Executive Summary

The Altius 2014 Conference, held in Balliol College, Oxford, brought pre-eminent young thinkers from around the world together with internationally-respected people from the worlds of politics, diplomacy, business, academia, law, journalism and the not-for-profit sector.

Looking at the broad topic of global trends and governance over the next fifty years, the conference was split into three parts. The first focused on the future of philosophy in the Western Hemisphere, the second on the future of governance, and the third on science and technology. This simple division, however, does little justice to the interdisciplinary nature of the panels and keynote speeches; throughout the three-day conference, ideas were translated, discussed and re-discussed in light of intervening talks in such a way that technology, governance and philosophy were continuously present from beginning to end.

The conference was also characterised by its diversity of forms of intervention, from panel discussions to keynote speeches, from coffee question-and-answer sessions to video conferences, and by the way in which open discussion was at all times encouraged and engaged in. Despite the broad nature of the conference’s overarching title, recurring themes quickly emerged from the detail of the discussions: the tension between pessimism and optimism when considering the past century or decades and the future years, decades or century; the need to make an effort to understand non-Western cultures; the critical state of democracy at the beginning of the twenty-first century; the huge effects of technology on every aspect of our lives, both positive and negative; the search for meaning in an increasingly mechanised world; the failure to address the greatest global problems such as governance, the environment and economic sustainability; and the importance of knowledge and education to a successful future for humanity.

Disagreement was just as fundamental to the conference as agreement; differing cases were put forward and opposing arguments thrashed out to reach not definitive answers but a desire to explore the subjects broached further and in more depth. The variety of views and backgrounds held by conference guests and speakers ensured that discussion was always lively and passionate. In a true spirit of cordiality, however, all guests engaged in social activity outside of the conference room, taking the best opportunities...
to network with other people in their field and other fields. No guest at the conference could possibly be a specialist in everything discussed, and so all left thoroughly enlightened with regard to new and exciting fields in the twenty-first century, and posing themselves new questions about how the future of our world will pan out – and what they can do to ensure it is as successful a future as possible.
Federico Mayor Zaragoza, Chairman, Foundation for a Culture of Peace, Former Director-General of UNESCO

Zaragoza began by stressing that “philosophy is essential,” and said that our hope is that humanity can invent its own future, with the liberty to do what must be done and a unique creative capacity, recalling President Kennedy’s statement that “there is no challenge beyond the creative capacity of human beings.” But to decide on the crucial changes we must make, he said, we must know reality in depth. He recalled seeing the phrase, while at Oxford, “sapere audere” or “dare to know,” and said it was just as important to “know how to dare”.

He said that the crucial issue for us to become “altius, citius, fortius” is education, specifically education to be free and responsible, with which we can create dignity for all humanity, which is “the cornerstone of all human rights.” Today’s system, however, is strongly driven by financial motives, not ethical principles, favouring only a minor portion of humanity while elsewhere people are even dying of hunger, and more importantly, during a century in which this dichotomy could be avoided. He said we must start working to transform this situation and realize that we are in a new era that demands that we act differently.

In a digital world, he argued, all citizens are world citizens from birth and thus have a world consciousness. We all have a voice in cyberspace and “can participate [...] we are no longer silent or obedient.” We must, he said, increase female representation in all areas of life, and move from violence to conversation in our decision-making.

Essentially, he said, we need a new beginning, new thinking, new paradigms, new references, a multi-layer system, and lamented the “plutocracy” which had replaced the UN, whether that be the G7, G8 or G20, and the absolute rule of markets. Instead, we must be guided by the democratic principles of freedom, justice, equality and solidarity, basing ourselves on the EU and UN Charters, and for the first time in history, he said, we can build this new society.

Sean Cleary, World Economic Forum, Future World Foundation

Cleary, elaborating on the issues set out by Zaragoza, addressed the need for normative parameters to overcome these challenges. Recent years have seen little progress in reform of transnational
government institutions, despite widespread awareness and understanding of the need for structural and systemic change (such as reform of the UNSC and Bretton Woods institutions and action on climate change). Decisions have even been made but not implemented. Cleary argued that lack of political will and an inability to agree on norms and rules have produced inertia. The agreement of rules and norms is not impossible, however, as proven by, for example, the Congress of Vienna in 1814-15, which created norms for Europe based on *lex naturalis* and universal applicability.

Cleary argued that we have failed because we seek to apply propositions from our heritage of Greco-Roman philosophy, Judeo-Christian ethics, Magna Carta and the Industrial Revolution onto a culturally diverse world in which the apogee of western supremacy has passed. Cleary believed that the US will probably still be the hegemon and an economic leader in 50 years, but that the world will look the world before 1868, when Asian GDP fell below 50% of global GDP for the first time. Given this direction, “we will have to negotiate norms for transnational actions based on collective understanding of our collective destiny,” said Cleary.

This vision is “not utopian,” he insisted, but “utterly pragmatic”. The west is morally illegitimate because it applies its values selectively, but a possible way forward is to consider the essential values which are common to most - and possibly all - civilizations, including equity, justice, courage and empathy. Indeed, all the great civilizations of history have, as they approached their apogee, achieved an equilibrium of three factors: (1) a space for individual expression and rights; (2) a collective sense of obligation to community; (3) a degree of respect for the ecosystem. That equilibrium, the fundamental ordering principle of society, uprooted by the deification of the individual and reification of the markets, must be rediscovered.

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**Anders Sandberg, Oxford Martin Programme on the Impacts of Future Technology**

Sandberg picked up on Cleary’s reference to *lex naturalis*, one of the fundamental questions of Transhumanism being: “Is there such a thing as human nature?” Its other questions include: “What should we be doing as a species?” “What is the human condition?” and “How can we push humanity to its limits, living longer, healthier, happier lives?”

Sandberg noted that humans are “ridiculously ecologically successful”, dominating most of the world’s ecosystems and species and therefore duty-bound to worry about them. However, we are – as Sandberg put it - “very stupid”, and “run the planet even though we don’t have the wisdom to do so”. However, we are aware of our lack of wisdom, and Transhumanism tries to remedy this by “changing humans”. “Changing humans” appears perverse and dangerous, especially to Western minds, and, as proved by the twentieth century’s eugenic movements, can be dangerous indeed. Nevertheless, Sandberg argued that productive changes to humanity soon come to be accepted by society while accepting that human development comes with opportunities and risks – at worst, the potential to develop negatively or even wipe out the human race.

