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The Negotiation of Social Responsibility in Academia

An Analysis of Ethical Discourses on the March for Science at German Universities

Abstract: This paper examines the discursive negotiation around the social responsibility of science that takes place in the academic field, and in particular in its organizations. As science faces growing skepticism, the question arises to what extent academic discourses may become political. The March for Science (MFS), a protest movement against ›post-truth‹ is a focal point of this discourse. This paper first outlines scientific reflections on the MFS and extrapolates different positions on the politicization of science. The MFS is then empirically assessed to analyze current discursive logics around scientific responsibility and the speakable possibilities of political intervention. It is specific to this discourse that both universities as corporate actors and their associated scientists and students can take a speaking position; the resulting organizational constellations are related to the emerging discursive logics.

Keywords: responsibility, science, discourse analysis, university, organization, politization of science, post-truth, alternative facts

Zusammenfassung: Der Beitrag befasst sich mit der diskursiven Aushandlung gesellschaftlicher Verantwortung von Wissenschaft, die im akademischen Feld – insbesondere in seinen Organisationen – stattfindet. Angesichts einer wachsenden Wissenschaftsskepsis stellt sich die Frage, inwieweit Wissenschaft politisch aktiv werden sollte. Der March for Science (MFS) als Protest gegen ›Postfaktizismus‹ bildet einen Kristallisationspunkt dieses Diskurses. Der Beitrag umreißt die wissenschaftliche Reflexion des MFS und arbeitet differente Haltungen zur Politisierung von Wissenschaft heraus. Anschließend wird der MFS empirisch in den Blick genommen, um aktuell diskursivierte Logiken wissenschaftlicher Verantwortung und die sagbaren Möglichkeiten politischer Intervention zu analysieren. Eine diskursive Besonderheit besteht darin, dass Hochschulen als korporative Akteure zugleich mit den von ihnen assoziierten Wissenschaftler:innen und Student:innen Sprechpositionen einnehmen können; dabei korrespondiert die Form der resultierenden organisationalen Konstellation mit den hervorgebrachten Verantwortungslogiken.

Schlagwörter: Verantwortung, Wissenschaft, Diskurs, Universität, Organisation, Wissenschaftsskepsis, alternative Fakten, Postfaktizismus

1 Introduction: The tradition of negotiations on scientific responsibility

In the 1920s, Alfred North Whitehead (1953, p. 2 f.) noted that science »recolored« modern speaking, thinking, and perceiving »so that modes of thought which in former times were exceptional, are now broadly spread through the educated world«. He characterized the »tinge« of this scientified mentality as »a vehement and passionate interest in the relation of general principles to irreducible and stubborn facts«. Today, parts of society are questioning these modes of thought and expressing skepticism toward scientific production and academic knowledge itself. Talking about alternative facts within the framework of post-truth politics and questioning broad scientific consensuses (e.g. climate change) are directed against the legitimacy of the production of scientific knowledge and, even more fundamentally, against the social responsibility of science.

Because the academic field – particularly academic organizations, such as universities – evolved around the practical production and expansion of scientific knowledge, it looks back on a long tradition of questioning the kind of responsibility tied to this status. Although the organization of a responsible scientific practice is an obligation of academia, the respective ethical discourses are usually conditioned by society (Lenk/Maring 1998): Public criticism of the unintended societal, health-related, and environmental consequences of scientific discoveries has accelerated several academic sub-fields and various sub-discourses, such as technology assessment (Grunwald 2010), scientific professional ethics (Watts 2017), and dilemmas of fundamental rights (Wilms 2014). However, the current discussion about the responsibility of science reflects a new quality in which different understandings of responsibility come into conflict with each other. Should scientists and science organizations become political in order to meet their responsibilities or should science remain neutral in order to be able to appropriately analyze the new situation?

This conflict is particularly evident in the context of the March for Science (MFS): The MFS was first initiated in 2017 as an immediate reaction of civil society to the above-mentioned social developments. The MFS can be understood as part of a social movement in which scientists are involved, but not the exclusive participants (Fisher 2018). However, it also represents a crystallization point in the scientific discourses around the social responsibility of science, which provides an opportunity to reflect and work on the organization of scientific responsibilities (Elven 2021).

