

**DEMOS
HELSINKI**

**The need
for scientific
knowledge,
education,
and critical
thinking
is growing**

**4 theses about the
role of universities in
Finland in the 2020s**

Demos Helsinki
March 2019

How this Publication was Created

THIS PUBLICATION was born out of the need to understand the societal role universities play in a situation where rapid changes are taking place all around them.

Universities have traditionally played a crucial role in building a prosperous society in Finland. We believe that this role should become even more significant in the years to come. Climate change and digitization are challenging the structures of the traditional industrial society, and in these circumstances scientific knowledge, education, and critical thinking are needed more than ever.

Demos Helsinki has been working with universities and their research findings for over ten years, as long as it has been operational. We have repeatedly been made aware that the importance of universities is not adequately understood. Critical, socially relevant issues are being discussed daily, and we easily forget the role of universities as the foundation for and vanguards of society. They have an essential role in guaranteeing that the future will be better than the past.

This is why we got in touch with the Ministry of Education and Culture during the autumn of 2018 and the Ministry is now our partner in this venture. We would like to present arguments in the discussion about universities and their role in society. In this publication, we will describe the possible changes in direction for Finnish universities. We also see this publication as a starting point in the debate about what universities could be like in Finland in the 2020s.

The basis for this project is the multifaceted work that the writers of this publication have done at universities and in their co-operation with them. These experiences and viewpoints, existing literature and subject matter, plus the various discussions arising in work groups, have served as the building blocks for the theses on the role of universities in Finland and the coming changes in this role during the 2020s. An interview framework was built around these theses, which was then used in the interviews with various interest groups. Twenty-three interviewees took part, including university leaders, university employees, and scientists researching outside Finland. Politicians, educators, media persons, civil servants, and members of advocacy groups were also interviewed. A list of the interviewees can be found at the end of the publication.

The theses and their argumentations were amended after the interviews. Finally, the subject matter was synthesized into this publication. Think tank Demos Helsinki is responsible for the publication and its content.

In Helsinki 8.3.2019

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Finland's Universities in the 2020s - Four Theses

Thesis 1: The Significance of Universities Grows as Society Changes

EMBRACING MULTIFACETED CUTTING-EDGE SCIENCE is the best way of generating preconditions and keeping abreast of rapid developments in order to help create solutions for new, still partly unknown challenges. **The most significant influences universities have on society are born slowly, indirectly, and unpredictably.** Many scientific disciplines and scientists come together at universities. Their fundamental aim is to find the truth. Science does not just serve societal needs indirectly, it also supports broader education and culture, including cultural self-perception, critical reflection, and ability to be empathetic towards other people.

Thesis 2: The University Community Creates a Bridge from Regional to International

UNIVERSITIES HAVE AN IMPORTANT ROLE in introducing Finland's cities to the rest of the world. Science and research are international by nature. University communities, campuses, are open places, where people can learn, create, and have many various types of encounters with other people. Universities are seeking new ways in which to co-operate with municipalities, businesses, non-profit organizations and citizens. Local residents identify their universities as links to the wider world and to new phenomena.

Thesis 3: A Strong Mission Statement for Universities: Spreading the Scientific Worldview

UNIVERSITIES GENERATE RELIABLE, self-amending knowledge about society and nature using the scientific method. It is a unique way to generate knowledge and enhance society. The scientific worldview is spread by disseminating its achievements and the scientific method. **Universities should actively connect science and scientists with the media, citizens, and societal decision-making.** This could help prevent the polarisation of societal debates and create a mutual interpretation of surrounding phenomena while bringing understanding to the specific nature of scientific knowledge.

Thesis 4: The University is the Cradle of Civilisation for all Age Groups

OUR RELATIONSHIP WITH UNIVERSITIES and their idiosyncrasies – the ideal of education and self-development and the scientific worldview – begins in our youth. Universities are increasingly co-operating with high schools and vocational schools, so that more young people can discover universities and become familiar with the significance of scientific knowledge. By introducing science education to young people, they will become more familiar with knowledge based thinking. Learning to think critically and understanding the scientific method is important also for those who do not go to university. **The universities' target group is the entire population and having opportunities to learn and receive information should be ensured for all citizens, regardless of their age.**

The Role of Universities in Society is both National and Global

Finnish universities in the 2020s will have overlapping roles that are local, national, and international. The universities are faced with national expectations, such as training the new workforce and generating innovations. At the same time local universities are a part of the global science community, conducting research that seeks to find solutions to global problems.