*Should* we change ourselves, though? Philosophy, which relies on a “human being”, would have to be reformulated if this human being is modified. While some take this as evidence to maintain the human being as it is, Transhumanists see it as evidence that we should actively try to improve the human condition.

Sandberg gave three everyday examples of improvements to the human condition which are already seen as “normal” but will develop in the coming years. Vaccinations could be prepared in the future to combat new afflictions within months or even hours. While we have used caffeine for years to take
control over when we are alert, we may in the future be able to biologically increase intelligence. And smartphones will have massive societal implications, especially in the developing world. Sandberg said that he personally disagreed with the idea that these developments do not constitute "changing the human condition."

Transhumanism is not without challenges itself. It faces severe opposition from some thinkers such as Francis Fukuyama, and many find “improving the human condition” a “creepy, perverse” concept. Cost issues mean that its progress could be the reserve of an elite, and different cultures treat ideas in different ways. Eugenics, for example, is not considered taboo in China as it is in Europe. Essentially, though, Sandberg said, we should not fear change; we must not forget the universal values to which Sean Cleary referred. We must remain optimistic, Sandberg said, and realize we have the opportunity to “do something awesome with ourselves, our planet and our universe.”

**Danah Zohar, Management Thought Leader, physicist, philosopher and author**

Zohar started by putting down her microphone and declaring: “Let’s get away from the mechanization of the human being,” which was to become the basis of her talk. She wondered at what cost the technological shift which is “completely taking over our lives in the developed world” is changing us. Classing herself among the generation which has perhaps “felt the most chaos and change,” she said she occasionally felt “illiterate” and experienced a sense of “hopelessness” at the technological world.

“Who are we?” should be the question we are asking ourselves, rather than "Who might we be?”, Zohar said, since “the man that is going to modify ‘man’ is the man of today.” She spoke briefly about the shift from the “Newtonian paradigm” to the “quantum paradigm” which she would elaborate on later at Altius. She tentatively ascribed the sharp rise in mental illness to a loss of the sense of meaning in the modern world. Of the three intelligences - IQ, emotional intelligence and spiritual intelligence - she felt the last has been lost and needs to be rediscovered: "we are perhaps the first civilization that has not had a vision of what it is to be a human or a leader."

In the “new myth for our times” which Zohar proposed, we must ask ourselves four questions: Where do I come from? Who am I? Why am I here? What can I do?. As for the first, we must realize and humbly accept that we are at once the whole history of the universe and only “five minutes into the universe”. As for the second, we must realize that our responsibility as “servants of the quantum vacuum [... unique and active agents.” The third reminds us of our responsibilities to ourselves, our jobs, our families, our environment, our communities, and so on, while the fourth reminds us that we must all bring everything we have to whatever it is we do.

Zohar ended by imploring the audience that above all, the most important way of seeing the world in the modern age was to ask questions at all possible moments, to never accept answers as definitive answers, and not to be afraid of asking dangerous and subversive questions.

**Q&A**

The question and answer session was characterised not so much by a tension between a Transhumanist, “forwards-looking” vision and a “nostalgic” vision, as may have been expected, but by a latent tension between optimism and pessimism towards our future. This would prove to be one of the persistent conference themes.
Zohar clarified that while the Mongolian community she had spent time with had things we do not, such as a worldview, a sense of who they are, interdependence and a willingness to ask questions, she was not nostalgic for the past, and indeed hopeful for the future while simultaneously hopefully that some of what has been lost into the modern world can be reintegrated. When one attendee asked whether it actually matters to ask “big questions”, Zohar did not deny that we do indeed live in a results-driven world, but asked whether this was wise and questioned whether this means we “have lost something vital.”

Another attendee suggested that we do not ask the “big questions” because we know that they cause so much conflict, and questioned why we need “global values” as alluded to by Cleary - if we can decide on targets, should values not be left to the individual? One panellist argued that in the modern world we should seek a bottom-up approach whereby individuals’ values shape policy, while another emphasised the need for “absolute clarity about the distinctions between values and norms.” The former are inherently personal, but the latter are social in context, rules which generate and rely on reciprocal behaviour and are only needed for issues related to common goods.

Another attendee noted the panel’s “glum” outlook on the past 20-30 years and that the word “wellbeing” had not been raised at all, asking whether it was possible to embark on the future from a more positive standpoint. One panellist agreed that the human race “is doing pretty well,” while another placed certain caveats, such as a large rise in poverty on the African continent. However, they also struck a less optimistic note for several reasons: because the trend towards democratization has blown off course; because the link between individual freedom and obligation to one’s neighbour is “out of kilter”; and because of climate change issues. Many problems, they argued, arise in trying to apply principles at a larger scale to the one where they were formulated.

It was raised that many western goods are made in China at huge social and environmental cost. How can we create norms or develop values to counter increased self-interest? One panellist argued that we must look at the question in terms of “circles of concern” - oneself, the family, one’s local community, society as a whole, or the Earth as a whole. These circles of concern can be expanded through technology, such as if we could scan a code and find out about the production process of a product. Another panellist argued that the human mind is motivated by fear, empathy and want, and that currently the last of these is reigning supreme. On the specifics of Chinese goods, we fail to count externalities such as effect on the environment and society and must, instead, take account of wellbeing. GDP calculations take no account of this.

The discussion ended with the co-ordinator addressing the different outlooks of the recent past and the future - how much should we focus on success and opportunity, and how much should we focus on failure and risk? It was not suggested that an answer would be provided in this panel. Instead, it would become an important theme for the rest of the Altius conference.
Luca Belgiorno-Nettis, Founder, newDemocracy Foundation: "The future of democracy"

Chair: Aaron Maniam, University of Oxford, Singaporean Administrative Service

Belgiorno-Nettis spoke of the “existential crisis” of democracy, as some have branded it - a system of low turnout, youth disengagement and distrust in politicians, institutions and politics, underpinned by the disappearance of any broad ideological positions. Politicians today act “more as salesmen than statesmen,” he said, and – recalling Zohar’s comments earlier in the day – the glue holding society together is disintegrating, while power is becoming more diffuse. While not necessarily a negative development, this means that governance becomes a “circus” of “continuous campaigning, rhetoric and hyperbole” and “tribal tensions.”

