# Beyond the facts: on digitisation, mistrust and overcoming deep disagreements

A concise version of this speech was delivered by Rector Magnificus Karen Maex in Dutch on 10 January 2022 during the Dies Natalis.

# 1. The public domain

Last year, I discussed the erosion of the public domain due to digitalisation. More specifically, I talked about the influence and power of the platform companies: the ways in which their power diminishes the public domain and how this is impacting universities. I also discussed the importance of the knowledge system and our own role within it. The issue has since been prioritised at both national and European levels.

This year, I would like to discuss the ways in which the far-reaching consequences of digitalisation are radically altering certain parts of the fabric of our society. Aspects of the traditional public domain have been partly entrusted to private powerhouses. As you all know, social media have created platforms where people can quickly interact with each other. People need a sense of community. They seek each other out: people with similar ideas are forming close-knit new personal, professional and political networks.

Digital proximity is becoming more important than geographical proximity [1]. This is certainly not without consequence. Serendipitous encounters seem to be increasingly confined to our own personal digital bubbles. Interaction within groups is being reinforced while interaction between groups is declining. This can only increase the risks of bias [2] and polarisation [3].

Modern communication drives the creation of hardware and software bubbles on both small and large scales. Negative stories attract more attention and generate more revenue for the operating companies than one positive ones. While we may believe we are navigating these channels freely, our choices are restricted by a digital straitjacket with its own set of organisational, political and ethical principles [4,5].

So where does this leave our shared values? They are coming under pressure in the current public domain, an environment thoroughly organised and controlled by algorithms. As we know from several recent whistleblower cases, our shared values are frequently sacrificed for the sake of profit. So how does this affect our community, academic freedom and public confidence in science? How should universities approach these developments?

## 2. Digitalisation and new structures

You can find 'evidence' for every imaginable opinion online. People are searching for meaning in a rapidly changing society [6]. As a result, new communities of like-minded individuals are emerging around specific ideas and world views.

Conspiracy theories play a particularly important role here, allowing fictitious narratives to attract followers.

In his book 'De platte aarde' (The Flat Earth), Frank Verhoft outlines the history of the flat earth theory. Following several resurgences over the centuries, British inventor Samuel Birley Rowbotham revived the flat earth theory in the 19th century [7]. His discourse, unfettered by science, gained widespread popularity. The scientific perspective, by contrast, was more difficult to explain and prove. As a result, Rowbotham gained many 'followers', inspiring one of the most enduring conspiracy theories. American Daniel Shenton founded the Flat Earth Society at the start of the 21st century. Social media and the Internet transformed the organisation, which became larger and more aggressive, attracting new local leaders with guru-like aspirations. The focus also shifted from the

flat earth concept to broader conspiracies.

Conspiracy theories are an age-old phenomenon. They previously thrived on a lack of knowledge or poor communication, so their prevalence today can appear strange at first glance. The introduction and use of mobile phones has highlighted just how much people – as social beings – like to be in touch with each other. This technology has almost become a necessity, both here and in low to middle-income countries. People need something to hold on to and are looking for like-minded others. A common discourse can be helpful in that regard. While these stories are fallacies, they do create a real sense of community that helps people gain some control over their lives. The current social unease is rooted in a lack of control. The institutionalised backbone of society is changing. For example, empirical research shows that people are less likely to identify with their own environment – e.g. city, country or the EU – in times of political division, unfavourable economic prospects and social pessimism [8]. This could explain the current eagerness to identify with new groups seeking to reassert control over their own futures by forming virtual rather than geographical ties.

Conspiracy theorists aren't necessarily less intelligent than others, can't be tied to any particular political affiliation, and aren't always wrong [9]. Conspiracy theories are based on subjective and collective sentiments that gain momentum as they are repeated. In fact, conspiracy theories actually derive legitimacy from this repetition. The more our media repeat something, the faster the conspiracy theory spreads.

Conspiracy theories are frequently harmless. They are expressions of our desire for meaning and community.