WHEN FINLAND GAINED ITS INDEPENDENCE in 1917, it was a developing country compared to the more advanced countries in Europe. Today, Finland has one of the most well-functioning societies and is one of the wealthiest nations while being at the top of global ranking-lists that measure well-being year after year. Finland was ranked third in the SDG Index for sustainable growth in 2018.

Behind Finland's success story lie highly-developed scientific research and the education system. The university system has been the cornerstone for the welfare state, which aims to achieve educational equality for all. Finnish well-being was not built on natural resources, but on education and the competence and expertise of its workforce. There are eight Finnish universities among the 500 best universities in the world. The universities have trained innovators: researchers, politicians, civil servants, artists, and the workforce – all fulfilling the needs of society. They have assimilated nationally significant cultural and educational goals while simultaneously connecting Finns with the global scientific search for truth.

Universities still face many national expectations: as educators of their citizens, filling gaps in skills requirements, securing the evidence base for decision-making, and raising the general levels of education and thus raising

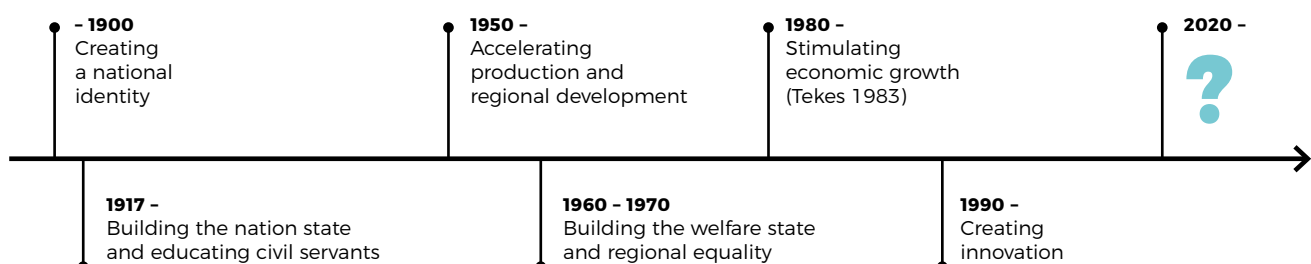
local levels of enterprise and vitality. Finnish universities are now also a part of the global network, and national requirements need to be calibrated to the increasing globalisation. As a result, local universities are clearly stepping out of the national frame of reference. One third of all scientific publications were written by multinational teams (reference numbers from 2008). Finland is a part of the international scientific community via its universities and it generates achievements and breakthroughs that have a global nature and audience.

One hundred years ago the national task of the universities was to help build a Finnish welfare society. The societal role of Finnish universities in the 2020s is a synthesis of its national and international roles. Universities need to be more international and generate achievements that are more globally relevant in order to produce visionary research and enhance a critical understanding of global problems.

The UN Agenda 2030 and its 17 goals for sustainable development define the fundamental framework for political processes and present principles for, among others, the targets of governmental programs. Universities have a decisive role in achieving these global goals and bringing into focus the ways in which to achieve them. In order for Finland to be able to respond to climate change and other environmental challenges in a socially justifiable and economically viable way, there is an urgent need for scientific knowledge, its compilation, and interpretation.¹ Similarly, the universities will have to find ways in which Finnish society can cope with the challenges and to enable it to renew itself – to continue being the civilised, educated society that is fundamental to Finland's success story.

¹ POLKU2030 – An evaluation of Finland's sustainable development policy. Publications of the Government's analysis, assessment and research activities 23/2019

Graph 1. The universities' role in society has also been in flux in the past
What is the purpose of universities in 2020s Finland?



