e.g. equipment operation) will drop by 14 and 15 percent respectively. Third, the demand for high-skilled workers will grow and job loss caused by automation will mainly affect low-skilled workers, thus exacerbating the growing inequality trend of the past two decades.

Many other studies and findings could be reviewed, with similar results. Unlike with research seeking to forecast the proportion of jobs that will be eliminated by AI and automation and within what timeframe, foresight surveys that focus on skills draw a clear picture of where to go for young people who are considering post-secondary training

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76. The Human Factor, The Hard Time Employers Have Finding Soft Skills,” Burning Glass Technologies, 2015. [www.burning-glass.com/wp-content/uploads/Human\\_Factor\\_Baseline\\_Skills\\_FINAL.pdf](http://www.burning-glass.com/wp-content/uploads/Human_Factor_Baseline_Skills_FINAL.pdf)

or education options. What remains to be seen is whether many institutions involved in post-secondary education, universities in particular, will be able to implement the changes that would allow them to impart those talents.

Tomorrow's skills seem to be embodied by two major characteristics. First, competences across the board, even with high levels of specialization, will have to include a mixed range of both professional and personal skills. Second, acquiring skills will no longer be confined to the formative years of life but will continue throughout professional life via life-long learning, i.e. life-long training and retraining.

This clear-cut end to a rather perplexing overview of future trends in labor warrants a direct transition to the broad conclusion of this report.

## ► Conclusion

Taking stock of the dramatic societal and economic transformations that are under way prompts the question: are we ready?

Much of the literature devoted to the future of work argues that the answer is no. Governments and lawmakers are not by and large moving to put forth policy and legal frameworks aimed at reining in the impact of what may be a tidal wave on developed and developing societies alike. Proposals abound, such as government funding of lifelong training and retraining, the implementation of a universal basic income or even – at Bill Gates' suggestion – taxing robots. It is beyond the scope of this report to attempt to weigh in on such questions. But focusing on institutions of higher education alone inspires the same question: are they ready?

To remain relevant in the face of such daunting changes can be a harrowing endeavor, and it must be feared that not all academic institutions will be able to live up to the challenge. Pointing the way toward how colleges and universities should evolve to adapt are the two major characteristics that the current research consensus seems to ascribe to the skills that will be in demand tomorrow: the ability to engage in life-long learning, and the acquisition of hybrid and nimble skills. It would seem wise to imagine that only those universities that can rapidly embrace this new reality and reinvent themselves accordingly have a chance of thriving in what is certain to be an even more competitive landscape in the future. Many may dislike how these trends will affect the very core and nature of higher education. But just as an alternative economic model is yet to emerge across the planet, so it seems that there will be little leeway in seeking unconventional paths.

Depending on the socio-economic policies of countries, initiators and actors of life-long learning frameworks today are mainly found either in the business sector, where employers invest in training and retraining staff, or at state level where governments engage in policies that either update or redirect workers' skills – in many cases without devoting the necessary impetus and budgets to the task. This is unfortunately true of

the United States and most of the European Union, with the exception of Scandinavian countries, which have been implementing efficient reskilling policies for their populations for decades. In years to come, universities, which have by and large stayed away from or even looked down on these programs, should become major players in life-long learning. The example of Stanford's "open-loop" university and of Michigan University may be an indication of a wise developing trend. An economy where knowledge acquired at an early stage in life will no longer last through an entire career path seems to offer an opening field of development and growth for institutions of higher learning intent on remaining competitive. The budgets and organizational efforts required to seize this opportunity may render the choice difficult for countless universities, but there is little doubt that the prospect carries high potential for the higher education sector. Hybrid skills, the other marker for future skills in demand, can also be seen as an opportunity. Reorienting curricula to foster such flexibility will require a type of restructuring that makes increasing room for interdisciplinary teaching and learning. This too, for many institutions, will represent a major endeavor. But in a tech-dominated society, striving to cater to this need may well be what could spell redemption for the humanities and liberal arts. A growing number of universities are now offering hybrid degrees in science and humanities and calls are rising from education professionals, the business sector, international institutions and other stakeholders to put an end to the dichotomy between the two broad fields in tertiary education.

In the final analysis, the world to come, such as delineated in these countless reports, studies and surveys, may well prove unendurable if the thoughtfulness, sense of moral and ethical priorities and historical continuity, and – simply – the elevated literacy that the study of the humanities have bestowed on students for many centuries are not a foundational part of the spiritual compass among the educated youth. ▀

## A1 ► Cover letter to the Triple Revolution Report

March 22, 1964

Dear Mr. President:

We enclose a memorandum, *The Triple Revolution*, for your consideration. This memorandum was prepared out of a feeling of foreboding about the nation's future. The men and women whose names are signed to it think that neither Americans nor their leaders are aware of the magnitude and acceleration of the changes going on around them. These changes, economic, military, and social, comprise *The Triple Revolution*. We believe that these changes will compel, in the very near future and whether we like it or not, public measures that move radically beyond any steps now proposed or contemplated.

We commend the spirit prompting the War on Poverty recently announced, and the new commissions on economic dislocation and automation. With deference, this memorandum sets forth the historical and technological reasons why such tactics seem bound to fall short. Radically new circumstances demand radically new strategies.

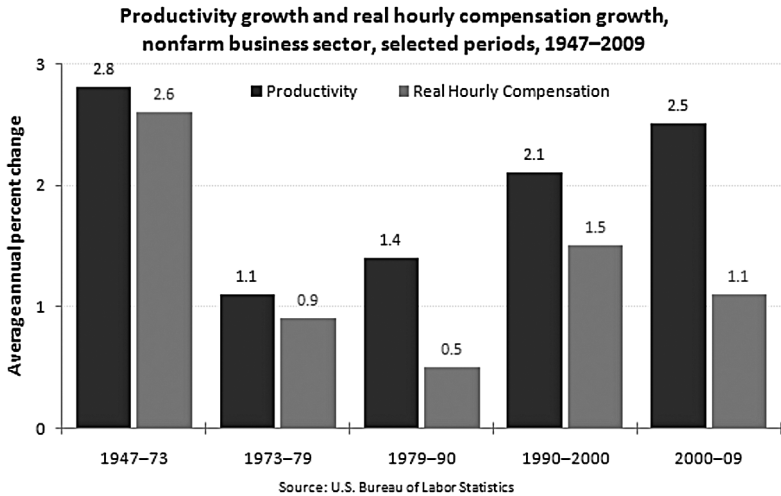
If policies such as those suggested in *The Triple Revolution* are not adopted we believe that the nation will be thrown into unprecedented economic and social disorder. Our statement is aimed at showing why drastic changes in our economic organization are occurring, their relation to the growing movement for full rights for Negroes, and the minimal public and private measures that appear to us to be required.