Faced with this, Belgiorno-Nettis teamed up with prominent figures to found the newDemocracy Foundation. He spoke about various projects enacted by the Foundation; the first, in 2009, involved 150 Australians seeking to “improve and strengthen the Australian system of government”. The meetings, held in state capitals, were followed by a six-month online forum, and the report was presented in the former Parliament House. For Belgiorno-Nettis, this proved that “ordinary people, when together in the right forum, can be extraordinary,” and showed that “people want to be involved in politics,” since we “are social animals and all want a role in how we are organised.” Since then, citizens have been involved with the Foundation at the local, federal and state levels.

The two criticisms aimed at juries in general, Belgiorno-Nettis said, were that they default to the common denominator or are dominated by one or two jurors, and that they are inexpert. He noted studies, however, which suggest that in 80%+ of cases judges agree with juries’ decisions. Furthermore, legal juries are “profoundly egalitarian,” have no corruption, and build public trust in the judicial system.

Belgiorno-Nettis then asked “What is democracy?” and concluded that it is used as an umbrella term to cover several types of government. Today, he said, we have a “conflation of issues and candidates’ electioneering”, to which various alternatives have been proposed. Belgiorno-Nettis cited Alex Zakaras’s idea of an Upper House chosen at random, thereby placing citizens above elected representatives who are in the service of the people who elected them. While Belgiorno-Nettis did not subscribe to this view, he had “full confidence in [the power of] a representative group of the citizens to make decisions.” Bringing his keynote speech to an end, Belgiorno-Nettis gave one final thought: that in this “crowded and complex world [...] we need better ways to reconcile differences [...] We need advocates from the broader spectrum of everyday people.”

Q&A

The discussion’s two main threads were whether the form of democracy as outlined by Belgiorno-Nettis was theoretically desirable and whether it could be practically instituted.

It was questioned, for example, whether it was not a “sign of maturity in society that we allow people to bargain and negotiate for us,” to which it was countered that the current system is broken beyond repair and that citizens’ juries are a form of others “bargaining and negotiating for us”. It was also questioned whether deliberative democracy “removed meritocracy from our political framework,”, and Belgiorno-Nettis clarified that he envisaged reform of the legislature, rather than the executive, and still saw a place for teaching of public policy.
In terms of practicality, it was questioned whether juries would become self-selecting; whether they could tackle more complex topics; whether online forums could provide a way forward; and whether juries which succeed on the local level could be successfully scaled up. These were considered to be legitimate concerns, but countered. Involvement could be compulsory, as for legal juries, although it was admitted this would be impractical and unpopular. Complex issues can be taught to people in intense sessions, and citizens become more trusting and confident when put together and making change themselves. Belgioro-Nettis said that personally he was “yet to be convinced” about online forums, since a few opinionated personalities can easily dominate. He noted, finally, that the Australian Productivity Commission - “the most respected body of federal government” - came up with recommendations almost completely aligned with those of the Citizens’ Commission., suggesting complex issues could be tackled effectively.

The session ended with a return to the emerging theme of optimism and pessimism towards the future. While the status quo of electioneering and candidates over issues was “pretty much broken”, according to the speaker, many attendees were hopeful for the future, whether through representative, deliberative or direct democracy.
Hausmann and Pérez, discussed the impact of technology on global economic governance. It was stated that – contrary to the beliefs of some economists – productivity growth since the technological revolution has been higher even than during the Industrial Revolution. While some people have argued that the past two decades have seen no “transformative inventions” – no wheel, or sanitary system, for example – and humanity has already developed solutions for most of its basic needs, it was argued that new technological services and products are and will be in fact transformative. Data show that the technological revolution has led to the fastest increase in population and social development indices – not just GDP, but also other metrics that take into account quality of life – in human history, proving that technology is truly transformative.

Despite the effects of the “Great Recession,” in the corporate sector, we are at historically high productivity levels, but at the same time we have very low employment participation for the working age population. Pérez gave a few examples of how technology leads to increased “human unemployment”: we no longer need translators as computerized translation becomes ever more complex; we can feed data into a machine which will produce a report and analysis quicker than any human, and it will probably be better; driverless cars could put millions of American taxi drivers – 2% of the population, by some estimates – out of work; and tax advisory software does the work which accountants have always done. At the same time, the technological revolution creates huge added value in a short period of time; to give one example, one of the most successful Spanish infrastructure companies of the 20th century took eight decades and 35,000 employees to create the same added value as social app Snapchat did in two years. Furthermore, this development is not linear, it is exponential. This will have profound long-term effects on the labour market and, in turn, on economic governance, because ways will have to be found of supporting people who find themselves out of work, replaced by computers. And in turn, inequality has risen, they said: since 1960, the level of employment participation has remained generally high for highly educated people while dropped significantly for less educated people. Other metrics of inequality also point towards a widening gap. The fair distribution of the gains made as a result of the technological revolution, Hausmann and Pérez thus argued, was paramount to future global economic governance.

Hausmann asked why some countries are richer than others, and argued that the answer lies in “know-how”. Nowadays, knowledge is divided between people and teamwork is imperative to success, creating complications in gathering knowledge together, and potential problems for countries that do...
not have a given type of knowledge. Education and knowledge co-exist, and one cannot exist without the other. As it is easier to move people with knowledge than it is to "move knowledge into brains", neighbouring industries – leading to hubs – are conducive to knowledge diffusion. This, among other factors, explains why technological industries have diffused so slowly geographically.

Hausmann – disagreeing with some economists – argued that productivity growth since the technological revolution is higher even than in the Industrial Revolution, but increased productivity has not led to increased employment, largely because technology has replaced or is replacing human power at an exponential rate. This has led to an increase in inequality, he said: since 1960, the level of employment has remained high for highly educated people and dropped for less educated people. Other metrics also point towards a widening gap. The fair distribution of the gains made as a result of the technological revolution, Hausmann thus argued, was paramount to future global economic governance. Nevertheless, he claimed that the potentially destabilizing impact that this technology transformation may have in the workforce, would be noted more deeply in developed countries vs. developing countries.

Sean Cleary, World Economic Forum, Future World Foundation

Cleary repeated Hausmann’s premise that knowledge is key for development. Knowledge hubs are needed, along with institutions to maintain it and entrepreneurial incentive. The challenge we face now is how to get knowledge, institutions and governments to work together.