The Role of Universities in the Post-Industrial Society

Universities' monopoly position regarding data, information, professions, and their elite status in society is unraveling all around the world. The need for critical thinking continues to grow, however, which is why it is necessary to safeguard the position of scientific knowledge. The central function of science is to uncover the truth and the culture of education that has grown around it – both are also sorely needed in the post-industrial society.

CLIMATE CHANGE, which threatens the future of the entire human population, will require enormous changes in society and its economic structures in the coming decade. Globalisation brings with it changes in both the political and economic systems. The global economy has engendered the development of a new type of inequality, and digital communication has changed the traditional ways in which information is produced and disseminated. All these trends have a significant impact on the stability and future vision of societies, as well as on how individuals experience their wellbeing and significance in society.

The changes place pressure especially on the societal structures and institutions that were born as a result of industrialisation. This challenge also includes Finland, a society whose success has leaned heavily on the institutions that functioned well and were regarded with an unusually high degree of trust within society. The current transition from an industrial to a post-industrial society will alter the connections between economic growth, work, and wellbeing and will question the position of the very institutions that, up to now, have been securing this positive development.

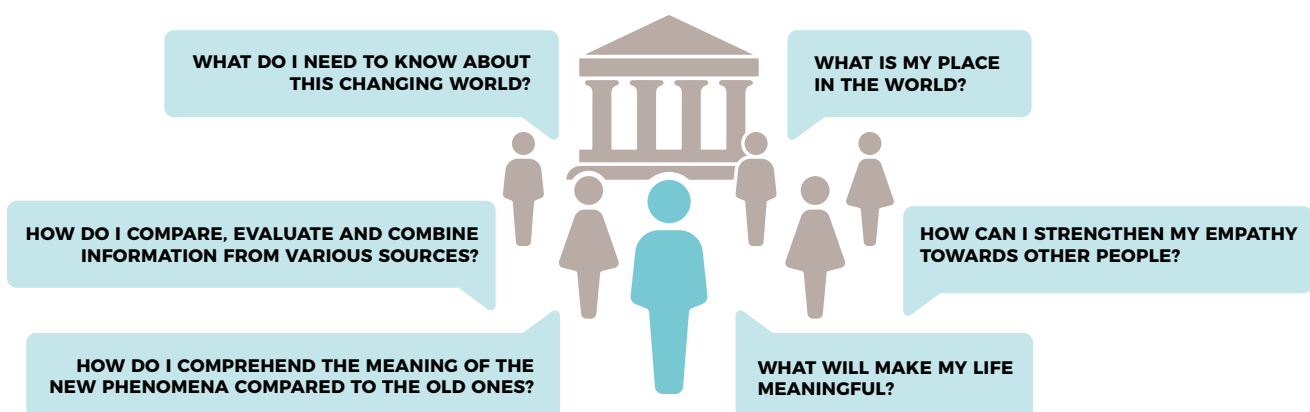
In this current process of moving into a post-industrial era, universities must join in the creation of a new type of society. When the environment, its principles, and institutions change, the universities' power to reform the society also needs to find new channels.

The universities' old monopoly position regarding data, information, professions, and their elite status in society is unraveling all around the world. Digital communication has made information easy to access, but this development has also changed the privileged position of scientific expertise. The role of being the gatekeeper of information has shifted from universities and the media to data giants that collect data about their users and aim their news streams at them. These data banks are immeasurably large when compared with, for example, national statistics or data gathered during scientific research. The data is accumulated by private entities and neither universities nor individuals have access to it.

Universities have long had the exclusive right to disseminate the central knowledge and skills bases of most occupations and professions. In order to have access to these, one had to be admitted into a university to study there and most often having a profession was tied to first having received a degree. In the world of accessible information, these restrictions barely exist anymore. In the global, quick-paced labor markets, careers are no longer based on degrees alone.

In the digital age, systematic knowledge production and theoretical expertise are more significant forces of production than before. Economists have pinpointed innovation and higher competence as the most pivotal factors of economic growth and universities are the single most important institutions in advancing these factors.