This paper is based on this twofold notion. I first provide a brief overview of the MFS, discuss its status as a social movement, and emphasize its dilemma: Should science be political on its own account? What is a responsible response to the current social situation? (2) I then analyze the MFS as a focal point for the discourse around the social responsibility of science. The focus is on two questions: Which logics regarding the social responsibility of science become visible in the discussion about the MFS, and how can universities and scientists as ›speaking actors‹ be positioned in the resulting discursive space? (3) I conclude by summarizing three major issues concerning the practical production of responsible science. (4) This argumentation is based on a discourse analysis of

related statements on the websites of the German universities involved in the MFS. It is not only the universities as corporate actors that have their say, but also individual scientists, who express specific positions.

2 The March for Science as a political initiative of academia?

The initial MFS took place on April 22, 2017. Originally planned as a ›scientists‹ march on Washington‹, the protest soon sparked global solidarity, manifesting in around 600 simultaneous marches, demonstrations, and public declarations worldwide (Appenzeller 2017). Hundreds of thousands of participants supported action to recall the relevance of science in society and politics. This massive display of support was fueled by criticism of the new agenda in US politics:

> »[W]ith its rejection of the scientific consensus on climate change, its efforts to restrict immigration, the tacit encouragement it has given to the anti-vaccine movement, and its plans for drastic budget cuts at science agencies such as the Environmental Protection Agency and the National Institutes of Health – [it] galvanized scientists into unaccustomed political action.« (Appenzeller 2017, p. 356)

In addition to the criticism of concrete political decisions in the US, there has also been a general concern among scientists about current social developments. In many Western societies, growing skepticism toward science causes »a fear that politicians and the public have lost sight of science as a force for improving the human condition« (ibid.). Thus, the marches served as an explicit defense of the integrity of scientific investigation (Brulle 2018).

Within the social sciences, the MFS is discussed as a form of political activism and a social movement. Caroline Weinberg – one of the American initiators (Wessel 2017a) – understands the march as a »grassroot event« that comes to the defense of science. This shows that scientific findings have already been ignored by political decision-makers for decades, without provoking political activism in the scientific field. However, now the situation is different:

> »We have been unequivocally dragged into the fray. Science is no longer simply being ignored by policymakers. Today, the very practice of scientific research is under threat, jeopardizing our ability to answer questions about our world [...]. The March for Science represents a planet-scale movement in support of our field and the hope it offers for the future.« (Weinberg 2017, p. 899).

Regarding the fact that so many scientists have followed the call of the MFS initiators, Norah MacKendrick sees signs of a special quality of political activism: »Although science activism is not altogether new, the wave of science-themed rallies and marches in late 2016 and 2017 is fresh and unprecedented. We are witnessing a unique moment«

(MacKendrick 2018, p. 897). Scott Frickel (2018) does not contradict this analysis; yet for him, the key question is if the political activism of this »unique moment« can be perpetuated – for example, by combining the traditional repertoire of social movements (e.g., marches, rallies, formal organization) with »tactical innovations« (e.g., data »hackathons«, rogue Twitter accounts, virtual networks). Furthermore, Dana Fisher notes that the MFS should not be overemphasized as an exclusive political action by scientists. With her research team, she conducted surveys during the Washington March and found significant socio-structural similarities to the participants of the Women's March 2017 and the People's Climate March 2017. The MFS did not in fact mobilize more scientists than the other two protests:

> »As such, the March for Science tells us less than we might hope about how scientists themselves are engaging in the Resistance. Instead, it provides evidence that this march was part of a broader movement that has emerged to challenge the Trump administration and its policies.« (Fisher 2018, p. 250)

