



The social university in a scientific society: an appeal for interspaces

This speech was delivered by Rector Manificus Peter-Paul Verbeek in Dutch on 9 January 2023 during the Dies Natalis.

Dear all,

It was 391 years ago today that the University of Amsterdam began, just a stone's throw from here. On 9 January 1632, Barlaeus delivered his inaugural lecture 'The Wise Merchant', a day after Vossius delivered his own oration on the use of history. They delivered their lectures in a period in our history that is increasingly the focus of questions today. Questions that indeed examine the wisdom of the merchants of yesteryear, questions that demonstrate that it is indeed good to continuously critically examine our past – something that the University of Amsterdam will also be actively doing from now on, based on the questions that we are now asking in regard to our past.

Finally, we can once again celebrate our dies natalis – the anniversary of our founding – together in person. This is a special moment for me, given that, though I have only been here for a short while, I already feel completely at home. We are now at a very different stage in history than we were 391 years ago. The past years of the Covid-19 pandemic have had a major impact on science, research and academic knowledge, and at least as much on the role of science, research and knowledge in society. I would like to talk about this changing relationship between 'science' – in the broadest sense of the word – and society, and in particular about what this means for universities in the 21st century.

Covid-19 made the link between science and society more evident than ever before. Science and research gained unprecedented influence over politics, and the media spotlight was cast directly on researchers and medical experts, which also led to far-reaching

forms of intimidation. A need for speed arose: in the hunt for vaccines the pace of conducting, assessing and publishing research increased enormously. We conducted a huge social experiment with the digitisation of our education and research. And significant social controversies concerning vaccines and lockdowns arose, controversies that laid bare the great distrust of science and medicine among a certain group of people. Though this group is limited in size (confidence in science and medicine has actually grown in recent years, as figures from the Rathenau Instituut [Rathenau Instituut, 2021] show), it is a group that has nonetheless played a major role in the public debate.

Covid-19 has therefore radically changed the context in which universities do their work. Actually, it has intensified a process that had already been long underway. Science and society are becoming increasingly intertwined; as science focuses more on society, society is becoming more scientific. Politicians can no longer make well-founded choices without science and research. And the scientific and research agenda is increasingly being directed by societal issues and challenges. These developments call for a re-evaluation of what a university should actually be. Why do we have universities in the first place? What should students be learning? What role do universities play in society?

The idea of the university

What is the nature and mission of a university? This question has been asked, in various forms, throughout the ages. And, of course, that always happened when there was cause to question its role, just like now. The existential philosopher Karl Jaspers, for example, wrote his book *Die Idee der Universität* (Jaspers, 1946) immediately after the Second World War. According to Jaspers, the university is a place where 'authentic



thinking' is facilitated. After all, thinking 'on your own' and not as part of the masses keeps us from slipping into fascism.

The Covid pandemic has forced us to question once again the purpose of universities. And we are doing so against the background of an extended period during which an economic mindset has strongly dominated society's thinking on what a university should be. 'Turn knowledge into cash' has long been the mantra, especially concerning the more applied disciplines. Research funding has even been distributed, in part, based on companies' willingness to contribute to the research. A common image was that of a 'pipeline' between universities and commercial enterprises, with the assumption being that policy should be aimed at ensuring a smooth, uninterrupted flow through this pipeline. And in fields where the cash register is not ringing as loudly, there had to be at least 'valorisation'. With the arrival of the Covid-19 pandemic, however, we have seen that this view of universities is much too limited. The economy is just one of the many areas of society in which science and research play a major role. From Covid-19 to nitrogen and from energy to climate, our society is facing unprecedented challenges, and science plays a central role in how we can address these challenges. The valorising university has become a socially engaged university.

What does this development mean for the way universities should structure themselves? What does it mean for our society as a whole; how should universities be operated? To answer these questions, I would first like to explore in more detail the changing social context in which universities are operating in the 21st century. I will then investigate what it takes for universities to play a meaningful role in this new context. I will advocate the creation of 'interspaces', that is to say: spaces where universities can connect with society in a meaningful way.

The new context for the university

The new context in which universities operate can be summarised based on three developments. I have already mentioned the first one: the more central role science is playing given the enormous challenges society is facing. The climate issue is perhaps the most

urgent example of this. Philosopher Bruno Latour, who died last year, called the pandemic a dress rehearsal for the climate crisis that is yet to come (Latour, 2021), and with good reason. The climate issue is inextricably intertwined with science: it is scientific tools and scientific models that tell us just how serious the problem is; it is science-based measures that may enable us to do something about it; and it is science-based technology that has caused the problem over the past century. Universities are playing an increasingly important role in this scientific society.