Graph 2. The importance of education is accentuated in the era of transformation of the 2020s



There has long been a strongly-held belief in Finland that all of its citizens should be educated and the Finnish education system has been designed accordingly. It was thought that the most important resource for a small nation was its people, whose education and training was worth of developing to as high a level as possible and extended to as many people as possible. Education was extended beyond the university system to include community colleges and the study groups of various organisations. Inspired by this vision of educating all of its citizens, the university system was made as accessible as possible. A special feature of the Finnish university system is that tuition is free.

Today new kinds of inequality, marginalisation, and polarisation pose challenges to fulfilling the ideal of an education for all. One might ask how the welfare state's ideal of an enlightened and learned citizen can now be realised. Education levels in Finland have jumped from being one of the lowest to the very highest in Europe, and the number of university students has risen in 60 years from 16,000 to the 170,000 of today. However, this rising trend appears to now have turned downward. Even though studying at a university is in principle possible for all, in practice the teaching and knowledge offered by universities is still beyond the reach of many.

The central questions for the 2020s will be:

WHAT KIND OF KNOWLEDGE does society need so that it can renew itself? How can universities help direct society to achieve globally sustainable goals? How can universities respond to changes in societal structures, such as those in the workplace and in the professions? How can universities create a feeling of belonging and meaning in a society where polarisation is growing along with digitalisation and the changes in information technology? How can universities fulfil their educational role in the middle of a flood of information?

Next, a series of four theses will be introduced, which are based on interviews and a background study regarding the tasks and roles of universities in the 2020s. The theses show arguments for why decisions that strengthen universities, science, and education will in the future be more of a priority in society than they are now.

Thesis 1: The Significance of Universities Grows as Society Changes

The current situation: The solutions to complex problems are found in unexpected places.

Universities, science, and higher education offer effective ways to increase the economic growth of a nation. However, the relationship between universities and societal needs is one of tension, because science is independent, and the benefits of science reveal themselves in unexpected ways. In 2016, every euro that was invested into universities added approximately 5.26 euros of value to the Finnish economy.

SCIENCE is always ahead of the rest of society. Research reveals facts about the world that would otherwise be difficult, if not impossible, to recognise and explain without rigorously applying the scientific method. Many scientific disciplines and researchers come together at universities: as a result, new insights are gained about phenomena in the world and solutions are found to solve a variety of problems.

A GOOD EXAMPLE OF SURPRISING SOLUTIONS found by science is the *Golden Goose Award*, given yearly in the United States. The purpose of the prize is to acknowledge research funded by the government and is given to research, the premises of which may have seemed odd to begin with, but which later lead to breakthroughs in economics, wellbeing, health, and security. In 2017, the Golden Goose Award was given to a research group which for decades had studied chytrid fungi. The research was vital in explaining the mass deaths of frogs and created procedures to prevent the destruction of animal species caused by this fast-spreading fungus, by, for example, ensuring the safe transportation of animals.

The universities' role as the unpredictable innovator of societies is more accentuated during the era of change and transformation. Scientific knowledge is needed now more than ever, since there are more complex phenomena and intricate problems arising all the time. We need more university education and researchers' analyses, since more of us need to upgrade our understanding of what these new phenomena are, what is going on in the world, and what our place could be in it.

For the last 50 years and longer, attempts have been made to direct universities towards being more useful to society: to respond to the growing need for new skills in the workplace, to co-create viable innovations with the business world, and to generate more economic growth. However, the relationship between universities and societal needs is one of tension: science is based on being independent and seeking the truth, not on any immediate benefit and need.

Universities, science, and higher education offer effective ways to increase the economic growth of a nation. A Universities Finland UNIFI study found that universities received 2,7 billion in funding in 2016, which gave 14,2 billion back into the Finnish economy. In other words, every euro invested into a university added approximately 5,26 euros of value.²) It is, however, difficult to accurately assess the positive economic effects of both university education and research in terms of empirical analysis. Universities and science naturally have other benefits to offer to the wellbeing of the population and the prosperity of a nation.