The big question, he said, arises from three dislocations: firstly, the disaggregation of the real and the financial, with an exponential increase in the velocity of financial transactions in the past two decades; secondly, central banks are not the sole or even primary creators of money; and thirdly the disaggregation of knowledge, productivity and employment. All three are currently on “completely different trajectories”, with returns to capital much larger than returns to labour, a trend which is likely to continue. Cleary argued that we do not have appropriate measurements of these dislocations, let alone ideas about how to deal with the financial economy or systemic risk.

He concluded by enumerating three challenges faced by society and policy makers. Firstly, we must decide how to intervene at different levels - individual, community, national and international. Secondly, we must consider the implications for education, and how we teach people to use their knowledge productively. Thirdly, “the death knell of representative democracy has been sounded,” he said, since in a globalised world governments cannot control economies and citizens, in turn, lose faith in party politics and governments.

Stan Veuger, American Enterprise Institute

Veuger picked up Cleary’s pessimistic close, arguing that governments are incapable of running budgets and dealing with long-term issues. This will be aggravated if, for example, 50-year-olds are soon jobless, having lost jobs to computerization. Veuger’s “one piece of good news,” however, was that social mobility between income groups is still possible.

At the same time, returns to education are growing, with gains for higher education graduates and losses for less educated people. Jobs which the latter could do are being filled by educated people whose middle-level jobs are now being computerised; exacerbating the situation by producing jobs
which are low-skilled and low-paid. However, Veuger admitted that his comments related solely to the US, and reminded the audience of the drop in global inequality in recent decades.

What implications does this have for global governance? He argued that the world economic centre of gravity is moving east, and “would be surprised if the IMF has the same influence decades from now”. It may still be grappling with Western issues, such as the EMU, but will have little global influence.

Jacek E. Giedrojc, Warsaw Equity Group

Giedrojc began with a story, in which a new oligarch in the 1990s did "numerous questionable, although not illegal, things" with a newly-listed company, teaching him that governance is not just about rules but about habits and customs. That we learn these as children explains in part why culture clash can lead to governance problems.

Giedrojc then talked of the 1970s’ “dramatic rupture” into the neoliberal paradigm of self-interested markets constrained by state laws. This had two major implications. Firstly, economic actors could now not be criticised for their actions; only the regulator could be blamed. Secondly firms became preoccupied only with maximizing short-term shareholder returns. In the past, people invested in firms as a safe haven from unpredictability. They risked loss, and therefore also deserved profit. Now, however, the speed of transactions means that shareholders are in for the short-term while other stakeholders - workers, clients, society - are locked in for the long term. As a result, he argued, economic actors can no longer act on their convictions, since a deterministic system has no place for "strategy", purging innovation from the system. And firms cannot modernise, as short-term shareholders are not tied in and long-term ones are unwilling to commit.

Giedrojc ended by returning to the company with which he had started his talk, and stated that he was worried about the effects of habits and customs being ignored, leading to institutions being undercut and unsavoury investors damaging the economic system.

Q&A

Democratic legitimacy formed a major part of the ensuing discussion. It was noted that while the economy is recovering, trust in politics is not. How do we build trust when there are few rules, norms and values? Are we too western-centric in our discussions? And if the elite do not work to build trust, will the people take over the centre? In reply, one panellist professed to have no clue about how to rebuild trust. The loss of government and economic credibility was masked by the financial success of 2002-2008, and resentment will increase if the trend of increasing returns to capital and decreasing returns to labour continues. Another member wondered how trust in national government could return while there is a never-ending search for global governance.

Government regulation and failures were also questioned. When asked why problems such as financial sector greed, consumer greed for credit and regulatory failures were not flagged earlier, one panel member simply said that human nature assumes “things will work out fine” and reluctantly finds danger when times are good. Another argued there was insufficient global regulation, but was unsure of how this problem could be resolved.

Turning to inequality, one person argued that a compensatory mechanism would be needed to make up for jobs lost to computerization, but another suggested this already happened, with the bottom 20-30%
of incomes worldwide paying negative tax. It was universally agreed that action is needed to combat changes in the employment market.

Asked whether we really do live in "a time of exceptional change", one panellist argued that only the Black Death and consequent empowerment of labour and the nineteenth century were comparably disruptive and transformative periods. Today's revolution is even more exceptional because it affects over seven billion, and knowledge, risks and threats travel far quicker. However, they argued that "necessity is the mother of invention"; the human race has the capability to combat huge problems, even if it takes a crisis to trigger action.

The co-ordinator closed the session optimistically, reminding the audience that the last three decades have been “hugely successful” and reiterating that "just as we have combated large problems in the past, we can do so again." The technology transformation has the potential to “significantly increase the size of the pie,” and now the task is left to Humanity to find out the mechanism to distribute the benefits of this trend.
José María Beneyto, Vice-President of the Parliamentary Assembly of the Council of Europe and Spanish Member of Parliament

Beneyto outlined four main concerns: the "global political awakening"; the erosion of government and governance; the continued centrality of the US; and the transatlantic relation and Ukraine conflict.

Demographic and technological changes - a growing middle class, rapid increases in urbanisation, access to information and news and greater dialogue between citizens of different nations - have led to the "global political awakening". International relations are ever more influenced by diversity of religion, culture, perceptions and opinions. Global governance must begin to take into account different cultures, and dialogue will only be possible in the future if western powers make an effort before said dialogue to understand other cultures.

Socioeconomic, environmental, economic and demographic challenges have led to an “accelerated deterioration of governments and governance,” he said. The emancipation of the individual and dispersion of power had led to conflict and the delegitimization of traditional government. The media and internet have produced an even more acute perception of the elite as self-interested. We must realize that even the term “democracy” is no more than a theoretical construct practiced differently in every state. Only with great difficulty is the reality of societies today reconciled with traditional governance theory.

Beneyto argued that the US will continue to be the great world power, and possibly hegemonic, for the next century. It is still the financial, economic and geopolitical world power, and other countries such as China are aware of this – and asserting their power in response. Beneyto argued that the world has difficulty accepting the US "leading from behind," and that many conflicts stem from the absence of the US. However, the US is also contradictory, he said, working with Iran against Syria, for example, but confronting Iran in all other respects. This leads to "profoundly destabilizing" perceptions of opportunism.