Secondly, scientific knowledge has, for a long time now, ceased to be generated by universities alone. In the Netherlands, the public health authority RIVM was of crucial importance during the pandemic, and this institute is part of a Dutch Ministry, not a university. And then there is the Royal Netherlands Meteorological Institute (KNMI), which has played a central role in matters relating to climate change. Again, this is an agency of a Dutch Ministry. And the vaccines that have helped us so far come from the research departments of pharmaceutical companies. At the same time, the fundamental, innovative research carried out by universities has always played a crucial role at these agencies and pharmaceutical enterprises. This raises the question of what the university's specific role can be in this new landscape of scientific research.

Thirdly, science itself has become more accessible to society and more transparent in recent decades as communication from the science community became increasingly important, moving from 'providing information' and 'instilling enthusiasm' to 'evoking citizen participation' and 'facilitating open science'. The image of science existing in an ivory tower is now obsolete. The Dutch Science in Transition movement (Miedema, 2022) has given the further modelling of the social role of science an enormous boost, and the current global emphasis on open science (UNESCO, 2021) is a direct continuation of this.

The stage we have now entered requires us to go a step beyond open science. The ivory tower has met the wrecking ball and the ruins lie scattered over the ground. It is still recognisable as a place of science and knowledge, but now everyone can enter and exit



the grounds freely, from citizen scientists to staff of commercial R&D departments, from social action groups to government bodies. Society is no longer simply the recipient of scientific knowledge: society is now an active participant in the practice of science.

Based on these developments, the university is increasingly becoming a social university. This designation is close to the concept of the 'civic university', which has been developed in recent years, particularly in the United Kingdom, to emphasise the stronger links between universities and society (Goddard et.al. 2016). But while the 'civic university' mainly emphasises the socialisation of the university through an increasing pursuit of social impact, I also want to emphasise the scientification of society and the increasing responsibilities that universities are given as a result. The new connections between university and society go beyond 'social impact': it is precisely the intertwining of scientific and social questions that requires attention, and that calls for new ways of shaping and organising universities.

The science paradox: value-free and valuable

What is the place of the university in this new synthesis of science and society? What unique role can universities play in this new context? The answer to this question is what you could call the 'science paradox'. The university's role lies in the unique way in which it manages to connect two dimensions of science that would otherwise appear to be mutually exclusive: critical distance, which leads to truth and understanding on the one hand, and social engagement, which leads to impact on the other. Scholars are driven by curiosity and by engagement. While seeking fundamental knowledge and understanding, they also want to find ways to be meaningful to society. These two aspects would appear to be paradoxical – and that paradox is also often expressed in the sometimes contradictory demands society places on science. Science must be impartial, while it also needs to have an impact. Scientists must be independent but also socially engaged. Science is both value-free and valuable.

What is unique about universities is not so much the fact that these two dimensions of science have a place there, but above all that, there, these aspects are

mutually linked. Universities are places where critical and independent thinking can coexist with engagement, without one dimension having to overshadow the other. They are places where you can always start over again, ask critical questions, and have a quiet space to carefully consider your approach and method. They are places where fundamental knowledge is not what matters most, nor the impact either, but rather that subtle interplay between distance and proximity – close enough to take a good look at what is going on and feel engaged, and yet far enough away that you can always ask yourself why things are the way they are, whether you are sure of what you think you know, and whether things could be different or better.

The university's unique role in our scientifically advanced society thus consists of connecting curiosity to engagement and autonomy to impact, not as a paradox, but as two side of the same coin. And so the most important challenge for the university in our science-based society is to continue to connect these two dimensions of higher knowledge and allow both to exist in a shared space. In our research as well as in the way we educate students.

Interspaces

Universities do not automatically create this connection. Such a connection requires space, an interspace that helps shape the nature of the connection and for which both the academic/scientific community and society have their own responsibility. In this last part of my story, I would like to delve further into this interspace – what it involves and how it can replace the old image of the 'pipeline' between universities and innovation. Interspaces are places where fundamental and applied matters can meet, and where the pursuit of knowledge and understanding is coupled to the pursuit of impact. Places where both the hearts of science can beat. There are at least four interspaces that are important for the university in the 21st century.

The first is simply the space between matters of concern to the academic and scientific community and social issues. These two types of issues only meet where there is the latitude to take challenges facing society and rephrase these in scientific or academic terms and where there is sufficient scope to apply scientific/academic

insights to create social impact. This is the space where the scientists, researchers and academics, the policymakers and the civil society organisations meet, and it is a space where, thanks to open science, society can participate in scientific research. This space can be created through funding, but certainly also by setting up a physical location for this interaction.

For this interspace to flourish, effort is required both on the part of the academic and scientific community and on the part of society. Scientists and researchers must, even more than before, prioritise ethics by acting responsibly when it comes to collaborations with social partners and by preventing improper use of our knowledge and technology. And they must pay close attention to the integrity and quality of their research and continue to provide clarity about the degree of certainty that their research can provide, even if they are under pressure to quickly produce usable results. Conversely, society should not expect absolute certainties from researchers or overhasty practical application of their findings. Furthermore, attention needs to be paid to the safety of researchers and such who engage in the public debate and who are increasingly facing threats.

