WHAT ARE UNIVERSITIES FOR? IS IT TIME FOR A NEW DEAL?[1]

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The university is one of the oldest institutions in the world. The pursuit of creating new knowledge "just for knowledge's sake" and of excellence in science is written into its DNA — and this will and should not change. At the same time, universities' imperative to engage with society is more intensively recognised — and universities take this up in many ways.

In our deeply connected and globalised world, strong external and internal forces are impacting universities, challenging them to their core: new forms of learning and teaching, new forms of doing science (open science and open innovation), urgent societal challenges that need an interdisciplinary approach, diversity and inclusion, efficiency and accountability.

How do research universities engage and where are their priorities? While universities (may) have and continue to deserve a high degree of autonomy and freedom to determine their path, it is clear we need new paths for dialogue and new kinds of agreements with society. What are the implications for universities and science advice?

The university and excellence

The university is one of the oldest institutions in the world. After 800 years or so, it is still going strong. The "Western", often Humboldtian model of a university has become an almost universal and successful model for higher education. The free and sceptical enquiry at the frontiers of human understanding underpins its wide range of activities in learning and teaching, in research and innovation, in entrepreneurship, public engagement and more.

Despite its long-standing success, these are turbulent times for universities. There is **criticism** from many quarters. Bert van der Zwaan (former rector magnificus of Utrecht University and former chair of the League of European Research Universities, LERU) in

his book *Higher Education in 2040: a Global Approach*[2] lists some of these criticisms: the mass nature of education, the focus on efficiency and research output, the lack of collaboration with industry, the lack of societal engagement. These criticisms have to be heard, assessed, given a value and, importantly, a response.

Bert van der Zwaan also discusses **challenges** around food, energy, climate, water and other resources, all of which are global issues, and are captured, for example, by the United Nations in the UN Sustainable Development Goals. Other challenges pertain to the changing nature of work and the demands from the labour market affecting learning and teaching (and more) at universities, from online learning to life-long learning and student

entrepreneurship (all of which LERU is working on). In addition, the 21st century will be, and already is, that of the fourth industrial revolution, the digital revolution, characterised by the parallel development of all kinds of technologies. From genetic engineering, to virtual reality, machine learning and artificial intelligence, to blockchain and digital currencies, exciting new possibilities are rapidly developing, with world-changing potential, benefits and risks.

I will return to the issue of how universities can interact with these challenges, but let us first remind ourselves that these advances to a large extent trace their origins to ground-breaking, pioneering, **fundamental, blue-skies research** made at research universities. Such research is driven by a deep-seated curiosity to understand and improve the human condition. Secondly, it is driven by the talented people the university attracts, nurtures and releases into society. People who are "creative, critical, autonomous, intellectual risk-takers" as LERU has argued in its policy papers on doctoral education. As LERU has stated in several papers, "it is talent more than technology that society needs from universities". Thirdly, such research is fuelled both by **competition,** which can be ruthless, and by collaboration, which can be challenging. Both are necessary to confront the challenges society faces and the opportunities they bring.

This also means that the quest for **excellence** is and must be contested. It can never be taken for granted, but must be earned and continuously scrutinised.

I have not defined 'excellence'. When I looked for it in a seminal LERU paper "What are universities for", written in 2008 by Profs. Geoffrey Boulton and Colin Lucas[3], who were instrumental in shaping LERU's foundational principles, I only found one instance of it, in a phrase on "society's technical excellence". Nor does the word 'excellence' appear in LERU's mission statement. To be sure, excellence is not easily defined or captured. But neither can we claim to "know excellence when we see it". Excellence is not an absolute, it derives its operational meaning from the context in which it is set, from the criteria that are and must be defined in that context. Excellence is also not the exclusive domain of pioneering research, it applies to innovation and entrepreneurship, to teaching and learning, etc. Not only is it our duty to set standards for excellence. Importantly, it is our duty to make those standards fair, open, transparent and merit-based.