Events in Eurasia will change the path of Europe and the US over the next two decades, Beneyto argued. Ideally, a stronger NATO would work constructively with Turkey and Russia, but the opposite is currently happening. Nevertheless, Russia’s potential is limited by domestic and international issues, and its former defensive advantage - its territorial expanse - is now being eroded as former Soviet states become more westernised. He argued that Russia’s current actions are a defensive response to perceived betrayal by the US and Europe when it tried to take Ukraine under its wing, and that the crisis could either lead to an interminable EU-Russia conflict or be the “litmus test” for long-term rapprochement, thereby revitalizing the transatlantic relation. Such rapprochement would need to be done through an existing or new supranational body.
Hidalgo argued that civil society will be as important as political society in shaping global governance in the future. The UN, while still indispensable in global governance, has been challenged as ineffective and institutions, specifically the UNSC, have been particularly criticized, and we have seen the establishment of new institutions like the G27, G28, G20, G77 and the New Development Bank.

Looking to the future, Hidalgo highlighted two truths: that nothing is more difficult to change than global governance; and that humankind only reacts to catastrophe when it is imminent or has already occurred. We are also faced with massive changes in the geopolitical make-up of the world and are still dealing with the legacy of the Cold War and the Iraq War, as well as technological and environmental change.

Hidalgo argued that the status quo of largely unregulated capitalism, markets as masters, an unreformed UN and the US as hegemon as unsustainable because of the massive inequality it bred. It ignores long-term problems such as world peace, health and the environment, but will not be solved by newly-formed institutions alone.

The remedy to this, he argued, was a strong institution which would urge UN member states to act with regard for long-term effects, and constantly apply pressure to make swift action a reality before catastrophe strikes. This body would need greater legitimacy than the UN, possibly with panels of experts on different subjects whose conclusions must be implemented by countries.

Burrows used the annual US Global Trends reports, with which he was involved for a decade, as a point of departure for his intervention. Two of the big narratives in these reports involved major global challenges and global governance. Within the latter, diffusion of power, contradictions in governance and the inability for decisive action were the key concerns.

We have moved, Burrows said, from a unipolar to a multipolar world, but “not all poles are created equal.” Some countries with low GDP per capita wish to be global players while also focusing on their own development. There has also been diffusion from central government towards cities, as shown for example by the C40 Climate Leadership Group, and civil society is a growing factor. Although the latter will never wholly govern, the number of people “stepping up to act” is undeniably positive, he said. Finally, we have seen empowerment of the individual, which, while largely positive, also gives poses risks – individuals, for example, now have powers of destruction which previously only governments had.

Given these contradictions, predictions are impossible: whereas people imagined social media would lead to greater democracy, it is in fact authoritarian leaders who have had more success with social media, whether using it or suppressing it. Faced with this reality, Burrows suggested that a baseline of “business as usual” would be the best starting point for global governance in the future, with the some sort of ad hoc way of making solutions as and when necessary.

Burrows admitted that of all the global trends today, he was most pessimistic about global governance, and worried that a catastrophe will be necessary before people take concerted action.
The discussion which followed embraced both theoretical ideas and current practical issues.

Military power was a point of focus, specifically the Ukraine and IS crises. One panellist believed that military power is not as valuable a tool as it used to be, unless carried out by small groups. Other forms of intervention, it was argued, could better combat issues such as fundamentalist Islam, namely improvements to education and job markets. However, fundamentalism is very unpredictable, noted another panellist - social media was predicted to broaden horizons but has in fact reinforced narrow and fundamentalist. Another member stressed that democracy relies on certain prerequisites, such as economic stability, which may not yet be in place, and that this ideological conflict must not be taken to be a political one. Leading global forces such as America, another said, must stop “switching” allies, which leads to countries feeling marginalised and increases the risk of fundamentalism. Another speaker noted that the US has been reluctant to intervene in foreign conflicts ever since Vietnam, and the domestic population is “exasperated”; furthermore, events are currently moving too quickly for a clear strategy and a mid-second-term Obama administration is unable to take strong decisive action. The panellist had serious concerns about the will and capacity of the US to be the organizing principle of the future.

On the subject of Russia, one speaker argued that it has “no future as a great power”, with declining population and life expectancy, falling education standards, lack of economic diversification and inequality rising from the rise of oligarchs and failed privatisations in the 1990s. Putin’s behaviour, it was argued, may arise from an awareness of this situation. Another speaker, however, argued that we would be unwise to isolate Russia too far; both the US and Iran have lost out because of forty years without official relations, and this situation should not be replicated for Russia.

The successes and failures of Europe were also considered. It was noted that a decade ago several books argued that Europe’s soft power would make it a great world power. Today that seems wildly misplaced. Were the fundamentals wrong, or was this just misplaced optimism? One speaker argued that Europe was too busy thinking about theory - various treaties, the “United States of Europe” and the EMU, for example - to notice the Bosnian War or the unsustainability of the welfare state, and is now paying the price. Another argued that Europe’s biggest failure was to ignore the Maghreb and Sahel; the US has a far better record on immigration, they argued, while also expressing fear that the US was following Europe in considering immigrants as “the enemy”. Another speaker, however, stressed Europe’s success and noted that a country like Spain has made huge gains since dictatorship, and the economy is improving economically after the crash.

It was also raised whether we need to look at the future as if it were something imposed upon us and leaving us incapable of action. One speaker argued that governments have little room for economic manoeuvre, and that collaboration between different sectors of society makes decisive action difficult. However, we must remain optimistic and believe that we can change the world, even if this change does not spring from traditional government. Another speaker argued that the past three years have demonstrated the weakness of the state - governments are dependent on all other actors, and individuals can do far more than governments. However, they noted that civil society has a duty to support government and contribute if possible - while criticizing when necessary. Politicians today are “despised, marginalised and criticised”, which may be justified in some cases but on a widespread scale impedes any positive change. Once again in this discussion, the tension between pessimistic and optimistic views of the future dominated and the session closed with a note of optimism from the panel and chair that the chance of positive change is not completely written off.
Paul Révay, European Director, Trilateral Commission: "Past, Present and Future of Global Civil Society: The Trilateral Commission"

Discussant: Prof. David Cadier, Fellow in International Strategy and Diplomacy, London School of Economics

Révay began by speaking about three key dates in his memory: 1973, the year the Trilateral Commission was founded, followed by its rise to prominence; 1989-90, when the world changed from a bipolar to a unipolar world, and the Trilateral Commission began to expand its membership bringing in Central and Eastern European countries; and 2000-04, when unilateralism came to the fore. Now, as when it was founded, the Commission seeks to come up with ideas in the full knowledge that it has “no democratic legitimacy,” but must take its ideas to those who do have democratic legitimacy.