The most important contributions universities offer are slow to develop, are indirect, and unpredictable. Let us think, for example, about climate change and ozone depletion. These phenomena would not have been observed, nor would the reasons they occurred have been recognised in time, had universities not been doing research. There are a great number of examples like this in various fields: the economy, health, artificial intelligence, energy, and so forth. Basic research generates theories about the world, which open new perspectives into the status quo and how it could change. Science renews society through its scientific method: the idea of advancing science is that, even though it does not immediately provide the right answers, it is always going in the right direction.

2 BIGGAR Economics (2017): Economic Contribution of the Finnish Universities.

Science is constantly finding new phenomena in digital society, the global economy, and climate change. It would be difficult to direct universities towards these phenomena from outside academia.

Often, when society tries to direct universities, the outcomes are other than desired ones. Educating a greater number of people in a specific field is visible in the job market only after five years, by which time business needs, competitiveness, and the factors that steer economic trends may already have changed. Similarly, the road from scientific research to innovation is not necessarily straight and the process is often found to be more time-consuming than expected. Companies regularly find the solutions they are looking for in innovations that have already been commercialised elsewhere.

Thus, versatile cutting-edge scientific research is a way of keeping up with rapid development in the world and creating resources to solve new, partly unknown challenges, both regionally, nationally, and globally. Universities are not able to solve these interconnected problems, such as climate change or poverty, by themselves. The societal task of universities is to challenge and make far-reaching interpretations of what is happening within the fundamental transformation that is taking place.

A new role for the 2020s: Society can expect multi-disciplinary universities to show long-term impact.

The importance and logic of independent science is understood and recognised now more than before. Science produces practical results, but also serves larger goals: it creates an awareness of reality, connects people from various disciplines, and teaches how to love seeking the truth.

A LARGER NUMBER OF FINNS now recognise the central position universities have as innovators of society. We expect much from our universities, but we know significant influence can have a time-delay of decades and be seen in places which we cannot predict. Science not only serves direct societal needs, but also supports a broader education, which includes cultural awareness, critical reflection, and the ability to empathise.

Universities understand their responsibilities as the agents of change in society. Insight into the impact of research and university education on the society and its conventions is better understood than before. Researchers are able to communicate what, from their point of view, the significant problems are that society and certain professions face and that need to be researched and towards which education needs to be directed. Researchers are able to communicate what, from their point of view, the significant problems are that society and certain professions face and that need to be researched and towards which education needs to be directed. Thus new channels are created with which universities can change the world.

Thesis 2: The University Community Creates a Bridge from Regional to International

The current situation: Universities open up to their region and to the world.

Finnish universities have had an important role in connecting Finnish urban areas to the world at large. Both researchers and students are becoming more international. Regional universities still have an important impact on the general atmosphere and vitality of local communities.

FINNISH UNIVERSITIES have a special role in spreading education and wellbeing in many areas in Finland. Teachers, doctors, civil servants, engineers, economists, and other experts are being educated at universities all over Finland. Their presence in the local community can be perceived in the form of better services, more profitable enterprises, and new practices, hobbies, and societal points of view in the university towns. University lectures and libraries are open to all. Universities and scientific societies also organise *Studia generalia*-type open lectures. Universities have a prominent role in the cultural activities of their home towns.

Universities have in recent decades grown and become stronger as campuses – communities – with their unique culture. Within them, one often looks to the greater world rather than to more local regions. Having a university education has become more commonplace today and the roles that university-educated people have in their local