However, modern communication platforms may allow them to develop into manifestations of power with occasionally sectarian overtones. In that sense, contemporary conspiracy theories are fundamentally different from more traditional conspiracy theories. The platforms bring like-minded people together in a virtual echo chamber, while simultaneously creating

more distance between sender and receiver. The platforms do not necessarily function in the same way. Open platforms leave room for responses, while closed platforms do not [10]. You can voice your opinions anonymously without being held to account as you would in traditional forms of communication. You can, in other words, speak out without taking responsibility. In the words of Zweistra [11]: 'You're just a messenger dropping a bombshell'.

If there is one lesson to be learned from this, it is that the advent of social media has changed our public domain. While this example of the way in which bubbles are formed may be extreme, it is also realistic. It explains how like-minded individuals can develop a one-sided knowledge base by drawing on a narrow range of views, resulting in cross-border polarisation.

This is changing the microstructure of our societies with profound consequences. Both our knowledge system [12] and information system have been upended.

# 3. The disruptive effect of compartmentalised information flows

So how is this changing information system affecting the academic world? Is it have an impact on our academic freedom? How is it affecting public confidence in science? A recent report on Dutch Public Trust in Science [13, 14] focused on the current COVID situation and gauged the public's confidence in scientific research. According to the findings, public trust in science has improved compared to three years ago. Most respondents mentioned the development of COVID vaccines as the main reason for their growing confidence. A smaller but still significant number of respondents mentioned the very same vaccines as a reason for their declining faith in science. This group is struggling with contradictory information and uncertainty.

While science produces specific facts, it doesn't necessarily provide the public as a whole with any general certainties. The aforementioned Rathenau report found reduced levels of public trust in science on complex issues.

So how should we approach these developments? How can we close the gap between those who trust science and those who have little or no confidence? And how can we keep those that are still open to reason on board?

It can be useful to examine how people come by their information. Is everyone getting the same information and how are they interpreting the things they learn? Are separate information flows having any significant impact?

Let me illustrate this with a recent example [15].

Christian Drosten, a renowned virologist from Berlin, has been explaining the COVID pandemic to the German population. His communications reference a scientific article that was released to the public before the end of the review period on account of COVID. Researchers around the world had agreed to this temporary protocol in order to share scientific knowledge more rapidly.

Responses on social media and traditional media were quite different.

The media and respected news outlets focused on the ethical standards for scientific publication and referred to the fact that the paper was a preprint. These outlets also published comments by scientific reviewers.

Social media responses were quite different, however: a deluge of shocking accusations and aggression aimed at researchers and politicians - a segment of the population expressing their growing scepticism about science. And thus, the public discourse begins to spiral out of control. This illustrates how compartmentalised information flows between different sections of society and a lack of dialogue between those groups drive people apart with potentially disastrous results.

Segregated information flows undermine the equitable and broad dissemination of knowledge.

This is not an isolated example. Aggressive Twitter rants in the wake of a public appearance have become almost commonplace, leaving speakers intimidated. Those behind the attacks often remain anonymous, whereas scientists must operate out in the open. Researchers who do not want to be subjected to this verbal aggression are in danger of being silenced. This can implicitly lead to self-censorship and inhibit the very essence of the scientific process: discourse.

It is important to keep in mind that the sceptics and doubters feel they are not being taken seriously. In the words of Anthony Fauci: 'I've learned from my experiences, you shouldn't criticise sceptics for their ideas or you'll drive them away. You need to welcome them with open arms and say: let's examine the facts together.' [16]

**4.** Research on, and education in, the public domain So how should we examine the facts together? How do we go about that, and what will it take?

As a broad-based university, the UvA has a wealth of expertise and all the necessary disciplines to address new and complex challenges. The question is, how do we burst through those bubbles?

I was inspired by the farewell address of Professor Hirsch Ballin [17], university professor at Tilburg University and professor of Constitutional and Administrative Law. As he outlined, his field will have to update its insights in order to transcend social diversity or divisions and existential threats. This could be achieved through an interdisciplinary effort to modernise our research, whereby we tackle fundamentally new research questions rather than merely bringing together different perspectives.

For example, we could explore ways of organising society more effectively in the face of radical technological change. In more concrete terms, we could figure out how to ensure that our public values are not eroded by automated and semi-automated legal, communication and decision-making processes [18].

Another example would be the recent research collaboration between humanities scholars and medical doctors aimed at exploring how psychiatric and psychological diagnoses could best reflect inequalities in terms of the patient's own life perspectives while taking account of personal, interpersonal, social and ideological differences [19].