The bulk of the time was spent in active discussion with a number of issues raised. It was discussed how the Commission has a duty to elaborate on possible norms which could be imposed internationally, since the Bretton Woods norms are now considered inappropriate for many non-western countries. The evolution of the Commission was also discussed, such as Japan’s reluctance to admit other regional countries in recent years, as was its unique make-up of business leaders, politicians, and press/academics, each constituting around one third of members, and its conscious and deliberate low profile in the press. Finally, it was also questioned whether “like-mindedness” - one of the key aspects of the Trilateral Commission - was in fact positive, rather than dangerous. The speaker clarified that the institutions and philosophies and norms of the member states are for the most part similar, but argued that the Commission is in no way “inward-looking” and is keen to invite outsiders in.

Current issues such as the Ukraine crisis were once again discussed. It was suggested that there are two perspectives on the crisis: one of an imperial Russia provoking others, and one of Russia reacting to western provocation building up over past years. Reference was made to an idea from a new Trilateral Commission report which argues for the creation of a group called “The Friends of Ukraine”, dedicated to stopping using Ukraine as a pawn, and using Russian, European and American power to create a solution. In the longer term, a suitable place in the European security framework must be found for Russia. It was also argued that care must be taken not to lose a connection with Putin or to alienate Russia.

Once again, the theme of optimism and pessimism arose, and Révay claimed that despite the problems addressed in the session he was fundamentally optimistic about the future - even Russia, for example, should be considered as a friendly country in the long term, he argued, and the work of bodies like the Trilateral Commission has a continued fundamental role to play in global trends in the future.
From Biology to Engineering: The Engineering of Life and its Possibilities

Juan Pérez-Mercader, Senior Research Fellow, Department of Earth and Planetary Sciences, Harvard University

Speaking via video-conference, Pérez-Mercader gave a brief potted history of the universe and Earth, the extraordinary discoveries of the past decades, and the work still left to do – in his words, “life is still a massive mystery for science.” The question he seeks to answer is how we can use biology as we use engineering. Indeed, we are now learning all the science necessary to synthesis life from the bottom, with all the risks this involves, including cyber-security and bioterrorism. The ability to generate new forms of life will be fundamental to the future of the human race and we will be able to modify systems to help ourselves further, he said. Within 25 years, we will be able to print an order from Amazon, print medicines, and harness biology to extend our life spans. In half a century average life expectancy will be over 100, possibly even with several tens of years on the end. Pérez-Mercader stressed, however, that while “a fabulous future awaits all of us,” it is our duty more than anything else to be responsible with these scientific advances.

The ensuing discussion addressed some of the generalities of scientific research. Pérez-Mercader said that in his opinion the US has a “fantastic system” which is more willing to take financial risks than other countries. Governments have a role to play by making sure there is a continuous, clear strategy between research centres and government, which must be long-term rather than over four- or five-year governmental terms. The successful long-term collaboration between successive governments and research institutions will be fundamental in the development of bioengineering and scientific progress in general.
Danah Zohar, Management thought leader, physicist, philosopher and author: "The Quantum Leader"

Chair: Augustus Rylands, Head of Business Development, Desert Technologies

Zohar spoke about the “new paradigm that might lead us to an exciting and different future” which had been outlined the previous day in her panel discussion intervention. She argued that we still live in a “Newtonian paradigm” based on a machine-mindset, laws, forces, actions, reactions, predictability and determinism.

Science nowadays, however, is incomplete, she said, and rather than seeking final explanations we must accept - and welcome - that we will never get to the end of discoveries and knowledge. In particular, Zohar said, quantum phenomena “give us a powerful metaphor for every element of the human sphere,” and could have equally sweeping effects as Newtonian science. She said that such features as self-organization, surprise, adaptive evolution, uncertainty, open systems and relationships could have wide-ranging effects on the business and economic world, personal and societal relationships and globalization. She also stated that it is impossible to be an observer of the quantum paradigm; one must be a “co-creative insider” and the system only evolves by people interacting with and in it. In this new paradigm, questions, rather than answers, matter, and any answers we do reach are open ended and create new questions, “teasing out one of many faces of potentiality.” Quantum physics’ holistic nature, as opposed to the atomistic nature of Newtonian science, she also argued, “totally changes our view” of governance and world peace and will force us to co-operate and become aware of our “inter-tangledness”.

Q&A

In the subsequent discussion, Zohar elaborated on some of the aspects of the quantum paradigm. She said that we will move from an “either/or” to “both/and” mentality, one in which things “can be black and white at the same time”, in which identities shift and people as well are objects are an amalgamation of a limitless number of potentialities. It was suggested that an idea like the quantum paradigm has not been received more widely because “it is just too much energy to solve these open ended questions”, but others believed that this was a culturally-specific outlook of “laziness” rather than an inherent desire in the species to avoid asking big questions and to accept more questions, rather than answers, as a result. It was also suggested that we could consider the quantum paradigm as a “meta-paradigm,” one which points to the limitations of having a “paradigm” at all; we may in fact do better to consider ourselves “on the edge of different paradigm,” celebrating diversity and creating dialogue between these paradigms, as well as between different cultures. The discussion ended with an optimistic view of the future in which Zohar said she believed we are “on the brink of a new paradigm,” in which we will “play with ideas” rather than argue, appreciate different models and ways of life and reframe and rethink the ideas we grow up with.
Robert Cooper, European External Action Service: "The Future of Diplomacy: A European Perspective"

The session consisted mainly of a discussion revolving around many themes including the Ukraine crisis, emerging powers, the Middle East, the European Union, the future of diplomacy and governance, and Britain’s role in the world following some introductory remarks by Cooper.

He began by taking us back a century to the First World War, arguing that despite the numerous books written “nobody really knows why it started.” He regarded it as a “crisis of global governance,” but also the war which created global governance, with the Allied powers co-operating for the first time, even it was out of necessity rather than desire. After the War, the idea of peace through international collaboration truly began, he said, but the undertaking failed; after the Second World War, the chance arose to “do it better.” Moving to the present day, he argued that for all Europe’s faults it would not have another conflict like the Great War, and that the EU is “better than anything we had in 1914.”