Meritocracy is, after all, what universities are about. Meritocracy refers to a social system in which merit or talent is the basis for sorting people into positions and distributing rewards[4]. It dictates that access to power and resources be granted to those who deserve it. Meritocracy, requiring that competing ideas or hypotheses must be evaluated solely in terms of their merit, is a deeply engrained value in the academic world. In universities, it is the basis on which academics get tenure, secure scarce research funding, and publish in prestigious journals — through rigorous competition which should naturally drive the most excellent to the top. However, the idea that excellence is recognised solely on the basis of pure merit does not always work well in practice. There is evidence showing that organisations with an explicit commitment to meritocracy are particularly susceptible to bias[5]. Universities are no exception. In a LERU paper on the effects of implicit bias and gender equality, we show how academic excellence is not always gender-neutral. Although it is not an easy subject in the academic world, LERU believes it is crucial, first of all, to recognise that the rules of meritocracy can be inadvertently circumvented — by all of us, because this is about men as well as women being susceptible to bias as a cognitive process, and, secondly, to commit to take action against bias, for instance in recruitment, evaluation and promotion

procedures. We can and must in this way avoid a discrepancy between idealised meritocratic beliefs and the *de facto* functioning of, for example, assessment procedures. The argument can and must be extended to all underrepresented people and to all activity areas at universities (learning, innovation, etc.), if we are to achieve a more **equal, diverse and inclusive university**, which is another pressing imperative for universities, if they want to maintain their position of credibility, authority, relevance and **impact** on society in the future.

Productive interactions and pathways to impact

Over the last decade and more, the discussion of universities' **impact on society** has gained importance. It is, to a varying extent, embedded in policies referring to universities' contributing to the knowledge society, solving global, societal challenges, building an open and inclusive European Research Area, and more. LERU expects this trend to intensify even more in the near future.

Impact has been in the past, and is to some extent still associated with **economic benefit**. As public institutions (most in Europe are), universities are accountable to demonstrate that they use the public purse wisely. LERU is no stranger to this. Twice in the past years, we have produced a report demonstrating the collective contributions of LERU universities to the economy.

Whilst that remains important, I am happy to see that the prevalence of uniform, linear models of knowledge production and impact, focusing on easily quantifiable output and direct economic benefit, is a tide that has started to turn, albeit perhaps too slowly or unevenly. It is reassuring to LERU that governments and policy makers (begin to) realise that these models do not suffice to capture the very societal impact they want, and that, at worst, they may jeopardise fundamental scientific characteristics, such as unpredict-

ability, experimentation, sufficient time-span and even failure.

In an open, non-linear and networked science system, academic knowledge is not a simple package that can be handed over, but a dynamic part of a wider process which develops in interaction with a relevant context of stakeholders, each with their own expertise, knowledge and insight. Societal impact is then to be regarded as the outcome of the creative encounter of these stakeholders and their contributions, which should start right from the design phase of a research project, for example, and last throughout its course. Central to this is the concept of **productive interactions**: the mechanisms through which research and other activities lead to socially robust knowledge and relevant applications. To determine research impact in this new model, traditional mechanisms will come under (even) more scrutiny. Two such mechanisms, bibliometrics and peer review (each with their own pros and cons), will need changes to remain fit for purpose and meaningful in a dynamic, open and networked research ecology. Many innovative approaches are starting to take ground: new qualitative and quantitative measurements have been developed, new methods aim at the use of social media, and peer review is being extended with other expertise, to name just a few.

New evaluation procedures need to have the capacity to assess quality and relevance in a dynamic, non-linear, and often serendipitous environment. Procedures need to be flexible, process-oriented and able to review the different contributions of partners and the productive interactions between them. These new evaluative arrangements will differ per discipline, accounting for variation in production, communication and context.

LERU universities are pro-active in developing more meaningful and robust approaches to impact, recognising that there are multiple pathways to impact, that one size will

not fit all circumstances and different sorts of research will generate different sorts of impact. Evidence of this can be found in universities' new strategic plans, in their support for research projects in which, in line with the productive interactions model, societal stakeholders are involved from the start and throughout the process, in the way in which they recruit and promote researchers, and more. They do this in response to, and/or to actively help shape policies by governments and funders, who are developing or revamping their own approaches to impact (cf. REF in the UK, SEP in the Netherlands, etc.).

Governments, policy makers and funders — at the EU, national, and other levels — should recognise that impact is the result of a dynamic, open and networked process in a culture of sustained engagement and co-production of knowledge. Consequently, they should support and incentivise universities in their endeavours to embrace this broad perspective on impact and the accompanying agenda, they should take a flexible approach, and they should engage with universities to develop meaningful and sensible impact evaluation policies.