Another example would be researchers' efforts to unravel complex health issues that involve various ecological and other factors interacting with each other, contributing to the onset and perpetuation of common mental health conditions such as depression, anxiety disorder and addiction, and affecting the mental health of individual urban residents across different time scales, resulting in multiple feedback loops. In the process, they are conducting ground-breaking research into the relationship between non-linearity and causality [20]. Society expects us to provide reliable insights. These insights must be clear, unbiased and preferably actionable. That's not as straightforward as it might seem in the face of challenges like the pandemic, digitalisation, migration or the climate crisis. Scientific results can offer insight, but they do not provide ready-made solutions.

This marks a shift in public perceptions as to what we can expect from science and how scientific knowledge should be presented. As a scientists, we are expected to expand the body of existing knowledge. However, the fundamental question remains:

Where is the dividing line between our responsibility and the role of government? [21]: 'This raises the risk of scientifically modelled subjectivity, and thus the domination of the experts over the uninformed.' Vattimo discusses the need to change the way we relate to scientific knowledge: 'From universality to hospitality'. An inspiring notion, not least within our context, and an idea that could help us maintain the necessary public support.

# 5. Having the right conversation

So how can we make our research results accessible?

Through the education we provide, naturally. The question is, how can we also do so for a broad audience? In other words: it's important to gather knowledge, but it's also important to be understood. The book 'Seeing us in them' [22] explores the sources of shared group identity. Although the study is primarily focused on the United States, the underlying notions are also relevant to us.

How can we make sure we're engaging in the right type of dialogue? As researchers, we are used to checking our facts and arguments [23] as a matter of scientific principle. I believe the basic concepts of argumentation theory – as developed in Amsterdam by pragma-dialetics researchers – [24] can also be helpful in this process. Differences of opinion that initially appear to be intractable 'deep disagreements' can still be resolved reasonably if we start by understanding and respecting each other. No one should be excluded from participating in critical debates because of their background. This helps to ensure the right kind of conversation, a dialogue in which listening is at least as important as speaking.

In fact, such dialogue can subsequently yield valuable cross-pollinations and new research questions.

If we aim to maintain public confidence in science, we will have to be even more active in the public debate and make sure the perspective of 'the other' is reflected in all our communications. We cannot simply convey facts – as I said, facts don't convince people. We also need to listen, to engage in real dialogue. What matters to them?

Dissenters are also critical thinkers and we should try to find common ground there. After all, science isn't about validating outcomes; it's about sticking to the scientific method so that claims and opinions can be tested. While scientific results may be conclusive, they can also be tentative and raise new research questions. We should be holding our debate at this intersection. Scientific results can also be politically expedient, or not. Scientific methods provide a valuable constant in that regard, and we should keep on proudly promoting them.

We should never shy away from debates with dissenters and should not be deterred by political posturing. Science should never become polarised as if it were merely another opinion, and that also applies to politicians. The academic world should be more focused on this valuable quality. After all, it is one of the cornerstones of science, public trust and the dissemination of knowledge. Of our role, in other words. Science can provide knowledge and arguments, and test their validity.

It is worth pointing out that sound and legitimate science is divorced from politics. A government that doesn't overstep its bounds will apply scientific insights as a basis for policy decisions. Let's refuse to accept any blurring of the lines and take our own individual responsibility.

### 6. Conclusion

I have explained how digitalisation – and more specifically digital communication – is changing the microstructure of our society.

Digitalisation is a key aspect of the European Commission's policy. They have numerous valuable initiatives ongoing in the areas of technology, algorithm transparency, administrative processes, digital skills, cohesion and civic participation.

There is still some international progress to be made when it comes to constitutional provisions on academic freedom. The European Commission should take the lead in this process and ensure that the European treaties provide a legal basis for academic freedom.

We need a strong academic community and a close relationship with the society we serve. The government has a role to play in this process and must support the academic community with more autonomous and discretionary resources and greater appreciation. The preservation of independent knowledge is becoming all the more important as our society fragments into bubbles, the public sphere deteriorates, and we become increasingly dependent on the digital sector. At the same time, our global

challenges are more urgent than ever.

However, we also have our own responsibility.

