

## Elusive publics

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## **Valorisation Addendum**

This dissertation shows the publics of the GM crops debate to be an elusive multiplicity constructed by different actors in various arenas of the controversy. I have shown how publics emerge in the debate along with the many issues of transgenic crop technology. I have also indicated how this matters for the democratic governance of technological innovation, in particular if various actors strive to democratise decision-making on techno-scientific development in contemporary technological culture. How can my research be significant for society?

Scientific knowledge speaks not for itself. It has to be made relevant and applicable by scientists translating their knowledge to society. Universities, policy-makers and funding agencies use valorisation to stimulate researchers to make their knowledge production relevant and applicable to society at large. In Dutch academia, valorisation refers to the discourse around the relevance and impact of scholarly knowledge production to foster closer links between scientific research and society, and in particular between scientific research and the business sector. This poses specific challenges for the humanities (Belfiore, 2015; Benneworth, 2014; Zomer & Benneworth, 2011). Since university research is partially state funded, there is a societal expectation that public funding needs to yield returns to society (Hessles, Van Lente, & Smits, 2009). Today, almost all funding agencies require scholars in their research funding applications to explicate how they will make their knowledge production relevant and applicable to societal issues and problems. This translates into valorisation having become the university's "third mission", next to teaching and research (Shore & Mclauchlan, 2012; Zomer & Benneworth, 2011). It is argued that valorisation has become part of a renewal of the ethical norms of science through procedures and directives that shall ensure that scholars remain responsive to society's demand for applicable and relevant research (cf. Vinck, 2010). Yet, this demand, how it is communicated by governments and funding agencies, and how it is responded to by universities and researchers is not unproblematic.

In her study of how humanities scholars in the Netherlands respond to the demand for valorisation, Dani Older (2015) shows how valorisation is broadly defined by the Dutch government and the central funding organization NWO. These actors communicate valorisation to imply different logics: civic (referring to cooperation and sharing of knowledge), market (economic growth), industrial (knowledge utilisation), and inspired (flexibility and creativity). Older argues however, as universities communicate the demand for valorisation as an instrumental response to tighter competition for research funding acquisition from public bodies (thus the market logic), scholars are prompted to respond strategically to this demand: "humanities scholars feel forced to respond to valorisation on market terms because of its role in determining their success" (Older, 2015, pp. 67-68), e.g. in the assessment of their research proposals and funding applications. Although the prevailing definition of valorisation is framed within the market logic because of its role in distributing resources in the research community, Older reminds us that "the demand for valorisation is not established or negotiated according to a market definition alone" (p.67). Therefore, she prompts us to think of the many forms of valorisation to recognize how valorisation is, should, and could be otherwise. The following is an attempt to frame my research on the elusive publics of the GM crops debate in such terms.

In this valorisation addendum, I reflect on the relevance and applicability of my research and my vocation as an academic. How did I make my research relevant and to whom and for what will the findings on the mutual shaping of GM crop technology and its elusive publics be applicable? In the following paragraphs, I provide a brief overview of what I consider my past valorisation activities. Next, I provide a critical note on the importance of recognizing the social responsibility of science, and of Science and Technology Studies (STS) scholars in particular. Based on this discussion, I will conclude by charting other audiences to whom the knowledge I produced might be relevant and applicable and in so doing reflect on potential future (valorisation) activities related to my Ph.D. research.

### **How valorisation is otherwise: teaching vs. research?**

I consider making research relevant by communicating and translating the insights I gained to various audiences. As a PhD candidate, I gave a numerous presentations and talks at different institutions and in various places. For instance, during my second field trip to India in 2013, I discussed my research and theoretical approach at the Institute for Social and Economic Change, Bangalore, exchanging views with Indian social science scholars. There I not only shared my insights but also questioned my own ethnocentric assumptions about the Indian debate on GM crops. Doing so, my Indian colleagues and I engaged in a process of conversation and exchange of knowledge. During my fieldwork, fellow academics also invited me to give presentations about my research to their students. For example, I gave a lecture on agrarian discourses from an STS perspective to MA students of political science at St. Joseph's College in Bangalore. At home in the Netherlands, I also had various talks about my findings to contribute to students' educational curricula. I gave workshops at the United Nations University – Maastricht Economic and Social Research Institute (UNU-MERIT) to MSc students of Public Policy and Human Development about the politics of risk assessment science (2014, 2015, 2017), a lecture on the same topic to engineering students at Technical University Eindhoven (2015), seminars about risk governance to MA students of European Studies at the Faculty of Arts and Social Sciences, Maastricht University (2012, 2014), and a lecture at the University of Groningen to PhD students in the project SOCBIOAfr (=addressing societal challenges of biotechnology in Africa – towards balanced innovation) in 2016.<sup>203</sup>