Sincerely,

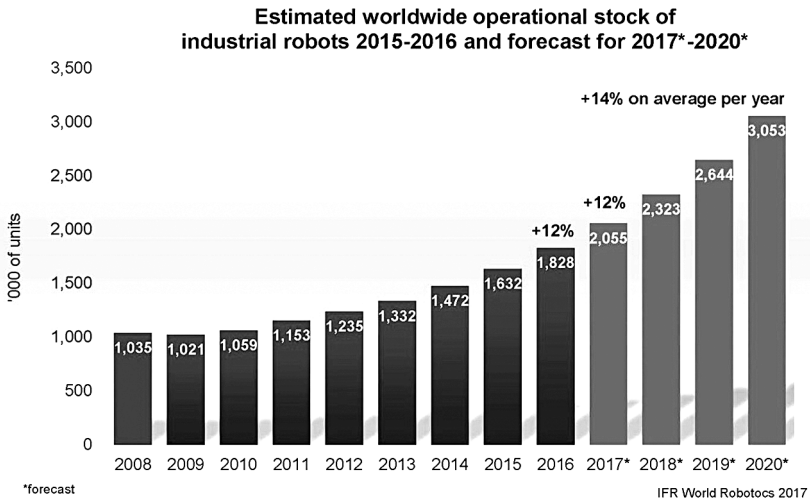
Donald G. Agger  
Dr. Donald B. Armstrong  
James Boggs  
W. H. Ferry  
Todd Gitlin  
Roger Hagan  
Michael Harrington  
Tom Hayden  
Ralph L. Helstein  
Dr. Frances W. Herring  
Brig. Gen. Hugh B. Hester  
Gerald W. Johnson  
Irving F. Laucks

Gunnar Myrdal  
Gerard Piel  
Michael D. Reagan  
Ben B. Seligman  
Robert Theobald  
William Worthly  
Alice Mary Hilton  
David T. Bazelon  
Maxwell Geismar  
Philip Green  
H. Stuart Hughes  
Linus Pauling  
John William Ward

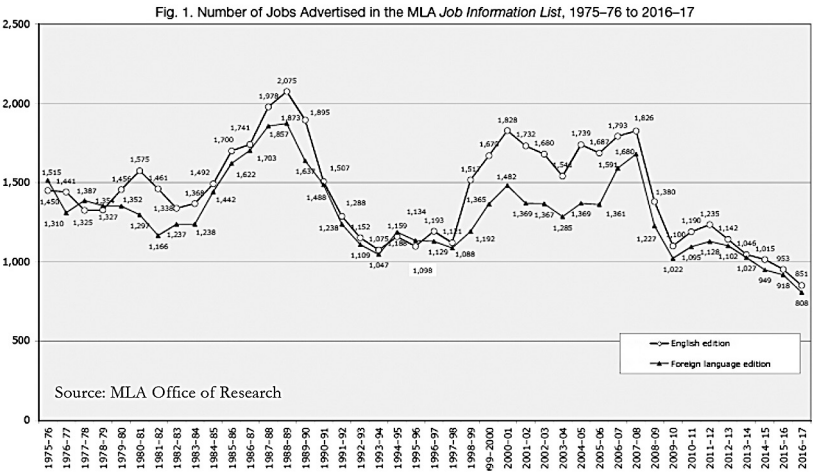
## A2 ► Productivity growth vs. compensation growth in the U.S., 1947-2009



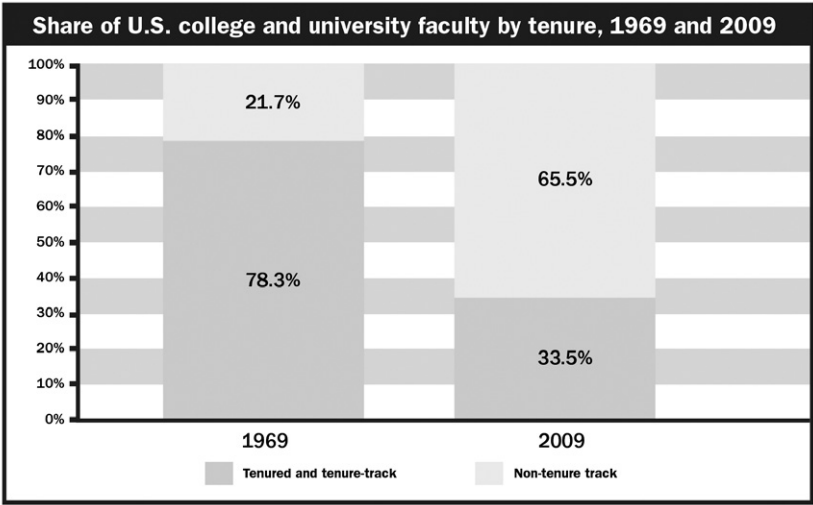
## A3 ► Growth and forecasted growth in operational stock of industrial robots 2008-2020



#### A4 ► Number of teaching jobs in English and foreign languages fields advertised in the MLA Job Information List 1975-76 to 2016-2017



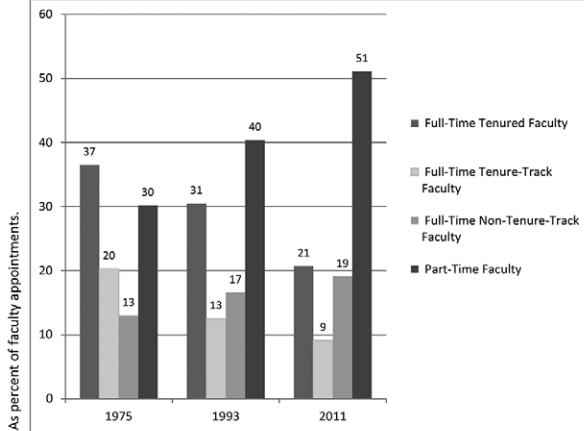
#### A5 ► Share of U.S. college and university faculty by tenure, 1969 and 2009



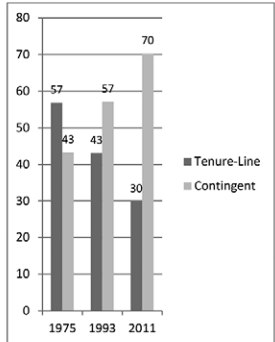


## A6 ► Trends in faculty employment status, 1975-2011

### Trends in Faculty Employment Status, 1975-2011



A different way of looking at the same numbers--all tenure-line faculty grouped together and all contingent faculty grouped together.

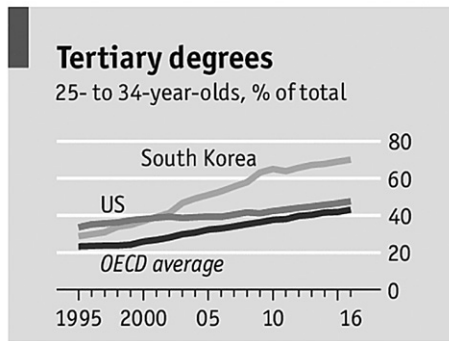


**Notes:** All institutions, national totals. Figures for 2011 are estimated. Figures are for degree-granting institutions only, but the precise category of institutions included has changed over time. Percentages may not add to 100 due to rounding.

**Source:** US Department of Education, National Center for Education Statistics, IPEDS Fall Staff Survey; published tabulations only.

**Compiled by:** AAUP Research Office, Washington, DC; John W. Curtis, Director of Research and Public Policy (3/20/13)

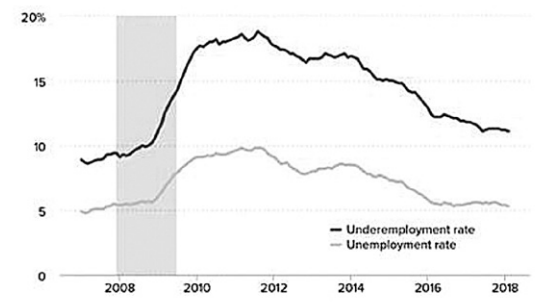
## A7 ► Increase in college graduates in South Korea, U.S. and OECD countries 1995-2016



Economist.com

A8 ► Unemployment and underemployment rates for college graduates aged 21-24, 2007-2018

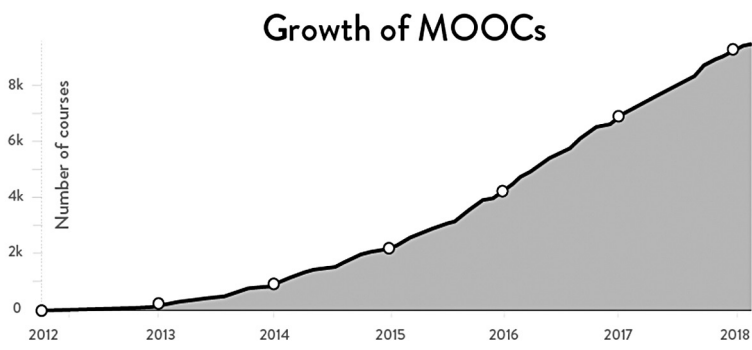
**The underemployment rate for young college grads is still significantly higher than it was before the recession**  
Unemployment and underemployment for young college graduates (ages 21-24) not enrolled in further schooling, 2007-2018



**Note:** This series is based on a 12-month moving average. The most recent data point is the average of March 2017 through February 2018.