Universities on their part should fully embrace the impact agenda, safe in the knowledge that it is fully compatible with their historical fundamental missions of knowledge creation and transmission. They should engage with others across the research ecosystem, including governments, research funders, the private sector, civil society and society at large, so as to develop open, explicit and **transparent reward systems** that include the value of all kinds of impact, reward it and take it into account for individual promotion.

That includes properly valuing academics' **public engagement**. We know that academics have long contributed freely their specialist knowledge to public bodies, to a broader public, and as public intellectuals. Often this was/is done informally, without knowledge of the university, part of the "halo effect" of a university (as said in "What are universities for"). Public engagement has come to the forefront as public policy seeks to be evidence-based and therefore depends on access to a wide range of specialists, and as universities actively seek to fulfil their role in solving societal challenges. Academics' reputations for independence and their credibility make them ideal interlocutors for such debates and universities offer a fertile space. The challenge for universities is to create, with a light touch, an enabling environment that supports and encourages such activity. The challenge for government and other bodies is, in part, to express the need and to fashion the processes through which such inputs to public policy and engagement can be made.

Science and policy: LERU and the UN — a case study

Two years ago, LERU signed up to the **United Nations Academic Impact (UNAI) principles**. UNAI is an initiative to align institutions of higher education, scholarship and research with the UN. It aims to generate a global movement of minds to promote a new culture of intellectual, social responsibility. It is driven by a commitment to such bedrock principles as 'freedom of inquiry, opinion and speech', 'educational opportunity for all' and 'global citizenship'. By sharing ideas across borders and disciplines it should be possible to find solutions to many interconnected problems. In the spring we organised a LERU meeting on university development cooperation and the UN's SDGs. Secondly, LERU has recently obtained 'special consultative status' with the **UN Economic and Social Council** (ECOSOC). As a result, LERU can now actively engage with ECOSOC and its subsidiary bodies, as well as with the UN Secretariat, programmes, funds and agencies in a number of ways. LERU can, for instance, provide expert analysis, raise public awareness of

relevant issues related to research, education and innovation.

This has happened thanks to the active engagement of one of our members, the University of Geneva, located in a city which is of course a global hub of multilateral diplomacy. The University of Geneva has just now (October 2018) launched the **Geneva Science Policy Interface (SPI)**, with the support from the Swiss Federal Department of Foreign Affairs government, and in collaboration with the University of Zurich, EPFL (École polytechnique fédérale de Lausanne), and LERU. Part of SPI's mission is to engage research-intensive universities in impactful partnerships and contribute to redefine the university sector's global role and social responsibility. SPI is to act as a decision-making support system connecting international organisations with the latest knowledge, technology and evidence produced by scientific institutions. It is to facilitate and catalyse interactions through active matchmaking, fostering knowledge networks, incubating collaborations and capacity building.

We are now also linking the Geneva SPI to **LERU's engagement with other networks of research-intensive universities across the world**, such as AAU (USA), U15 (Canada), RU11 (Japan), C9 (China), AEARU (East Asia), Go8 (Australia), RG (UK), U15 (Germany). There will be a common meeting in December where we will engage delegates from UN organisations, LERU and the other networks to think of concrete ways in which to engage.

The university: A sanctuary that is open, connected and socially engaged

Clearly, there are important developments and exciting opportunities for universities, demanding deep reflections about and substantial changes to universities' usual way of doing business and their established culture. The university should be a "sanctuary for ex-perimentation and reflection on all kinds of issues that will affect society and the labour market in the years ahead".[6]

A sanctuary that is open: **openness, sharing and collaboration** characterise many of the changes upon us. The transition to open science and open scholarship is leading to different open-access publishing models and to open data ("as open as possible, closed when necessary"[7], open infrastructure, changes in the metrics, assessment of promotion, etc. Also, citizen science and interdisciplinarity require more openness, the breaking down of silos and a university that is more "permeable".[8] On **interdisciplinarity**: we see interdisciplinarity as both an individual, bottom-up, academic mind-set and an institutional agenda driven by quest for excellence and the desire to serve society. Universities are tasked with finding that balance, letting both approaches meet each other and lead to good things. Modern society depends on the whole range and interconnectedness of knowledge rather than on a subset or isolated disciplines. This requires new structures and processes in universities. It is important to stress the role of humanities and social sciences in this, as independent self-organising branches of intellectual endeavour and as vital partners in solving challenges such as energy, food, climate, etc. We, society, are not going to solve these challenges successfully if we consider them only or primarily as technological challenges and if we do not comprehensively embed the human and social dimensions of these challenges throughout our quest to solve them.