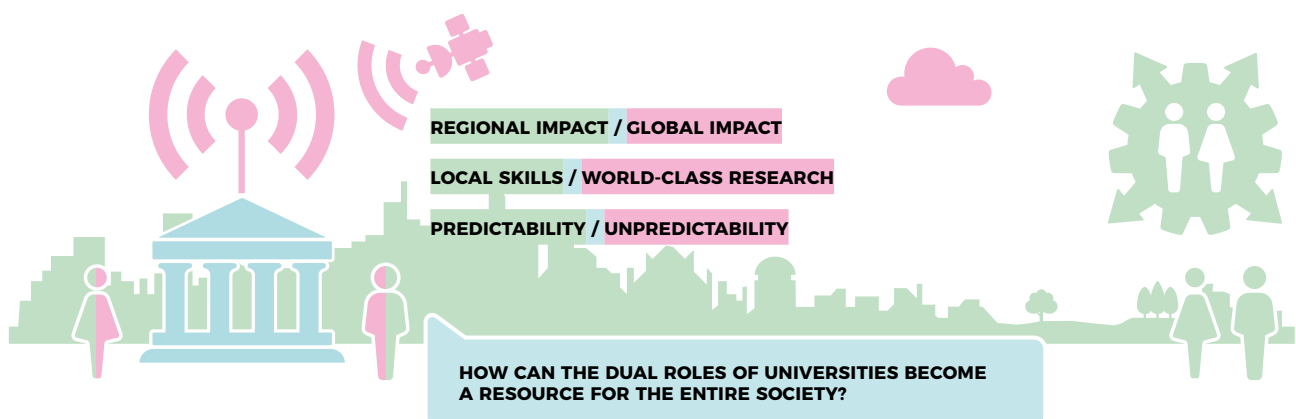
communities are less important than they were before. Lectures presented by universities, publishing activities, and other communications are facing greater competition for people’s time. There is an endless supply of lectures, publications, information, and all other types of entertainment available digitally.

Business clusters, innovation centres, and triple-helix models have been built in university towns, where the university has a central role in enhancing local vitality. In rapidly-changing global economies, companies are becoming more mobile and so, to some degree, is the workforce, which is why these structures are becoming increasingly more difficult to maintain. The role universities have as accelerators of local businesses have been varyingly successful.

Finnish universities are strongly focussed on world-class research and all universities have research teams that are at the international forefront of their particular field. These groups attract researchers from outside Finland. The student body is also becoming increasingly international. In 2017, some 10,749 foreign students were studying at Finnish universities. Over one fifth of teaching and research personnel come from abroad. Students, teachers, and researchers are constantly traveling to universities around the globe, and thousands of international guests visit Finnish universities. Internationalisation is a natural and integral part of teaching and research.

Universities have an important role in expanding the awareness of local communities to include the world at large: tens of the friends of each new foreign student or researcher in a Finnish university become familiar with the Finnish university town and each co-operation project between a Finnish university and a university abroad also expands the reputation of some Finnish town or city.

Graph 3. The regional and global role of universities



Both researchers and students can, however, contribute to local planning and decision-making processes. Top researchers are constantly battling to keep up with their schedules, where the priorities are, of course, clear: their own research and research findings come first. For this reason, it is important to create support for the idea that one of the responsibilities that universities have is doing a certain amount of volunteering work in the local community as their investment in keeping the universities an attractive prospect.

A new role for the 2020s: Universities are attractive communities for co-operation with the rest of the society.

Universities disseminate data generated from their research activities for open use and draw both citizens and other interested parties to science, both tangibly and virtually.

THE COMMUNITIES THAT SURROUND UNIVERSITIES value them and the work they do there. The universities' ability to change society is realised in co-operating with the surrounding towns and cities. Cities integrate university campuses into the surrounding city better than before.

Universities develop new ways with which to attract co-operation with local community. This cooperation is visible as university campuses are opened up to the public for recreational use and as work spaces as is done, for example, at Aalto University. In addition, this cooperation is happening via inviting other educational institutions and services to their campus and as offering more extensive and diversified types of events.

Universities make their digital environment available as open and attractive platforms to the general public. Finnish and EU policies to switch to open science and to strengthen citizen science are important aspects of this development. Universities make publications from their libraries and data generated from their research findings available to all. In order to achieve these aims, steps must be taken to make the publications and data attractive and user-friendly.

THE THINK CORNER of the University of Helsinki is an example of a successful events venue. The street level café is easily accessed and brings science and researchers under the same roof with citizens and stakeholders. Everything on offer is also digitally available. Over 500 events are arranged at the Think Corner per year and it has 2,000-3,000 visitors daily. Around 45,000 people and approximately 1,400 experts take part in events there every year.

Thesis 3: A Strong Mission Statement for Universities: Spreading the Scientific Worldview

The current situation: The information market is crowded, but the quality of the products varies.