A9 ► Growth of MOOCs 2012-2018

CLASS CENTRAL



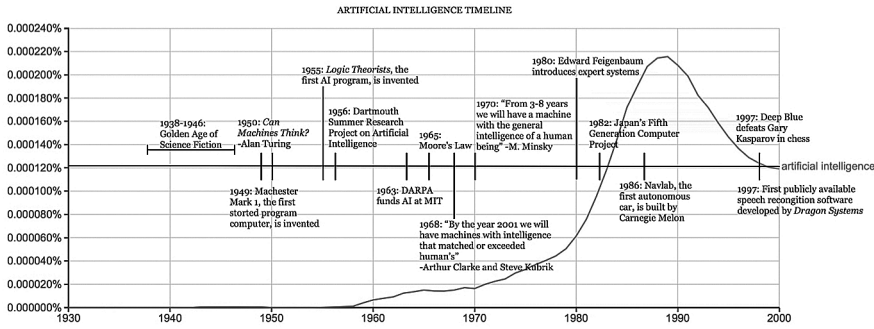
By the Numbers: MOOCs in 2017

## A10 ► Predicted jobs automation will create and destroy

### *Predicted Jobs Automation Will Create and Destroy*

When	Where	Jobs Destroyed	Jobs Created	Predictor
2016	worldwide		900,000 to 1,500,000	Metra Martech
2018	US jobs	13,852,530*	3,078,340*	Forrester
2020	worldwide		1,000,000-2,000,000	Metra Martech
2020	worldwide	1,800,000	2,300,000	Gartner
2020	sampling of 15 countries	7,100,000	2,000,000	World Economic Forum (WEF)
2021	worldwide		1,900,000-3,500,000	The International Federation of Robotics
2021	US jobs	9,108,900*		Forrester
2022	worldwide	1,000,000,000		Thomas Frey
2025	US jobs	24,186,240*	13,604,760*	Forrester
2025	US jobs	3,400,000		ScienceAlert
2027	US jobs	24,700,000	14,900,000	Forrester
2030	worldwide	2,000,000,000		Thomas Frey
2030	worldwide	400,000,000-800,000,000	555,000,000-890,000,000	McKinsey
2030	US jobs	58,164,320*		PWC
2035	US jobs	80,000,000		Bank of England
2035	UK jobs	15,000,000		Bank of England
No Date	US jobs		13,594,320*	OECD
No Date	UK jobs	13,700,000		IPPR

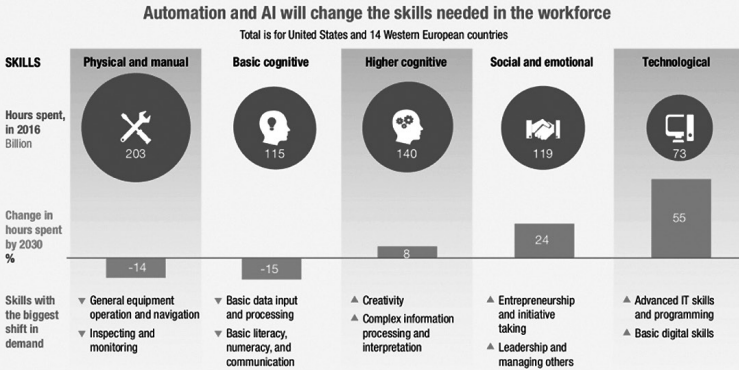
A11 ► Artificial Intelligence timeline 1930-2000



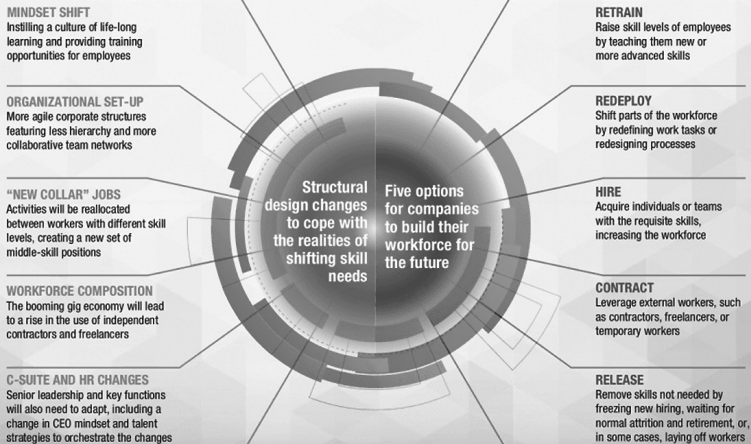
Source: The History of Artificial Intelligence, Science in the News, Graduate School of Arts & Sciences, Harvard University

Source: MIT Technology Review, Erin Winick, Jan. 25, 2018

## AI2 ► Automation and AI will change the skills needed in the workforce



## HOW WORKFORCE SKILLS WILL SHIFT



### Competition for talent

To recruit the people they need for a new era of automation, companies say they will



# HOW WORK IS CHANGING

## NOTES ABOUT AN IMMEDIATE FUTURE<sup>1</sup>

14

by Domingo Sugranyes Bickel

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### SUMMARY

When trying to look beyond the persistently bad unemployment figures in Spain, work appears as a complex and far from homogeneous reality. Intellectual ingenuity is needed to read it. A fact imposes itself immediately: the duality between traditional jobs and precarious or ephemeral jobs; these are part imposed, part freely chosen. Home working has transformed labour relationships, with positive and negative consequences. Psychological ailment is on the increase in companies. Flexible working time makes family conciliation more difficult. The black economy maintains a substantial part of work under unsafe condition. Below these changes, one can perceive the effects of technology, whose impact on the future of work is uncertain. While some pay attention to “transhumanist” utopia and the end of work, the COVID pandemic has brought to light that many first necessity jobs are persistently undervalued. Against this set of unanswered questions, there is an urgent need for a deeply renewed social dialogue, far from polemics, to build a new consensus on the lines of the common good.

### I ► Who works and who doesn't

We are accustomed – perhaps anesthetized – to Spanish unemployment figures that remain persistently among the highest in Europe, with more than 35% youth unemployment between 15 and 24 years. At the same time, we know that in several European countries – and even in parts of Spain – with the post-pandemic economic revival, many companies find it difficult to hire the skilled workers they need. It may be useful for a moment to look at things from another point of view: that of labour participation, that is, the percentage of the active population (employed and unemployed) out of the total working-age population (between 15 and 64 years old). According to OECD data<sup>2</sup>, the latest figures for labour participation in Spain are around 57%, compared to, for example, 48% in Italy and 73% in Sweden. The level of female participation in Spain is 52%. When considering only people between 25 and 64 years, the Spanish participation rate is 79% (71% in Italy and 89% in Sweden). There is therefore a wide margin of people in our country who are not currently looking for work, but who could do so.

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1. Translated from an article published in *Corintios XIII, Revista de teología y pastoral de la caridad*, Cáritas Española Editores, october-diciembre 2021.