Education will be affected. The "socially engaged university", as Bert van der Zwaan calls it, pays serious attention to preparing students for their future roles in society, as a considerable number of them will develop as leaders in society. Of course, online learning (another manifestation of openness) and other effects of the digital society are making profound marks already on university

teaching and learning. In 2014, for example, LERU explored some of the changes in online learning and how they change education at research-intensive universities like the LERU ones.[9] This interaction between universities, policy, politics and society is the role that LERU and the LERU universities, collectively, have been taking up for over 15 years now. To analyse these issues, to find common ground and to discuss views with stakeholders inside and outside the university. We do this through our policy papers and through events in Brussels and in many other places and with many stakeholders.

Conclusion:
A New Deal for universities?

To recap and finish up, universities have to engage in many ways if they want to maintain their position of credibility, trustworthiness, authority and relevance in the "information-rich" society. Bert van der Zwaan sees it this way also: the university, he argues, needs/will need to carry out a whole range of activities in society that clearly demonstrates what it stands for. He also mentions, for example, community services, interactions with city and region, etc., with the university seeking to "achieve broader social returns for its own performance". And, to be sure, in his words: "there is much work to be done"[10].

While the quest for excellence in advancing knowledge is existential for universities, there are many other roles (some old, some new, some old in a new context) universities need to fulfil. Perhaps too many of them nowadays, which is why individual universities have to reflect deeply on the roles and the agendas that *do* take priority for them, as they may not be able to do them all well at once. Diversification of the types of universities and their strategic priorities may be on the cards for us.

More than ever, we need to work on a broad debate in which society and university (in van der Zwaan's words) "look each other

squarely in the eye to discuss the question of what would be desirable in the future, not only for the university, but also for society. We are seeing far too little of this, partly because there is such mutual **distrust** between the university and the world of policy and politics."[11] I would agree very much with the "partly": it is partly distrust. Partly it is also lack of knowing each other and lack of really trying by those involved. Nowadays, this also needs to be linked to citizens' perceived and real (it is both) lack of trust in knowledge ('fake news', 'disinformation', etc.), and by extension lack of trust in universities, which is and must be a real area of attention for universities.

We definitely need new or improved paths for dialogue, and new kinds of agreements, as Bert van der Zwaan argues. Perhaps we need to revise the (sometimes tacit or implicit) compact of the past between governments and universities. Perhaps we need a New Deal for universities. In the LERU paper "What are universities for" (2008) Boulton and Lucas argue that the challenge for government is to articulate a compact with universities that recognises the value of autonomy and freedom, and supports them. It is also to assess their value and benefit without oppressive mechanisms of control or direction that undermine their effectiveness and to create processes of funding that do not drive them into narrow or short-term obsessions. The challenge for university leaders is to recognise that academic freedom — with the rights and duties that it entails — is a crucial source of creativity, and that the freedom to enquire, debate, criticise and **speak truth to authority** is central to the university's vitality and its utility to society. Those values are as old as the universities themselves, and they should remain fundamental and inalienable to universities, whatever the shape and role of the university in the future will be and however a new compact between universities and governments will or may be articulated.

The university will make it to 2040, that is Bert van der Zwaan's reassuring conclusion, but we should expect great changes. Reflection, debate and hard work will be required to give shape to all these changes.