Universities are no longer able to compete with the amount of data produced in the information market. Instead, they can decide to take an active role in disseminating scientific knowledge and the scientific worldview. Universities are not the gatekeepers of knowledge, but can guide citizens to help them find scientific knowledge and give them the tools needed for critical thinking.

UNIVERSITIES HAVE TRADITIONALLY HAD an advantaged position in producing, storing, and interpreting knowledge. Scientific research and researchers are respected in Finland. According to the 2016 Science Barometer, universities are the third most respected institutions, after the defence force and the police. Information technology and shifts in expertise have, however, challenged the advantaged position the universities have held.

The level of knowledge in society is rising all the time. The transformation in expertise is perceivable in the way in which research findings are received. People want to form their opinions about the research findings, based on their own experience and that of their peers. In addition, the media invite “field and experts by experience” as commentators alongside the researchers.

Anyone is, in principle, able to publish, copy, store, and share information for free online and in real time. Billions of people have access to information and can gain the attention of millions more. University knowledge competes in the information market, where information is also produced by companies, think tanks, and other research institutions, political and other interest groups, and ordinary citizens. The new gatekeepers online are data giants like Google and Facebook, who can define what kind of information the ‘searcher’ receives by manipulating searches and news streams.

Against the expectations born when the internet was created (at universities), the wider availability of data has not lead to information being more open nor to a more quality-based use of knowledge. The amount of information available can be overwhelming, and it can be difficult to evaluate how reliable the information is. The transmission of information becomes polarised and the discussion that supports democracy is divided into various forums.

Universities are no longer able to compete with the amount of data produced in the information market. Instead they can have an active position in disseminating scientific knowledge and the scientific worldview. Universities are not the gatekeepers of knowledge, but they can pilot citizens to help them find scientific knowledge and give them the tools needed for critical thinking.

The reliability of universities is based on their being publicly-funded institutions, that do not serve private interests, and also because research is conducted using the scientific method, which is objective, public, and self-correcting. Scientific truths have changed over the years, but the method has stayed the same and following the scientific method is what sets universities apart from the other information operators. The scientific method is sorely needed in a society where there is a constant battle between the truth and the trustworthiness of information.

SCIENTISTS AND THE MEDIA co-operated to advance science-based journalism, for example, in autumn 2018, when the media company BBC offered its journalists a course in climate journalism. The course was a response to criticism which the BBC received, according to which it gave too much broadcasting time to climate ‘deniers’ without their views being questioned by BBC journalists. During the course, journalists were given scientific background information about climate change and were reminded that climate ‘deniers’ do not need to, nor should they, be interviewed in the name of journalistic impartiality, when dealing with scientifically proven facts regarding climate change.

A new role for the 2020s: Science and researchers head to where knowledge is used and where it is needed.

Researchers are actively creating paths that enable people to search for the truth, for example, in the media. Research teams answer the knowledge needs of the decision-making process. Scientists and university students are present at schools, teaching young people about the scientific method.

UNIVERSITIES HELP CREATE access to reliable information by taking their findings into society at large and talking about the scientific method. Universities do not solve the problems of the reliability of information or polarisation alone, but do so in co-operation with the media, decision-makers, and citizens. Scientists actively support the media in explaining the world and seeking the truth.

Research teams are responsible for answering the knowledge needs of decision-making in the central stages of the political process.

Scientists and university students are present at schools, more often than they are now, teaching the pupils there about the scientific method, creating norms that are at the center of a new era of open-access to information and data, and making science and scientist more approachable.

As the perception of what constitutes expertise changes, the researcher is no longer automatically given the status of educator. Researchers are more open to dialogue and encountering others, in a situation where they are no longer the only ones setting the agenda of the discourse, which would require learning new types of communication skills.

Thesis 4: The University is the Cradle of Civilisation for all Age Groups

The current situation: Universities have the role of educating the nation – it is the road to knowledge and the truth.

Professions and professional skills are undergoing rapid changes. Career paths become scattered and professions more often than they have before. As traditional professions and careers evolve and change, education is the factor that will usher in a new age. Universities can have a significant influence on society by promising open access to the best information and learning in the world to all.