The second interspace that is needed is the space between disciplines. As obvious as the need for this space may seem, it is notoriously difficult to realise such a space. Scientists, researchers and academics are trained in their own discipline, look at issues from the perspective of that discipline, and use examples from that discipline as their benchmark. However, the issues faced by society do not 'know' these divisions between the disciplines. It is precisely by thinking from the perspective of social challenges that space is created for interdisciplinarity. For this interspace to flourish, it is necessary to remove barriers between and within faculties and to think differently about the assessment of the quality of research so that interdisciplinary collaboration no longer poses an obstacle along a person's career path. The ongoing developments in the area of Recognition and Validation are of great importance in this regard.

A third space that the socially engaged university needs is the space between the citizen and research.

Citizen science has increasingly entrenched itself in the world of research – in science, technology, and medicine – and this deserves to be developed further, not only to gain the 'extra hands' that can carry out the research devised by those in the scientific, medical and academic community, but also as a way to introduce the perspective of society into such research. The unique knowledge position of citizens can play an important role in this. In medical research, for example, patients can contribute to research into their own disease or condition based on the unique, 'first-person' experience they have of that disease or condition. At the same time, the 'rules of the game' on which science and medicine is based – rules concerning concepts like 'autonomy', 'scientific and academic freedom', 'quality' and 'integrity' – must continue to apply.

The fourth – and perhaps the most important – interspace is the one between the student and society. The socially engaged university we have become produces highly qualified people in various disciplines who will play a responsible role in society. In their future work, the two halves of their 'academic heart' will have to beat equally hard, which means that, in educating students, we must not just aim to stimulate their academic and scientific curiosity: we need to facilitate their connection with the society in which they will be working and to which they, with their critically minded, yet socially engaged ethos, will contribute. In short, our education must not only contribute to knowledge and skills, but also to academic citizenship. And that requires that we fully engage students in the connections between the matters relating to the scientific and academic community and social issues and in collaborations with citizens and various social groups and partners.

An important initiative aimed at nudging us in this direction has recently been launched at our university: after 'Science in Transition' it is now time for 'Education in Transition.' These are initiatives to be nurtured, just like all the other interspaces we have already shaped (and can still develop further) at our university, spaces like the Law Hub, IAS, Humanities Labs, IIS and Lab42, just to name a few.



Final observations

Interspaces are fragile spaces that can only exist if they are jointly managed by both the academic and scientific community and society. You can compare these with the historical meent of the Netherlands, or the 'commons' you can still see to this day in the United Kingdom – the shared pastures used jointly by farmers and livestock owners. In his famous analysis of 'the tragedy of the commons' (Hardin 1968), Garrett Hardin argued that this concept of 'commons' is lost as soon as the interest of the individual prevails over public interest (Hardin 1968). When individual livestock owners increase their herds and allow too many animals to graze on the commons, this results in soil degradation and erosion and, eventually, less space for the livestock to graze. In a similar fashion, the lush interspace between the academic and scientific community and society can become depleted and eroded. This can be the case, for example, when scientific and academic knowledge is viewed strictly from an economic perspective, without allowing scope for scientific and academic innovation and criticism. Or when the academic and scientific community becomes too far removed from society and academic freedom turns into academic self-indulgence. Interspaces require constant maintenance, attention, and shared care. And that makes them the responsibility of both the university and society. I look forward to taking on my share of that responsibility with great energy and dedication in the years to come.

Dixi.

Acknowledgement

I would like to thank Bert Bakker, Geert ten Dam, Huub Dijkstra, Yasha Lange, Barend van der Meulen and Frank Zuijdam for their critical input on earlier versions of this dies natalis speech.

References

- Goddard, John, Ellen Hazelkorn, Louise Kempton and Paul Vallance (eds.) (2016). *The Civic University - The Policy and Leadership Challenges*. Cheltenham and Camberley: Edward Elgar Publishing
- Hardin, Garrett. 1968. 'The Tragedy of the Commons: The population problem has no technical solution; it requires a fundamental extension in morality.' *Science*, Vol. 162. No. 3859. 1243-1248
- Jaspers, Karl. 1946. *Die Idee der Universität [The Idea of the University]*. Berlin: Springer, 1946.
- Latour, Bruno. 2021. 'Is This a Dress Rehearsal?' In *Critical Inquiry* 47:S2:S25-S27
- Miedema, Frank. 2022. 'Science in Transition: How Science Goes Wrong and What to Do About It.' In *Open Science: the Very Idea*. Frank Miedema. Dordrecht: Springer, 2022.
- Rathenau Instituut (2021). *Vertrouwen van Nederlanders in wetenschap (enquête 2021) [How far the Dutch trust science (2021 survey)]*. The Hague: Rathenau Instituut (written by Broek-Honingh van den, N., I. Glas and A. Vennekens)
- UNESCO. 2021. *UNESCO Recommendation on Open Science*. Paris: United Nations Educational, Scientific and Cultural Organization