All these activities, together with my teaching duties in the BA and MA programmes at Maastricht University, allowed me to share the insights of my research with wider, largely non- STS student audiences. I regard university teaching that is based on scientific research valorisation because most students will not become academics, but leave the university to work in and for corporate organisations, government agencies, and other societal institutions. Teaching students about the insights from my research is a valuable form of making the knowledge I generated valid to society. Students carry the academic skills and knowledge

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<sup>203</sup> All these activities, with the exception of the workshop at UNU-MERIT in 2017 I provided free of charge. My motivation was to share knowledge, create a space for the exchange of ideas, and to stimulate students' ideas about science, technology, and agriculture. Between the years 2011 and 2015, teaching activities within the Faculty of Arts and Social Sciences at Maastricht University were part of my teaching duties which in turn was an agreed upon duty of my appointment as a PhD candidate for which I received a remuneration in the form of a monthly salary (that is between the summer of 2011 and the summer of 2015).

they have acquired during their studies to society at large when they leave the university and commence careers outside academia after graduating. Within the changing context of contemporary academia with decreasing public funding for scholarly research and teaching however, the latter seems to get assigned less importance. Some argue that, as a result of the current structural changes of higher education funding, university teaching has become a second-class academic activity (under temporary and precarious employment conditions) reserved for those less successful in acquiring external funding and publishing enough of their research findings. (e.g. Gill, 2009; Halfman & Radder, 2013).<sup>204</sup> It is from this critique that a number of movements, some more oriented towards analysing the structural transition of academic research in general (see, e.g. the Dutch Science in Transition initiative: SiT, 2013), as well as the future of research and teaching at Dutch universities more specifically (see Platform Hervorming Nederlandse Universiteiten: H.NU, 2018) have emerged. My own experience of engaging with the latter movement allows me to reflect on the role of scholars as public intellectuals.

### **How valorisation should be otherwise: a role for public intellectuals?**

Scientists enjoy some academic freedom, but they also have a responsibility to society. Some of my colleagues take this idea quite literally by regularly disseminating their expertise in public talks and lectures, newspaper articles, TV and radio interviews, particularly when pressing societal issues and discussions can benefit from scholarly insights. Others prefer not to engage directly with societal debates and issues for the fear of compromising their position as disinterested observers and analysts who want to produce objective knowledge. While both positions certainly have their merits, it is not my intention to discuss these positions here in any depth. Rather, this divide in the academic community I experienced first-hand when helping to organise an alternative opening of the academic year with others from the Platform H.NU in Maastricht in autumn 2014 (see Degens, 2014). While it was our intention to stimulate discussion of how to make the university a better place for high quality teaching and research, as a consequence of our engagement with the concerns about the changing landscape of academia, some of us experienced hostility, but also encouragement and constructive feedback.<sup>205</sup>

Disregarding the divide, the status of higher education and research has direct implications and relevance for society, in particular in the context of knowledge production systems that are socially distributed (Gibbons et al., 1994).<sup>206</sup> We should therefore not cease to have this discussion and seek to make both teaching and research endeavours from which society as a whole can benefit. At the same time, leaving the Ivory Tower is like skating on thin ice. The valorisation value of such movements as Science in Transition, H.NU, and more recently

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<sup>204</sup> Mind that the Dutch Higher Education and Research Act (1992) stipulates research and teaching to be the combined core task of universities (<https://wetten.overheid.nl/BWBR0005682/2018-06-01>).

<sup>205</sup> Amongst such hostilities was, at least for one of us, the threat of getting fired.