AS WORK GOES THROUGH the current transformation the evolution of professions, job descriptions, and skills speeds up. Careers become more multifaceted, people change jobs more often than was customary before, and job descriptions keep changing along with, for example, emerging new technologies. As the changes in our surrounding environment seem to be constantly speeding up, we feel a need to understand what these changes mean and what our roles are within them. This requires curiosity and the ability to acquaint ourselves with new phenomena and subjects outside of our own field of expertise.

The central tenet of Finnish universities has been that of civilising and educating the people, an ideal that is based on the central ideals in Nordic society. This has meant that universities should be made as accessible as possible to all its citizens. A special feature of Finnish universities is free tuition, and Finland has tried to create a comprehensive network of universities to cover the entire country. Tens of thousands of people take part in open university courses, open lectures, and continuous learning courses every year. This is the foundation for building a strong university, which holds onto its core strengths and values; a university that fulfils the needs of the 2020s.

What makes universities' goals different from what other education institutions offer is their central aim, which is to incorporate a higher, civilising vision of society. This is defined as a combination of skills and the ability to view the world through the lens of critical analysis. It helps people understand others, the world around them,

and their own role in it. This higher aim gives us the tools to build our own view of the world. As skills requirements constantly change, this civilizing aim is the factor that carries us through the various changes into the next phase. The promise of giving open access to the best knowledge and learning in the world to all is the most significant way in which universities can influence society.

A new role for the 2020s: University is a place of higher learning for people of all ages on every level of society.

The main focus of university tuition shifts from younger students to adult students. Universities are part of the plan to create a culture of continuous learning: studying and gaining new skills throughout life.

IN THE 2020S, universities strengthen and diversify their connections, not only with people who are older than the age of traditional students, but also with children and teenagers. Universities must invest in developing significantly different solutions to continuous learning. The relationship that an individual has with university and its special features, a scientific worldview and the ideals of higher education, is built early on in life. Institutions of tertiary education increase their co-operation with high-schools and vocational schools, so that more young people find their way to universities and that the leap from

A SHINING EXAMPLE of an efficient course that has found its audience is the most popular online course ever: the Elements of AI – an artificial intelligence class. It is a collaboration between the University of Helsinki and the software company Reaktor. In September 2018, over 90,000 people registered to take the course. Online education, which equals the high standards of class-room teaching, is the best way to ensure regional equality in university education outside university towns.

secondary to tertiary education appears more manageable to them. This co-operation strengthens the belief in a young person that s/he can become a university student, regardless of his/her socioeconomic background. What makes universities unique is that they are based on a scientific worldview. Increasing science education in younger people helps instil the scientific worldview in them and makes them familiar with it prior to going to university. Critical thinking and understanding the scientific method is becoming more important, even for those who never apply to university.

The changes in the workplace and in career trajectories will make continuous learning one of the most significant challenges of the 2020s. Universities have a central role in resolving these. Early childhood education, secondary education, and degree-based tertiary education are still preconditions for teaching individuals how to learn and to develop critical analysis skills. There must, however, be places where people can learn and study outside these traditional institutions.

The main focus of university tuition, which has been on younger students, now shifts to include adult students – especially in Finland, where the birthrate remains low and there are no longer as many people as there were before who could go to universities.

Tuition at the universities of the 2020s includes online courses that have world-class content and user-experience: Finland has the resources to develop such courses as it is a country with global success in the gaming industry.

Interviews:

THE FOLLOWING PEOPLE were interviewed for this publication; Demos Helsinki is responsible for the presented content of this publication.

Jarkko Eloranta, The Central Organisation of Finnish Trade Unions
Jani Erola, The University of Turku
Emmi Hannuksela, Viljakkala Comprehensive School
Riitta Hari, Aalto University
Olli-Pekka Heinonen, The Finnish National Agency for Education
Visa Heinonen, The University of Helsinki
Jaakko Hämeen-Anttila, The University of Edinburgh
Jari-Pekka Kaleva, NeoGames (reg. assoc.)
Sanni Lehtinen, The National Union of University Students in Finland
Jari Niemelä, The University of Helsinki
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