Our society is changing, but universities haven't exactly been keeping pace. We can choose to complain about filter bubbles or people who don't believe us. We can object to the fact that some people have their own alternative facts. We may resent the fact that knowledge is not readily accepted. However, that would be pointless.

We must continue to engage with a changing world and adopt new approaches. We must fathom new complexities rather than simply providing facts. We must listen rather than preach. We must learn to value clear communication just as much as we do sophisticated publications. We must burst bubbles rather than remain stuck in our own. We must make sure we are understood rather than simply gathering or sharing knowledge. We must learn to understand others rather than dismissing their lack of understanding.

Only then can universities hope to retain their place at the heart of 21st century discourse.

Special thanks to Tom van der Meer, Eefje Steenvoorden, Claes de Vreese, Bart Garssen, Lucy Wenting, Ernst Hirsch Ballin, Niek Brunsveld for providing inspiration and contributing to the debate.

[1] The new Common', E. Aarts, H. Fleuren,M.Sitskroon, T. Wilthagen Editors, 2021[2] Judith

Moller, https://www.uva.nl/shared-content/faculteiten/nl/faculteit-der-maatschappij-engedragswetenschappen/nieuws/2020/01/interview-veni-judith-moller.html

- [3] Groenleer, D. Bertram in 'The new Common', E. Aarts, H. Fleuren, M Sitskroon, T Wilthagen Editors, 2021, p.98
- [4] Keymolen in. 'The new Common', E. Aarts, H. Fleuren, M. Sitskroon, T. Wilthagen Editors, 2021, p130
- [5] Achterberg in 'The new Common', E. Aarts, H.

A concise version of this speech was delivered by Rector Magnificus Karen Maex in Dutch on 10 January 2022 during the Dies Natalis.

Fleuren, M Sitskroon, T Wilthagen Editors, 2021, p 28

[6] Groenleer, D. Bertram in 'The new Common', E. Aarts, H. Fleuren, M Sitskroon, T Wilthagen Editors, 2021, p.98

[7] 'De platte aarde, een rondleiding' F. Verhoft, Academic and Scientific Publishers nv, 2020, [8] Eefje H. Steenvoorden, Matthew Wright, 'Political Shades of 'we': sociotropic uncertainty and multiple political identification in Europe' 2018 https://doi.org/10.1080/14616696.2018.15502980 [9] De GroeneAmsterdammern145/39, September 2021, p 42

[10] Claes de Vreese https://journals.sagepub.com/doi/full/10.1177/14614448211045666

[11] 'Waarheidszoekers', C. Zweistra, KokBoekencentrum Uitgevers, Utrecht, 2021

[12] K. Maex Dies 2021, uvaauas.figshare.com

[13] Rathenau Instituut, report: 'Vertrouwen van Nederlanders in wetenschap (2021 survey)

[14] Inneke Sluiter, 'De pen en de raketwerper', Annual address on the occasion of the Akademie afternoon, May 2021

[15] Rule by the People, the People of Knowledge: How Science Communication Strengthens Democracy Prof. Dr. Kerstin Krieglstein, Rimma Gerenstein, Glion Symposium 2021, to be published [16] Anthony Fauci, 2021

[17] H. Ballin, 2021 farewell lecture at University of Amsterdam

[18] Claes de Vreese, Natali Helberger https://www.uva-icds.net].

[19] Gaston Franssen, Narratives of Undiagnosability: Chronique Fatigue Syndrome Life-Writing and the Indeterminacy of Illness Memoirs, Philosophy, Psychiatry & Psychology, 27(4), 403-418 (2020);

https://doi.org/10.1353/ppp.2020.0052; [20] Junus M van der Wal et al. (2021) 'Advancing urban mental health research: from complexity science to actionable targets for intervention' https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(21)00047-X/fulltext [21] Gianni Vattimo, translated by Luca D'issanto Italian Academy Lectures. 'After Christianity'

Columbia University Press 2002, p 100 [22] 'Seeing us in them. Social divisions and the politics of group empathy' 2021, C. V. Sirin, N.A. Valentino, J.D. Villalobos, Cambridge University Press, 2021

[23] Honours module: From fact-checking to argument-checking, Institute for Interdisciplinary Studies (IIS), University of Amsterdam [24] Van Eemeren, Garssen and Meuffels, 2009, Fallacies and judgments about reasonableness, p54