References

1 This article is based on the speech in the conference "Advisory Role of Academies in the Information-Rich Society" (Tallinn, 21 October 2018).
2 Van der Zwaan B. *Higher Education in 2040: a Global Approach.* Amsterdam: University Press, 2017.
3 League of European Research Universities. What are universities for? 2008. https://www.leru.org/files/What-are-Universities-for-Full-paper.pdf (accessed 25.11.2018).
4 Merton R. K. The Normative Structure of Science. In: Merton R. K. *The Sociology of Science: Theoretical and Empirical Investigations.* Chicago: University of Chicago Press, 1973 [1942].
5 Castilla E. J., Benard S. The Paradox of Meritocracy in Organizations. *Administrative Science Quarterly*. 2010, 55 (4): 543–676.
6 Van der Zwaan, op. cit.
7 League of European Research Universities. Open Science and its role in universities: A roadmap for cultural change. 2018. https://www.leru.org/publications/open-science-and-its-role-in-universities-a-roadmap-for-cultural-change (accessed 25.11.2018).
8 League of European Research Universities. Citizen science at universities: trends, guidelines and recommendations. 2016. https://www.leru.org/news/citizen-science-at-universities-trends-guidelines-and-recommendations (accessed 25.11.2018).
   League of European Research Universities. Open Science and its role in universities: A roadmap for cultural change. 2018. https://www.leru.org/publications/open-science-and-its-role-in-universities-a-roadmap-for-cultural-change (accessed 25.11.2018).
   League of European Research Universities. Interdisciplinarity and the 21st century research-intensive university. 2016. https://www.leru.org/publications/interdisciplinarity-and-the-21st-century-research-intensive-university (accessed 25.11.2018).
9 League of European Research Universities. Online learning at research-intensive universities. 2014. https://www.leru.org/files/Online-Learning-at-Research-Intensive-Universities-Full-paper.pdf (accessed 25.11.2018).
10 Van der Zwaan, op. cit. (here p. 240).
11 Van der Zwaan, op. cit.

About the Author

PhD **Katrien Maes** is Deputy Secretary-General of LERU, the League of European Research Universities, which is a network of 23 renowned universities. LERU advocates the values of research universities across Europe and beyond. Katrien has worked in several roles for LERU since 2004, having co-authored or co-developed many LERU policy papers, for example recent ones about societal impact, interdisciplinarity, citizen science and others. As an expert in EU research, innovation and higher education policies, she serves in several advisory groups. Katrien Maes obtained a PhD in linguistics from and worked as an assistant professor at the University of Delaware (1992–2002), working on second language acquisition, pedagogy, syntax and Italian language.

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PhD **Katrīna Mēsa** ir Eiropas Pētniecības universitāšu līgas *(LERU)* ģenerālsekretāra vietniece — līga apvieno 23 pazīstamas universitātes. K. Mēsa darbojas *LERU* sistēmā kopš 2004. gada, piedalījusies daudzu *LERU* politikas dokumentu izstrādē, ir ES izpētes, inovāciju un augstākās izglītības jautājumu eksperte, darbojas konsultatīvajās grupās. Saņēmusi *PhD* valodniecībā Delavēras Universitātē un strādājusi tur par asociēto profesori (1992–2002), izpētes tēmas — pedagoģija, sintakse, itāļu valoda.

KAM DOMĀTAS UNIVERSITĀTES? VAI PIENĀCIS LAIKS NOSLĒGT JAUNAS VIENOŠANĀS?

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Kopsavilkums

Atslēgvārdi: *universitātes, izcilība, meritokrātija, sacensība, ES, Eiropa, augstākās izglītības politika, izpēte, sabiedrības izaicinājumi*

Universitāte ir viena no senākajām institūcijām pasaulē. Centieni radīt jaunas zināšanas "vienkārši zināšanu dēļ" un iegūt izcilus pētījumus zinātnē ir ieprogrammēti universitātes DNS — un tas nemainīsies. Tai pašā laikā arvien vairāk tiek atzīta nepieciešamība nostiprināt universitāšu saiknes ar sabiedrību. Mūsu globalizētajā un savstarpēji cieši saistītajā pasaulē universitātes ietekmē spēcīgi ārēji un iekšēji apstākļi, radot jaunus izaicinājumus: jauni mācīšanas un mācīšanās veidi, jauni paņēmieni zinātniskajā pētniecībā, dažādība starpdisciplinārā pieejā. Kādas ir pētniecības universitāšu prioritātes? Kaut gan universitātes joprojām lielā mērā bauda autonomiju un brīvību pašām noteikt savu ceļu, ir skaidrs, ka nepieciešams radīt jaunas iespējas dialogam ar sabiedrību.