2. <https://stats.oecd.org/Index.aspx?DataSetCode=STLABOUR>

In a recent book<sup>3</sup>, Italian sociologist Luca Ricolfi proposes the provocative concept of “Mass Stately Society”: a country in which only about half of the total population works in paid jobs, in which a good part of the inactive enjoy a comfortable standard of living (largely young people who neither study nor work and live on family resources), whereas the active part includes an exploited minority of low-paid workers who subsist in conditions of quasi-slavery, many of them immigrants. His dystopian description refers to the social characteristics of Italy, perhaps reflecting a little less those of Spain. But it applies here too to some extent: anyone may be struck by the contrast between high levels of inactive or unemployed young people, on the one hand, and the images that are presented to us daily of a youth that loves the party and lives nonchalantly a time apparently devoid of any demands.

This image, maybe excessive and unfair, should at least serve to provoke a critical reflection on the transformation of work now underway. The evolution of work raises many unanswered questions. It is important to approach it with prudence and mental freshness. Work is not a homogeneous reality that can be “distributed”. Employment statistics do not fully reflect the complex and diverse reality of work. And the fact of getting to work does not depend only on the creation of jobs by entrepreneurial initiative – although this is the essential engine – or by the public sector. It also depends, and perhaps previously, on the availability, on the level of training and on the expectations of the candidates themselves.

## **II ► Post-pandemic work: questions**

The pandemic has profoundly changed our way of working. In fact it has only accelerated changes that were already taking place as a result of previous evolution and for different reasons.

The first thing that stands out is the duality between traditional employment – stable long-term jobs, with fixed hours and a 38-hour workweek – and the multiple forms of variable, short and often ephemeral jobs of the “gig economy”, a regime of brief and isolated performances. This duality is reflected in the contractual and economic reality of the labour “market” in Spain, a duality often denounced between long-term contracts and “junk” contracts: high levels of protection enjoyed by traditional contracts are an obstacle to the generation of jobs and contribute to maintaining the precariousness of less stable hiring formulas. A very conflictive and (badly) politicized issue.

Trying to go beyond the usual debate that has us so often prisoners of sterile polarization, it is worth analysing the reason for “gig” jobs. There are economic and technological reasons for this, no doubt. But, at least in part, in addition to technical and commercial motivations, these formats also respond to aspirations of young people who approach

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3. RICOLFI, L. *La società signorile di massa*, 2019.

work without the idea of long-term permanence. For many, paid work is seen as a needed means of achieving autonomy, and not as an arable occupation in itself. The “gig” economy allows freedom and flexibility to both parties, employers and workers. In many cases, it may not be chosen by workers, but a provisional solution in the face of the impossibility of finding a permanent job; in extreme situations, which particularly affect migrants employed in intensive agriculture, precarious conditions are a harsh imposition of the strongest party; but in other cases, flexibility may be a preferred option for preserving individual freedom. In this sense, at least in these latter cases of relatively privileged situations and “covered backs,” aspirations for autonomous development can harbour the seeds of a capacity to undertake, and it could be a mistake to put limits on them.

Greater work flexibility is also accompanied by a greater sense of insecurity and an increase in problems of psychological maladjustment and anxiety. Throughout the pandemic, it seems, cases of psychological ailments have intensified even in the most stable companies, creating the need for a care service comparable to that of the occupational medicine service. Human resource management have had to face the question of how far companies should take charge of these interventions, while in the past they were considered strictly personal. In any case, and this is revealing, several start-ups have been developed specialized in the outsourcing of business psychological care.

### **III ► Home working and continuous working time**

Home working has transformed many things in companies. It has forced managers and team leaders to live on a capital of human relations and cooperation accumulated sometimes over the years. Today it is not clear if these good relations can be maintained among those who were already there, and if they can be created among those who enter new. In many companies, teleworking has been experienced as something positive, as an opportunity to strengthen internal ties of cooperation in the company. But it is likely that this is a passing effect. In fact, the problems of organization now arise with hybrid systems, partially presential and optional, such as those that many companies are implementing in the post-pandemic phase: will there be differences in remuneration between those who choose to always work in person, those who opt for a hybrid solution or those working only at home? How far is the company responsible for the cost of materials, equipment and operating expenses involved in teleworking? And how to ensure equal access to positions of responsibility for those who choose to telework?

Flexibilization also affects schedules. With or without teleworking, we are witnessing a generalization of unconventional work schedules to meet the needs of continuous service (in commerce, for example), in globalized businesses with time-zone differences in multinational companies, or to suit machines – robots or computers – which must be attended 24 hours a day every day... The work of 8 am to 3 pm typical of routine



administrative tasks is ending. With this, new freedoms arise, but also new problems as the already difficult conditions of work-life balance become more complicated.

Another order of questions – old but recurrent – is that of work in the underground economy, that of the well-known question “do I invoice you with or without VAT?”. Some experts estimate that the underground economy in Spain still accounts for more than 17% of GDP. There is a division of opinion on the effects of the pandemic: the generalization of card payments and online commerce may make the underground economy tend rather to retreat. But the problem of insecurity still stands for those who work in these fraudulent and risky conditions, lacking basic social protection.

#### **IV ► Technology: the end of human labour?**

Underneath these evolutions technological change is exerting its effects. General studies on the consequences of digitalization indicate a tendency to a reduction of routine work, in particular administrative work, in which for reasons of cost and quality (avoidance of errors) functions are being delegated to industrial robots and computing software based on “artificial intelligence” algorithms. However, works which require creativity and, even more, the capacity for empathy and care that are properly human are less exposed to being replaced. This means that the transformation lurks in the layers of average qualified jobs, leaving more “protected”, at both ends, those with higher and lower qualifications.

This topic was extensively addressed in the multidisciplinary seminar “Digital footprint: servitude or service?” organized by the Fundación Pablo VI between 2019 and 2021<sup>44</sup>. From an economic point of view, it is useful to study the history of technological revolutions of the past – textile industry in the nineteenth century, transportation and electricity in the twentieth century – to visualize the time elapsed between a first scientific discovery, until an invention among a hundred finally comes to solidify into a standardized technology. The effects that this process has on workers in each sector and on the population in general take time, but the increases in productivity and consumption that translate in the medium term into increases in well-being are spectacular.

Then as now, the transition period is difficult, especially when, as is currently the case, technology evolves more rapidly than people’s ability to learn. In any case, the debate results in a reinforced conviction: technology is the result of human work, technological change is a social construction, there is nothing in it that is uncontrollable by nature. Moreover, in many cases, technology has served to complement, not replace human labour. Today some jobs disappear, others are being created, and it is difficult to have an overview of the process. But through the demand for products and through policies and incentives, both consumer opinion and public authorities can nudge research and

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4. <https://www.fpablovi.org/index.php/huella-digital>. See especially the chapter on “The future of work” by Alfredo Pastor. To be published shortly in book form in Spanish.

development towards technologies that incorporate and reinforce human labour. The authorities must also ensure that competition is defended: each stage of technological revolution in history has led to a process of business concentration and oligopoly situations, and it has sometimes been necessary to correct this trend with appropriate reforms and policies, even by breaking up too powerful business groups.

In the ideologized view of some prophets of “transhumanism,” technology and the human person will somehow merge and human labour, as we know it, will disappear altogether. We are painted a utopian future in which machines and artificial intelligence will have absorbed all the tasks that require effort, and in which we will all be navigating in endless leisure, paid for by a benevolent State (the basic universal income of which small partial versions are already being tested) and distracted in endless digital game theme parks. These are science fiction perspectives that have glimpses of reality but ignore all the harsh permanence of conflicts and inequalities in today’s world. They are dreams that distance us from the real vision, that of a world in which a majority of human beings must fight to survive. For this majority, the ideologues of technology have no scenario in mind, except that of the “discard,” the rejection denounced by Pope Francis. Utopias based on the exclusion and separation of a part of humanity, protecting those who identify with technology and leaving the rest to their sad and definitive sunset, are at the opposite pole of what we could call an updated vision of the common good. And given this, it is necessary to develop a different thinking and action program, in which technology approaches the most disadvantaged populations, where they make it their own to develop their own models of digital development from the base.