The discussants disagreed on Europe’s past interventions and the role of intervention today. While some suggested that European powers should not intervene in today’s conflicts, others argued that faced with such crises there was no alternative. Europe’s “standing by” during the Yugoslav crisis was condemned by one attendee as “awful”, and it was unanimously agreed that Europe should have intervened earlier. Some suggested that the Balkans were not well-understood by Europe, leading to unwillingness to intervene. In terms of the Middle East today, European intervention would be dangerous because of its past track record, and, while Europe was able to help the Balkans after the war by bringing them into the EU, this would not be possible for the Middle East. The successes of the European Union were also addressed, and Cooper stated that he was proudest of the EU for its enlargement, welcoming former Soviet powers in, and the recovery in the Balkans following the war.

Discussants spoke about why there was no coherent EU foreign policy, with disagreement as to whether they had “different interests” or “the same interests with different nuances.” It was noted that there have been foreign policy successes such as combating the Malaysian regime. This began with a disagreement of sanctions versus aid, both of which were argued to be valid arguments; the mixture of sanctions and aid was probably more successful than either extreme. The barrier to a common EU foreign policy, however, is that it would mean national governments giving up their own policies. A lot of people have interests in the current system, it was argued, although some elements of foreign policy are “incomprehensible,” such as the fact that European defence procurement is not done on a bloc-wide basis.

It was agreed that Europe is in a far less comfortable place than it was a few years ago, with conflicts raging on three sides - Ukraine, the Middle East, and North Africa. The “chaos” promoted by Russia was condemned by one discussant as “disgraceful”. It was noted, however, that these conflicts are of less interest to the US, and several discussants agreed that these problems must be attacked on a European level. If the EU produced an active policy towards current crises, they would probably garner considerable American support, but “the Americans won’t solve Europe’s problems for it”, it was argued. The prospect of “European” embassies was raised, with fewer, more knowledgeable people and perhaps “regional” embassies (such as “Scandinavia”) to maintain plurality. The issue of digital diplomacy was also raised, along with linked questions about security and public acceptance, bearing in mind how many people-focused tasks consulates and embassies are responsible for.

The failure of the EU to construct a continent-wide security system after the Cold War was also raised. It was argued that while NATO expansion was not the ideal situation, it would have been difficult to say
no to a country such as Poland given its suffering during the twentieth century. The spirit of the 1990s, it was suggested, was “not the same as the spirit of the post-Second World War world.” The future of the Bretton Woods institutions was discussed, and it was generally agreed that national regulation is insufficient nowadays to govern the global economic system. Functioning standards will need to be developed, whether that is a new IMF, new Basel agreements, or something else entirely. The desire for a more competitive economic system - as shown, for example, by the founding of the New Development Bank - was expressed.

A problem with EU governance was raised, namely, that states are enormously strong and seen as the natural place of democratic legitimacy. Therefore, it was argued that Europe must try to protect and strengthen its institutions gradually, improving them as and when necessary, and that the EU must be “cared for and respected” despite its faults. Finally, the diminishing role of Britain in the world was addressed, with discussants expressing their disappointment at Britain’s apparent retreat. The possible departure of Britain from the EU was seen widely as an negative step, and one discussant reluctantly admitted that they had the impression the UK was “not even looking for a role in the EU.”
Min Chen, Professor of Scientific Visualization, University of Oxford

Chen defined five big myths of Big Data:

1. that there is “too much data”. Quite the contrary, he said, “in some ways we don’t have enough data.”
2. that big data is a recent phenomenon. Chen argued that in fact “we are emitting data ourselves”; only digital recording of it is new. Human “selective attention” is an example of how we have evolved to deal with big data.
3. that machine intelligence is the only hope. While it is often suggested that machines are almost omnipotent, we are in fact “not quite there yet,” said Chen. Many “intelligent” machines actually use simple intelligence and fail at tests which humans succeed. Nevertheless, the potential for machines to help humans is undeniable.
4. that visualization provides insight. Insight only comes from humans. Visualizations help humans - they save time, spot patterns, act as external memory, simulate hypotheses and visually “evaluate” hypotheses - but are nothing without a human analyst.
5. that data processing inequity is ubiquitous. This is the idea that “no clever manipulation of data can improve the inferences that can be made from the data,” and is theoretically valid, but since humans interact with data, the different stages of data processing are not independent of one another, which nullifies the theory. Humans do have the capability to introduce new information into data.

Chen went on to talk about the promises and challenges of big data. He raised three questions. What is information and how do we measure it? How do humans process information? Can we build a causality discover technology? He also addressed the challenges of visual analytics, arguing that visualizations, human interaction and analysis are all essential for the effective processing of data. If these are achieved, however, big data will allow us to understand more about the way our world works and improve scientific technology (in its broadest sense) while simultaneously saving hours of time of human data processing.

Rosemary Jay, Senior Attorney, Hunton & Williams

Jay asserted that the great difficulty of the technological revolution is trying to reconcile, on the one hand, collection and exploitation of personal data, and, on the other, human values. However, the potential of data is huge and we must find a way of moving data between different populations while maintaining privacy. But what is privacy, she asked. Privacy is not a constant and is culturally specific;
different jurisdictions have different legal frameworks – and over half the world’s nations have no explicit data privacy laws at all.

Jay questioned whether it was constructive to keep collecting data about, and only examining, ourselves. She also said that legal frameworks must be built in jurisdictions which lack them before powerful technology companies extend their power.

The EU considers its system to be the world’s strictest, and personal data collected in the EU can only leave towards a jurisdiction with equally stringent privacy laws. These data protection laws are extremely costly for business and a disincentive to organizations that want to set up in the EU. Furthermore, despite data laws we do not know if people are choosing to opt out for the right reasons, and whether the public really care about data and privacy. She admitted to being “stopped in [her] tracks” when finding out that 100,000 EU citizens had made suppression requests to Google, but argued that laws like the EU right to object to automated decisions are very little known. Therefore, the key challenges for the future are to create an agreed legal framework internationally, to find a balance between protecting data and using data constructively, and ensuring that citizens are aware of developments and their rights.