<sup>206</sup> Gibbons et al. (1994) describe the social distribution of knowledge production under the banner of the transition from Mode1 to Mode2 knowledge production, the latter being characterized as generated in a context of application, transdisciplinary in operation, conducted by heterogeneous actors (not only the university), reflexive and subject to a wider set of economic, political, and social quality evaluation criteria (for a literature review and research agenda of Mode2, see Hessels & van Lente, 2008).

WOinActie (see WOinActie, 2018) is that they scrutinise the role of academia in society and the organisation and dissemination of knowledge production. Such debate is necessary and we should not shy away from provoking fierce discussion, making problems explicit, and maybe even taking a stance that goes against the tides of the contemporary neo-liberal restructuring of higher education and research. This will also add to the societal relevance of academia which could, and maybe should, also be considered valorisation in the broader sense.

However, I do not plead for all academics to become activists. There are other positions, which Science and Technology Studies scholars are in particular suitable to take. STS scholars can take three possible routes with various degrees of politically inspired concerns: the *Academic Highway* (scientific publishing, taking academic leadership roles); the *Policy Street* (advising public and private sectors); and the *Democratisation Boulevard* (combining long-term academic agendas with political and social engagement) (Bijker, 2003). Bijker's own life-long journey on each of these routes serves as a role model for researchers to not only study contemporary technological culture, but also to help constructing the socio-technical world of our societies, and to eventually move between these positions with integrity, modesty, and a humble concern for issues of democracy, development, and social justice (cf. Bijker, 2017). I will conclude with what valorisation potential I envision for my own work on the GM crops debate beyond the timeframe of my Ph.D. research.

### **How valorisation could have been otherwise: missed opportunities, or future agenda?**

Academics face numerous financial, structural, time, and personal constraints that pose a limit to how much they can do. This, however, does not frustrate imagining ways in which the societal impact and relevance of their research could have been otherwise. Such ideas need not get buried under a pile of exams to grade, papers to publish, or a successfully completed dissertation manuscript. Instead, such ideas could be the inspiration for a long-term scholarly agenda that combines the skills and knowledge acquired with societal engagement to make academic work more relevant to society in the future. Let me briefly chart other audiences which could benefit from the knowledge I have produced. This is course goes beyond the academic community, which will benefit more directly from my research as it gets published in academic journals and books (e.g. Mitzschke, 2017; Mitzschke, forthcoming).

The participants of the GM crops debate could learn to take a different perspective on their ways of constructing publics and their strategies of publicity. A range of activities stemming from my research could find their way to activists, industry representatives, and scientists directly involved in the debate and regulation of GM crops. These could take the form of consultation activities, participation in stakeholder workshops, the drafting of information material on various aspects of biotechnology and its risks, and through communicating the findings of my research in public media such as newspapers, online journalism, and open access publishing which are accessible to wider audiences than the scientific community alone. In the case of risk assessment science, science journalism, civil society, and business could all increase their credibility and trustworthiness in the use of scientific findings if they were more sensitive to the problems of scientific uncertainty, and the paradoxes of

scientific and public authority alike. The question of the reliability and trustworthiness of science is pertinent in a climate of “alternative facts” (Swaine, 2017) and “post truth politics” (Roberts, 2010), where it will be useful for policy-makers and regulatory authorities to establish clear rules of transparency and accountability for their use of science in regulatory decision-making. Also, there is an increasing need for an analysis of the politicisation of science and technology in order to understand different sources of knowledge: Policy-makers can mobilise the analytic expertise and insights of STS researchers when organising and conducting public participation exercises in various forms to pay attention to institutionalised mechanisms possibly perpetuating, re-establishing, or even challenging established patterns of social stratification. STS research can help policy-makers in questioning their taken-for-granted assumptions about publics, and in designing and analysing public participation to help making engagement exercises more fair, inclusive, and democratic.

These are just a few examples of making the knowledge I have produced and the skills I have acquired over the past years relevant and applicable to society. If we want a broader definition of valorisation (beyond the market logic) to take effect, we need to devise roles for STS scholars that allow them to oscillate between their academic environment and societal arenas more easily. Yet, this will depend to a great extent on the availability of resources for such kind of activities and the willingness of all actors involved to listen to each other. After all, the greatest challenge remains to reconcile the demands of democracy as a slow form of political decision-making, with the fast pace of technological innovation.