## **V ► Low-paid or unpaid jobs**

In the “lower” rungs of the social scale there are many jobs that the pandemic has revalued, at least in theory: those of care for the sick and elderly in the first place, but also distribution workers and those of cleaning and maintenance, basic services in the health sector, transport of goods and food, agriculture, infant, primary and secondary education... Before Covid, we were not so clearly aware of their irreplaceable importance and the human quality provided by those who perform these essential proximity services day by day. They are in high demand and yet they are still low-paying, low-wage jobs. The question is whether society has instruments or whether there are forces capable of correcting this situation in a substantial way. Increasing the interprofessional minimum legal wage is the path followed by some rulers, but it is a “coffee for all” measure that ignores regional and sectoral differences and causes difficulties for many small companies without solving the specific issue. Better targeted approaches, true socio-economic “acupuncture,” would probably be necessary to reach those services, unanimously recognized as necessary, and improve their conditions. Above all, a permanent change of collective mentality will be needed in their favour.

First, the recognition of a fact: people are capable of extraordinary feats of service and care not for reasons of money, but for the intimate satisfaction of a job well done. This is the clearest demonstration that the abstraction of *homo oeconomicus*, with which some pretend to explain all economic behaviour, and which only moves for money, is incorrect. It just is not true in the simplest jobs, nor is it in jobs of very high specialization and high responsibility. Thus, it is fair to call for a revision of the lowest salaries, clearly undervalued. And also – as a co-responsible and exemplary measure – for a downward moderation of very high remunerations in prominent business positions. When you talk about work, of course, you're not just talking about paid employment. Families cared for by mothers or fathers – women have of course more experience of the “impossible” conciliation of family and professional work – or the generous dedication of many grandparents in our society: all this has no statistical recognition and, therefore, it is as if it did not exist. It would probably not be possible to pay for work in the household, which would entail immense bureaucratic waste. But somehow, perhaps through social protection measures (pensions, for example) they should be publicly recognized in a balanced society.

And finally, one cannot ignore the unpaid activity of those preparing as students or those who choose as retirees to dedicate free time to study or voluntary work. From a general point of view, as is being suggested here, these activities are as important as paid jobs and should be recognised with coaching and rewards.

## **VI ► Work and the common good: a topic for debate**

Facing with so many questions, we need a multidisciplinary dialogue in which experts participate alongside practitioners of labour relations. In the current socio-political context, it is common to observe how the social partners are capable of greater realism and are more pragmatic than political representatives. It is important to preserve this relative autonomy of labour relations and, at the same time, to ensure that new realities and uncertainties penetrate the minds and take their place at the dialogue table, so that attempts can be made to build little by little the elements of a new social, non-ideological and shared contract.

The future of work has more questions than answers. Asking the right questions is the first step. This is what will be tried from the end of 2021 to 2023 in a new seminar promoted by the *Fundación Pablo VI* on “Work is transformed”. The differential element of this effort will be, as befits a “think tank” dedicated to deepening the social teaching of the Catholic Church, renewed in a multidisciplinary way with the most current thought and debates. It will start from concrete realities in different sectors, trying in each case to discern how the flexibilization of working conditions has occurred, what consequences it has on different population groups, and how it can evolve. At the end, one hopes to draw conclusions and recommendations that translate an approach to

human work inspired in the common good into concrete steps, and which can serve to inspire political, business and educational decisions.

In this perspective, everything that can be done by public authorities, by business, by universities and educational institutions, and throughout society, will be useful to prepare people for a change that is still undetermined. The end of the process is not known, therefore in addition to the necessary applied technical knowledge, humanistic and ethical training that educates the capacity for discernment and helps to make future decisions is equally indispensable. And perhaps, rather than any kind of universal basic income, we should design systems that truly allow people to learn to work and to achieve in fact the dignity that work confers. Hence the essential importance in our society of a return to the forgotten concept of apprenticeship.



# CONCLUSIONS

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**L**audato si' clearly shows that human work is linked with the care of creation and the future of life and humankind on the planet. This research also highlighted the convergence of ethical perspectives arising from reflection on the future of work, the future of "our common home" and the future of the human family. Therefore, any innovation has to be evaluated within this triad: planet – social justice – future of humankind. For instance, through fair wages and social security systems, work promotes social justice. People have to earn enough to lead a dignified life. But there is a growing gap between the rich and the poor, while the number of "working poor" and the level of gender inequalities are increasing. The new forms of "flexibilized", through precarious employment contracts dissociate work from social protection and access to health or unemployment benefits. There is a global trend toward a regressive loss of labor rights and increase of precarious living conditions. Global value chains are always seeking the lowest cost locales, where workers are less protected and paid.

Several contributions by the research group reaffirmed that a system that prioritizes money over people and capital over human dignity is unacceptable from the point of view of Christian Social Teaching. A fundamental orientation in shaping work is the preferential option for the poor: *"Helping the poor financially must always be a provisional solution in the face of pressing needs. The broader objective should always be to allow them a dignified life through work"* (LS, n. 128). A measure for judging the humanity of a society is how it treats the poorest and the weakest. This has consequences for the understanding of work, which is much broader than just paid employment, encompassing a range of unpaid contributions to our societies, such as caring for children and the elderly.

Another concern connected to today's transformations in the world of work is work-life balance. From a biblical and theological perspective this resonates with the commandment of the Sabbath rest, which constitutes a barrier against becoming slaves to work, whether voluntarily or by force, and against any kind of exploitation, hidden or evident. Consequently, *Laudato si'* emphasises: *"We are called to include in our work a dimension of receptivity and gratuity, which is quite different from mere inactivity. Rather, it is another way of working, which forms part of our very essence. It protects human action from becoming empty activism; it also prevents that unfettered greed and sense of isolation which make us seek personal gain to the detriment of all else"* (LS, n. 237). Sunday is linked with the fundamental right to enjoy a time to rest. This gain new importance in the era of social media, which make us constantly and always

accessible. Thus, the border between work and private life is dissolving. It is laudable when new legislation is passed to grant workers the “right to disconnect”.

There is an urgent need of a thorough and rapid transformation of the production and consumption system, as well as the development of an ethically and politically responsible leadership. The market alone will not solve the problems. We have to change past trends, and this depends on changing minds. A central insight of *Laudato si'* is that everything is deeply connected: the safeguarding of the environment cannot be separated from ensuring justice for the poor and finding answers to the structural problems of the global economy. The Pope calls on us to change the existing models of growth which are incapable of guaranteeing respect for the environment, openness to life, concern for the family, social equality, the dignity of workers and the rights of future generations. Altogether this research demonstrates that Christian Social Teaching and especially *Laudato si'* offer a conceptual frame and a roadmap to redesign and change our current economic, financial and social system.

This project has also been very beneficial in terms of strengthening and mobilizing UNIAPAC's internal networks around the critical issue of the future of work. The project demonstrated the importance of complementarity between research and capacity building activities and contributed to a cooperative process of collective learning and working together with other organizations. The project has especially contributed to establishing closer links between business and the academic world; to expanding UNIAPAC external networks; and to nurturing the internal debate on the role of business in society with diverse positions and critical visions. ▀

# AFTERWORD

by Martin Maier S.J.