Zilgavis asked whether all data should be interoperable. Some governments, such as in France and Germany, do not allow interoperability of health data even domestically, even though, Zilgavis argued, interoperability allows for developments such as health services which allow people to see who is (wrongly) looking at their data.

Given big data’s huge potential and predicted growth of up to 40% a year, frameworks must be developed and trade-offs accepted. Zilgavis hoped that through democratic transparency and public consultation productive agreements will be reached. He outlined some of the developments which big data will allow in the health sector, including personalised medicine and cross-border transfers which will allow for better health monitoring and improved care, mobile monitoring of people’s everyday lives. In a world where people will need to work longer to support retirement, healthier lifestyles will be necessary, which the big data revolution will facilitate by informing people about the choices they have. But protections must be maintained and improved in order to keep the trust of citizens and ensure that data cannot be used for malicious purposes.

Taysom said he was going to try to convince the audience of three things. Firstly, he said, “big data is all about you.” The data does not just last for a small period of time; things which may appear ephemeral will in fact last well, well beyond our lifetimes, and data such as DNA is multigenerational. Metaphors such as a “digital footprint” are wrong because our data cannot be washed away.

Secondly, we have the wrong thinking about choice. We are attuned to “choice” in the West, but sometimes choice must be taken away - as it was with tobacco in the past or (gradually) sugar today. The costs and benefits of big data are “temporally disordered”, and so giving all citizens choice is not the correct model. Furthermore, collecting big data is massively expensive for companies, and he argued it for some sort of “data commons” to pool together personal data.
Thirdly, he argued that governance on data storage for companies and governments is wrong; companies live very short lives, and once a company has collected data it is “theirs, not yours”. Governments, too, have short lives, and change their priorities and data usage. He suggested a co-operative would be more successful, to interpose between companies and individuals to invest both with economic power. In this way the big data revolution could be accommodated to benefit economic growth and individual power over one’s data.

Q&A

One attendee asked how we really define data. Is “data” anything with our name attached? Is insight taken from that data “ours”? Is aggregate data ours? One speaker said that there is no universal definition, but, broadly speaking, people can be “identified” or “uniquely identifiable”. However, there is a growing risk that data from different sources can be collated to create a uniquely identifiable person which may pose problems for privacy.

One attendee argued that there is great opportunity in, for example, the domain of health, because big data will allow collation of thousands of doctors’ treatments and allow us to understand which treatments work for patients better than others. Given this potential, should we be allowed to opt out? One panellist argued that we cannot practically forbid people from sharing personal data, but that they should be strongly encouraged to share it. As there are increasingly complex ways today of separating data from the individual, people may come to accept more readily the use of their personal data. Another member argued that a key problem is alerting the public to issues of privacy; they noted that hardly any internet users customize browsers to protect privacy, and most people automatically click “OK” when prompted about issues such as cookies. Issues of privacy, security and trust must all be understood by the public for a coherent strategy towards data and privacy.

It was questioned whether data will ever be able to “prove” causality, and panel members agreed that statistics will not prove causality but may validate it. The human will still play an imperative role in the understanding of data. It was also raised whether human data may one day be modellable, and a panellist argued that such developments will happen, but only in 50-100 years. More importantly, the human race will have to decide whether it wants to develop such technology or not.

One attendee asked whether we can hope for collaborative inter-governmental agreements. One panel member said that we were moving towards greater interoperability until 2012, at which point new EU laws were drafted to make interoperability more difficult. It was argued that the EU legal framework may be unsuitable for less developed countries and has gone into too much detail. The panellists agreed that we must better define who the data is; maybe individuals need a personal data space, for example, which can be accessed or stored for later use. Another agreed but warned that people managing their own data is a personal burden and one which people would not necessarily warm to; the ideal situation for that speaker would be an opt-in system in which data is stored permanently. The idea of “demilitarized zones” for data was also raised - software which could be put between businesses and the individual, which neither party uses directly but which increases privacy. Academics are currently working on the scalability of such a zone, they said. While many would be wary, fearing greater risk to their privacy, it could be sold to the public, they argued, because it reduces the risk of data crime by companies and businesses.
Close Remarks

Manuel Muñiz, President of Altius

Muñiz began his closing remarks by thanking the speakers, sponsors and organizers of Altius 2014.

He outlined recurring themes which had emerged about the impact of innovation, technology and change on the individual, the economy and governance. In terms of the individual, Altius 2014 questioned how technology interacts with human nature and its limitations such as the lack of memory, or basic passions of empathy, want and fear; how technology empowers humans on even a biological level; and how change will affect the way we educate future generations and what skills we will need to develop to continue to thrive.

Moving on to the economy, Muñiz summarised three main effects of technology: firstly, increasing productivity, whether through self-driving cars or better healthcare systems; secondly, a transformed job market, problems of unemployment and a need for high added-value jobs; and, thirdly, increasing inequality, with value being concentrated in the hands of the few.

Finally, he addressed the impact on governance. Transformative changes have huge implications: power is diffused, both upwards to supranational groups and downwards to empowered and emancipated individuals; states lose legitimacy, because they are seen to be powerless to tackle problems such as inequality or unemployment; states are ever-more dependent on one another for trade and information, and events in one country affect others more than ever before. As a result of all this, there is a much greater need for global governance, but differences in norms between states and the lack of solutions to global problems have made the successful creation of international governmental mechanisms elusive, whether in the field of security, information and big data or the environment, to name only three. However, Muñiz emphasised that Altius 2014 should end on a positive note; while much of the conference had addressed world problems, we must not forget, he said, that the world will be full of opportunities and innovation. Europe shows us that peace can be achieved, interdependence managed, and effective dialogue and governance implemented.
Muñiz finished by outlining the plan for Altius 2015. The conference will be based around seven areas and one overarching theme, split into four sub-themes. These substantive areas are: Applied Sciences and Engineering; Art, Architecture and Design; Biological Sciences and Medicine; Economics and Business Administration; the Humanities; Juridical Sciences; and Political Science and Government. The overarching theme of Aging, Health and Genetics will be split into Demographics and Aging, Innovation in Healthcare, Genetics, and Impact on Social Structures.

Finally, to round off the conference, Muñiz encouraged all attendees to get involved, whether by joining Altius on social media, suggesting speakers and members for 2015, or helping with and attending other Altius events, such as proposed meetings in Washington, D.C. and Seoul, and collaborating on Altius’s continued development not only as a “think-tank” but also as a “do-tank”.

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