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**T**his book is a contribution to promote and implement the Encyclical *Laudato sí* of Pope Francis in areas related to work. With *Laudato sí* Pope Francis has succeeded in triggering in the past five years an extensive dialogue between the political and business worlds and civil society on the future of the planet. As his choice of name suggests, the Pope has made the care of creation a central concern of his pontificate. The title of his Encyclical are the opening words of the Canticle of St. Francis “Praise be”. In this poem the Poverello praises and thanks God for the beauty of Creation. The sub-title: “On care of our common home” adds to the major tune of the Song of Creation a tune in a minor key. The first chapter of the letter, in which the Pope addresses not only Catholics but all those who dwell on earth, summarises the consensus among scientists: that the dangerous climate change is largely caused by man and is mankind’s responsibility. In addition to global warming, the questions of clean water supply and the loss of biodiversity are also addressed. The diagnosis leaves no doubt: *“Never before have we mistreated and damaged our common home so much as in the last two centuries.”* (53)

In his Encyclical’s the Pope also sketches out a theology and spirituality of Creation. A basic premise is that the Creation has been entrusted to human beings as a gift from God, and that it must be protected and preserved. We are the stewards of our common world. Theologically speaking, the disturbed relationship between human beings and God’s Creation is an expression of sin. And thus the imperative is born of an “ecological conversion”, which Pope John Paul II has already formulated.

Throughout the document the issue of ecology is considered to be a question of justice. This can be seen in a parallel treatment of the cries of the poor and the cries of nature. Here also the Pope harks back to Francis of Assisi, for whom care for creation and care of the poor and neglected were closely linked. Those responsible for the dangerous warming and environmental degradation are mostly located in the industrialised countries of the North, while those suffering the consequences live mainly in the impoverished lands of the South. Hence the Pope derives the intrinsic principle of “different but common responsibility” on which the UN countries at their Rio Summit of 1992 agreed. The industrialised countries are the main cause of the global environmental crisis and thus bear a greater responsibility for the transition to sustainable development. Additional topics which run through the entire Encyclical are: inter-generational justice; criticism of the throwaway culture and prevailing paradigms of technology, economy



and progress; the firm belief that ecological, economic and social issues are internally interlinked; the concept of the global commons such as clean water, the oceans, forests and the atmosphere; the intrinsic value of all creatures, and the need for new models for production and consumption.

In his critique of modernity, the Pope is clearly influenced by Romano Guardini's book *"The End of Modernity"*. The ecological crisis is the external manifestation of the ethical, cultural and spiritual crisis of modern humanity. He does not, however, fall into cultural pessimism; instead he recognises the many different facets of modernity and technological progress which he sees in a very positive light.

A crucial question of *Laudato si* is: *"What kind of world do we want to leave to those who come after us, to children who are now growing up?"* This question concerns for the Pope not only the environment in isolation but the general direction of our world, its meaning and its values. The underlying questions are: *"What is the purpose of our life in this world? Why are we here? What is the goal of our work and all our efforts? What need does the earth have of us? It is no longer enough, then, simply to state that we should be concerned for future generations. We need to see that what is at stake is our own dignity. Leaving an inhabitable planet to future generations is, first and foremost, up to us. The issue is one which dramatically affects us, for it has to do with the ultimate meaning of our earthly sojourn"* (160).

*Laudato si* is a document both dramatic and hopeful. Dramatic because it leaves the reader in no doubt that the prevailing global system, with its reckless exploitation of natural resources and dangerous climate change, is heading for catastrophe. Hopeful because the Pope does not consider this dynamic to be inevitable, but instead indicates ways to alter our course and opportunities for transformation. In this context, he speaks of a "bold cultural revolution" (114). This is closely connected to his concept of an "integral ecology" and an "ecological conversion." He calls for another way of looking at things, *"a way of thinking, policies, an educational programme, a lifestyle and a spirituality which together generate resistance to the assault of the technocratic paradigm"* (111).

Politicians, scientists, academics and representatives of business and a large number of social movements have responded to the Pope's invitation to join a dialogue on the shaping of the future of our planet. For Andrea Tilche, former head of the "Climate action and earth observation" Unit at the European Commission, the Encyclical is *"the most innovative among the many proposals put forward by world leaders in recent years on the road to a binding decision on climate change"*.

Specially interesting have been the reactions from the world of science. Renowned scientific journals like *Nature* and *Science* published approving editorials both before and after the publication of the encyclical. Marcia McNutt, chief editor of *Science*, wrote: *"I applaud the forthright climate statement of Pope Francis, currently our most*

*visible champion for mitigating climate change.*" In its October 2015 edition the journal *Nature Climate Change* even dedicated an 11-page special to the discussion of the encyclical. In the general context of climate science, it has been emphasised again and again in comments made by climate scientists that the encyclical rightfully refers to the Intergovernmental Panel on Climate Change (IPCC), whose reports reflect the current state of scientific knowledge.

Also this book, which is part of the project "The future of work after *Laudato sí*", answers to the Pope's invitation for a comprehensive dialogue on the future of the planet. The common denominator of the different contributions is that we are experiencing an epochal change which affects all dimensions of our life and evidently also human work. What also goes through the book is the conviction that Catholic Social Teaching offers essential orientations and principles to shape this change.

It clearly appears with *Laudato sí* that the future of human work is linked with the question of the care of creation and the future of life and the human community on the planet. We cannot separate the future of human work, the future of our common home and the future of the human community. Any innovation has to be evaluated with this trilogy: planet – social justice – future of humanity.

In a theological perspective, human work is seen as a participation in God's creation. In the ignatian spirituality, which underlies *Laudato sí*, God is imagined as labouring in creation. He acts in the manner of a person at work. By working humans imitate the creating God and they cooperate in his continued creation (80).

A major contribution of Catholic Social Teaching to the concept of work is understanding it as part of human dignity. The Compendium of the Social Doctrine of the Church states: "*The human person is the measure of the dignity of work.*" (271) In a Christian perspective work is much more than merely a source of income. It is an integral part of human identity and fulfilment. Martin Luther, the great church reformer, put it in this wonderful metaphor: "As the birds to flying, so is man born unto labour." (A Treatise on Good Works. An Interpretation of the Ten Commandments). *Laudato sí* underlines, similarly, that "we are created with a vocation to work" (118). This helps us to care for creation, to define and integrate ourselves in society and to unleash the rich personal growth inherent in all of us.

Catholic Social Teaching can contribute to these changes with an in-depth-reflection about the ethical and anthropological foundations. We cannot have a sustainable and healthy economic life without collective values and a healthy concept of the human being, a healthy anthropology. Christian social thinking emphasizes the need to place the dignity of the worker at the center of thinking on how we regulate future work. Economy is at the service of the human persons. A false and individualistic anthropology reduces the human person to a consumer and a means of production. But the human

person is at first hand a relational being. The work culture that should be promoted must consider a person in their entirety, as an end and not as a means. Human persons are not machines; they are people who work, dream, and have feelings and histories and plans. They belong to a family and to a social, cultural and economic environment; and they need to feel a sense of accomplishment in all their aspects.

Closely linked with this anthropological reflections is the question of meaning. Work is more than only a means to earn money. It has a social dimension and it gives also security and self esteem. It is a vocation. A danger today is that technology determines human working conditions while it should be the other way around. Ethical values connected to work are freedom, security, equity, dignity.

An inherent dimension of human work in the understanding of Catholic Social Teaching is social justice. Through just wages and social security systems, work promotes social justice. People have to earn enough to lead a dignified life. But there is a growing gap between rich and poor and the number of the “working poor” and inequalities based on gender are increasing. The new forms of “flexibilized”, precarious working agreements dissociate work from social protection and access to health or unemployment benefits. General trend in the world today is toward regressive loss of labor rights and increase of precarious living conditions. The global value chains are always looking for the cheapest places, where the workers are less protected and paid.

A system that prioritizes money over people and capital over human dignity is unacceptable from the view of Catholic Social Teaching. A fundamental orientation in shaping work is the preferential option for the poor: *“Helping the poor financially must always be a provisional solution in the face of pressing needs. The broader objective should always be to allow them a dignified life through work”* (128). A criterion for the humanity of a society is how it treats the poorest and the weakest. This has also consequences for the understanding of work: Work is much broader than paid employment, encompassing a range of unpaid contributions to our societies such as caring for children and the elderly.

Another major contribution of Catholic Social Teaching for a healthy work-life balance is the biblical commandment of the Sabbath rest. The memory and the experience of Sabbath constitutes a barrier against becoming slaves to work, whether voluntarily or by force, and against any kind of exploitation, hidden or evident. Consequently *Laudato si* emphasises: *“We are called to include in our work a dimension of receptivity and gratuity, which is quite different from mere inactivity. Rather, it is another way of working, which forms part of our very essence. It protects human action from becoming empty activism; it also prevents that unfettered greed and sense of isolation which make us seek personal gain to the detriment of all else”* (237). Sunday is linked with the fundamental right to enjoy a time to rest. This gains new importance in times of

the social media. Through the social media we are constantly and always reachable. Thus the border between work and private life is melting. It is laudible that a French government legislation in 2017 granted workers the “right to disconnect”.

In November 2018 the Commission of the Bishops’Conferences of the European Union (COMECE) published a reflection paper, *Shaping the Future of Work*, which takes into account also the *Laudato si*. The document encourages the EU to shape the ecological and digital transformations of the world of work aiming at the common good. It highlights the role of work as an integral part of human identity and as an instrument to care for creation. Through the lens of Catholic Social Teaching, it pleads for a decent, sustainable and participative world of work for all, which, based on an economy that serves the integral human development, will contribute to a more inclusive and prosperous society. The COMECE reflection paper furthermore underlines : *“This world of work will be decent if it promotes just working conditions, including a dignified family-oriented income and sufficient space for life in family and society. This world of work will be sustainable if it provides the conditions for a stable and fruitful life of the present and future generations taking into account the ecological dimension of work. This world of work will be participative if workers and employers can shape together at all levels the conditions of their employment through social dialogue and cooperate in tripartite partnership with the state on the formulation of policies that affect their work.”*

Historic changes begin with ideas. This is also highlighted by the new report to the Club of Rome, which quotes extensively *Laudato si*. The report calls for a “new philosophy” and a “new Enlightenment”. The ecological crisis is both a social crisis and a crisis of values. What is the value of living? What gives life substance and meaning? Ultimately, this is a matter of the truth of one of the key verses of the Gospel: “What does it profit a man to gain the whole world and forfeit his soul?” (Mark 8:36). Unbounded pursuit of profit in the context of unbridled capitalism destroys both the environment and people’s souls. We need to rediscover some simple truths: sharing enriches. Being human means acting altruistically for others.

Today’s capitalism is actually making things worse, both for the environment and for people. The capitalist incentive structure rewards cost cutting and short-term profits. Extreme free-market thinking is at the root of the damage humanity is inflicting on the planet. There is an urgent need of a thorough and rapid transformation of the production and consumption system. The market alone will not solve the problems. We have to change the old trends, and changing trends depends on changing minds. We need a new mindset, a new model of civilization, a “civilization of shared frugality”.

That means on the one hand that resources and wealth must be divided more equitably and on the other hand that this will inevitably require restrictions in the lifestyle of the people in rich countries. Its decisive criteria have to be universality, justice, and

sustainability. The economies of the rich nations of the north are not universalizable because of reasons having to do with the environment and because of limits of natural resources. Whatever is not universalizable cannot be defended ethically either, according to Kant's categorical imperative. On a global scale, justice means that all human beings have the same right to natural resources and to energy and that ecological consequences are distributed equitably or at least in a more or less similar way. Sustainability means administering resources in such a way that the foundations of action are not destroyed and that the rights and interests of future generations are borne in mind. Pope Francis offers with his encyclical *Laudato sí* a roadmap and such a new mindset.

*Laudato sí* has drawn renewed attention to the Church's social doctrine. This was confirmed, somewhat surprisingly, by the British newspaper *The Guardian*, which is not usually known for its Catholic apologetics, in February 2018: "*The answer proposed by Catholic social teaching, and presupposed by most progressive thought, is that we should be working toward the common good. This is distinct from the fulfilment of individual wants, and will sometimes be opposed to them; but in the long term it may be the only way to satisfy our partially selfish and partially altruistic natures.*" ▀

# BIOGRAPHIES OF AUTHORS

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## ► ACDE

ACDE (Christian Association of Business Leaders) is a non-profit association in Uruguay member of UNIAPAC. ACDE offers its members to form a network through which they support each other to face the challenges of the business world and, guided by our values, be able to transform their companies and influence the environment. This transformation seeks the sustainability of companies through management based on the dignity of people and the common good.

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## ► XAVIER BECQUEY

Xavier Becquey is an industry executive. For the past 20 years, he has held different high-level positions in corporations, such as Areva and Alstom. He is the President of *L'Entreprise une Bonne Nouvelle*, an association that aims to develop an ethical approach to changing corporate rules and practices for the service of the common good. He co-wrote "*L'entreprise au défi du climat*" (L'Atelier, 2015) with Frédéric Baule and Cécile Renouard.

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## ► DOMINGO SUGRANYES BICKEL

Born 1945, educated in Switzerland, husband of Cecilia Foletti, father of 3 daughters and grandfather of 11 grandchildren. Worked in Switzerland and Belgium. In Madrid since 1981. Career at MAPFRE (financial management and reporting, corporate strategy, international reinsurance, surety and credit insurance) until 2008. President of UNIAPAC (1997-2000). President of the Vatican Foundation Centesimus Annus pro Pontifice 2009-2019. Director of the permanent seminars '*Digital footprint: service or service?*' and '*Work*

*is transforming*' at the Paul VI Foundation. Founding member of the Board of Trustees of The Voluntary Solidarity Fund VSF. President of VSF Spain.

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## ► ROMAIN BUQUET

Romain Buquet is an entrepreneur and co-CEO of the Virvolt project. He defended a thesis in 2020 at ESCP Business School on the commitment, discourse and ethics of start-up creators. He teaches occasionally at Ecole Polytechnique, ISAE Supraero and ESCP Business School). After a business education (Master in Management, ESCP Europe), Romain started working as a junior consultant for Accenture in Canada, in the change management team. He then joined GROUPE SOS, the European leading social enterprise (12 000 employees, USD 750 million turnover), with missions related to international development. Romain co-founded in 2012 a forum that gathers every year 1 000 decision makers from around 40 countries (IMPACT). He was subsequently Chief Operating Officer at INCO, an impact investment private equity fund (€100 million under management). In 2015, Romain worked as a researcher and lecturer on the topic on entrepreneurship and commitment (Research Master at Mines de Paris and PhD, candidate at ESCP Europe).

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## ► MICHEL CAMDESSUS

He is a former Managing Director of the International Monetary Fund and Honorary Governor of the Banque de France. He is a member of the Africa progress Panel, chaired by Mr. Kofi Annan. He was a member of the UN secretary General's Advisory Board on Water and Sanitation. Mr. Camdessus was the Chairman of the World Panel on

Financing Water infrastructure (report: “Financing water for All” – Kyoto – March 2003). Mr. Camdessus was educated at the University of Paris (Institut d’Études Politiques) and the National School of Administration (ENA). Mr. Camdessus joined the Treasury in the Ministry of Finance in 1960. He became Director of the Treasury in February 1982. During the period 1978-84, Mr. Camdessus also served as Chairman of the Paris Club, and was Chairman of the Monetary Committee of the European Economic Community from December 1982 to December 1984. He was appointed Governor of the Bank of France in November 1984. He served in this capacity until his election as Managing Director of the IMF (1987-2000).

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► **FRANÇOIS HENRY**

François Henry is lecturer and researcher at the Chair Meaning & Work at Icam (Institut Catholique des Arts et Métiers), Lille. His research focus on startup and SME managers, work at the heart of the ecological issue and the relationship between business and society.

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► **PIERRE DE LAUZUN**

Born 1949. Pierre de Lauzun made his career in banking and finance (French Treasury, CEO of a bank, manager of professional associations) while leading a personal reflection on philosophical, economic, political and religious issues, resulting in 16 books. He is member of the *Académie catholique* (French Catholic Academy), of *Entrepreneurs et dirigeants chrétiens* (French Christian Businessmen). He is currently chairing the *Association des économistes catholiques* (French association of Catholic economists). He was Chairman of the International Council of Securities Associations (ICSA), CEO of AMAFI, *Association Française des*

*Marchés Financiers* (French Financial Market Association) and Directeur Général Délégué (deputy CEO) of *Fédération Bancaire Française* – FBF (French Banking Federation).

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► **MARTIN MAIER**

Dr Martin Maier SJ is the Spiritual Advisor of Uniapac. He was born in 1960 in Messkirch, south-west Germany. He joined the Jesuits in 1979 and studied philosophy, theology and Music in Munich, Paris Innsbruck and San Salvador. His doctoral thesis in theology was entitled “*theology of the Crucified People. The Outline of a Theology of Liberation in Ignacio Ellacuría and Jon Sobrino*”, originally published in Innsbruck in 1993. From 1995 to 2009 he was a member of the editorial team of the review *Stimmen der Zeit*, and from 1998 to 2009 managing editor. From 2009 to 2014 he was rector of the Berchmanskolleg in Munich. Since 2014 he has been Secretary of European Affairs at Jesuit European Social centre in Brussels. He is regularly visiting professor at the Central American University in San Salvador and the *Centre Sèvres* in Paris. In 2021, he has been elected as new General Manager Director of Adveniat by the German Catholic Bishop Conference.

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Rolando Medeiros is a Chilean business leader with senior executive experience in Latina America (Argentina, Chile, Colombia, Peru), USA and China and in several business sectors (metallurgical and industrial manufacture, oil and gas, energy and power generation and distribution, among others). He is CEO of Elecmetal S.A., an international holding company headquartered in Chile. He serves as Chairman of the Board of ME Global Inc. a US Delaware corporations, of Fundación Talleres Ltda. and ME Elecmetal (China

Ltd.) and seats in several domestic and international Boards of Directors. He participates in business associations (Consulting Board of the Industrial Association of Chile, SOFOFA), Non Profit Organizations (Board of Directors of Fundación Arturo Lopez Perez devoted to the prevention, diagnosis and treatment of cancer) and academic institutions (Consulting Board of the Labor Relations Cathedra of the Pontifical Catholic University of Chile). He is member of the board of UNIAPAC International and UNIAPAC Foundation, and former president of UNIAPAC. He was educated at the University of Chile and earned postgraduate degrees in quantum chemistry and physics (Uppsala University in Sweden), business administration (University of Chile) and philosophy (Alberto Hurtado University in Chile).

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Corinne Mellul has a Ph.D. in Political Science from Boston College, USA, and teaches political science and international relations at Institut Catholique de Paris and at Sciences Po. She has also worked for the French government, specializing in benchmarking and foresight studies applied to a wide range of public policies and economic issues in a globalized context.

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► **CÉCILE RENOUD**

Cécile Renoud is a Professor of Social Ethics and Political Philosophy at the *Sèvres Centre*, and has taught at *l'Ecole des Mines* in Paris since 2008. She is a member of the Human Development and Capability Association, which was founded by Nobel-prize winning economist Amartya Sen. She is also a member of the *Fondation pour la Nature et pour l'Homme's* (FNH) Scientific Council and the *Fondation de l'écologie politique*. From 2014-2017, Prof. Renoud was on the '*Agence Française de Développement*' Board of Administration. She taught Philosophy in a secondary school in Bordeaux (1995-1997) and Paris (2000-2003), and worked for Petra, an association for job-seeking executives (1997-2000). Cécile is the Director of the CODEV "Businesses and Development Research Programme" at *l'Institut ESSEC Iréné*.

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► **JUAN MANUEL SINDE**

Born in Bilbao in 1950. He is an industrial engineer and has practically developed his professional life in various management positions at Laboral Kutxa, a financial entity of the Mondragón Corporation, for which he has held responsibilities in the Permanent Commission, Mondragón Inversiones and Mondragón Foundation. He has been a member of the board of Directors of several companies representing the aforementioned financial institution. He is currently President of the Arizmendiarieta Foundation and Secretary of the Postulator Commission of the canonization process of the promoter priest of Mondragón Experience.



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### ► **RICHARD TURNBULL**

Richard Turnbull is the Director of the Centre for Enterprise, Markets and Ethics. He brings to the Centre a wide range of experience in business, the church and public life. He holds a degree in Economics and Accounting and spent over eight years as a Chartered Accountant with Ernst and Young. Richard also holds a first class honours degree in Theology and PhD in Theology from the University of Durham. He was ordained into the ministry of the Church of England in 1994. He has served on the General Synod and was a member of the Archbishops' Council of the Church of England; the Chairman of the Synod's Business Committee and chaired a number of church working parties including a review of the remuneration of the clergy. Richard served in the pastoral ministry for over 10 years before being appointed Principal of Wycliffe Hall, Oxford, a Permanent Private Hall of the University of Oxford, in 2005 where he served until becoming the Director of the Centre in 2012.

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### ► **RODRIGO WHITELAW**

Rodrigo Whitelaw is Secretary General of UNIAPAC. Specialist in global network management and development of philanthropy-based programs in a multicultural, multi-stakeholder environment. Mr. Whitelaw holds a Bachelor degree in Economics and Business Administration and a PhD in Political and Social Sciences from the Catholic University of Louvain. He has worked in the financial, academic and public sectors in Europe and Latin America. His research interests are in corporate social responsibility, business ethics and corporate governance.

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### ► **STEFANO ZAMAGNI**

Stefano Zamagni graduated in 1966 from the Catholic University of the Sacred Heart, Milan with a degree in Economics, in which he specialized at the University of Oxford (UK) at Linacre College. Professor Zamagni has taught at the University of Parma and Bocconi University. He retired in 2013 as Full Professor of Economics at the University of Bologna where he continues to teach. He is vice-director of Johns Hopkins University, SAIS Europe, where he also teaches Public Sector Economics as Adjunct Professor. Professor Zamagni has written 11 books and co-authored seven others. He has also published numerous papers and articles. Professor Zamagni has served on many councils and commissions since the 1990s including a term as a consultant of the Pontifical Council of Justice and Peace. In 2013 he was appointed a member of the Pontifical Academy of Social Sciences.

**T**his book is the result of more than 5 years of work within the framework of the project *The future of work, Labour after Laudato si'*. The investigation presented here focuses on the potential impact of transformative forces at work today that could affect the enterprise, entrepreneurship and work of tomorrow. These transformative forces are either external or internal to the world of business. They have to be, first, identified; and, second, assessed from the *Laudato si'* perspective, as either threats or opportunities, enhancing or compromising the contribution of enterprises to the future of decent work and the common good.

The research also focused on the importance of turning business into a noble vocation, aiming particularly at full employment in conditions of human dignity. We thereby affirm that work is an essential means of human fulfilment and a contribution to the common good.

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