In addition to attempts to understand the structure of the social phenomenon of the MFS, the discourse also raises the question to what extent scientists' political activism can be an appropriate reaction to the current science-critical tendencies in politics and civil society. Should scientists »stand up for science« or does the politicization of academia instead have »a chilling effect on [...] the authority of science at the expense of other ways of knowing« (MacKendrick 2018, p. 900)? The positions here are controversial: Bonnie Keeler et al. (2018) see the MFS as an indicator that academia is ready for a new kind of science that integrates the public to a greater extent, is oriented towards its usefulness, and translates advances more quickly into actions. Matthew Motta (2018), in contrast, warns that the MFS has a polarizing effect on society. He found that liberals' opinions on science became more positive after the MFS, whereas conservatives' opinions became more negative. Moreover, Robert Brulle fears that the central discussion on scientific findings will fade out of sight if scientists become too involved in a defensive and legitimizing debate:

> »Countering scientific disinformation with scientific information merely repeats and continues this nonsense debate. The scientific community mirrors the countermovement's rhetorical tactic and legitimates the debate by arguing for the accurate scientific perspective. Thus, the leading spokespersons for climate change become climate scientists. This can then create the impression that the core topic at dispute is the level of certainty of climate science. This rhetorical mirroring perpetuates this stale and unproductive debate.« (Brulle 2018, p. 257)

Such restrained and skeptical statements correspond with essential elements of modern scientific culture. With the rise in importance of modern science and the associated structural emancipation from religious and political authorities, value neutrality became a core aspect of scientific legitimacy. Over time, science refrained from moral or political

judgements. As Weingart (1983) notes, this dissociation contributed to the success of the scientific method: The separation of scientific statements from ethical and political opinions guaranteed science a monopoly on objective non-normative findings and simultaneously justified science's claim to autonomy. A particularly prominent explication of this attitude can be found in Max Weber's consideration of »freedom from value judgment«: Value-free social science is oriented towards answering the question »what is the case?« and not the question »what should be the case?« (Weber 1922). Against this backdrop, it is consistent »that ›nonpartisan‹ was the mantra of many of [... March for Sciences'] organizers, particularly those leading the flagship event in Washington, D.C.« (Appenzeller 2017, p. 356).

Naomi Oreskes and her colleagues assume that the culture of value-free science drives scientists into a distanced stance: Despite their factual expertise, they are reluctant to give political recommendations. They prefer a neutral and general language in order to not be perceived as mere advocates in a non-scientific endeavor. The distinct dividing line between politics and science, which is one of the reasons for the success of science, is still produced by scientists in their everyday scientific practice:

> »Science is centered on understanding the diversity of nature; policy is focused on the singleness of action. [...] Many scientists have internalized this ›two worlds‹ view and bowed out of the public arena altogether, fearing to trespass into territory that seems to belong to others, and sensitive to the abuse that some scientists have taken for their involvement in public affairs.« (Jamieson/Oreskes/Oppenheimer 2015, p. 55)

Due to the deep cultural roots of value-free science, scientists also fear a loss of reputation if they cross the line between science and politics. However, this strict separation has to be problematized: In history, there have repeatedly been situations in which scientific expertise coupled with the political engagement of scientists made significant contributions to improving life conditions (e.g., discussions about chemical and later nuclear weapons and the avoidance of acid rain).

> »Science is not value-free and we should not pretend that it is. This does not mean that scientists should say whatever they want, whenever they want, or that in many cases value-free science is not a goal worth striving for. What it does mean is that, when it comes to having value-commitments, science is closer to policy than the ›two worlds‹ view allows.« (ibid., p. 56)

Oreskes wishes to establish a specific scientific stance that moves between the poles of freedom of value judgement and political activism: She identifies the scientist as a sentinel who represents the ideal of responsible science and can thus be positioned between the »pure science ideal« and the »activist ideal« (Oreskes 2017).

The scientific discussion around the MFS illustrates that far more is in negotiation than the defense of science. The movement represents a focal point allowing for articulation and reflection of unquestioned self-conceptions, for the rethinking of the relation-

ship of science and society, and for a discussion about the social responsibility of science. Thus, the MFS – as Owen Whooley (2017, p. 251) concludes – offers an opportunity for discursive self-assurance: »First, we should unpack what we might mean by the ›science‹ we might wish to defend.«[1]

3 The March for Science as a focal point of discourses on scientific responsibility in academia

The MFS can be examined not only as a phenomenon of political activism, but also as a discursive object. Around this object, a discursive field expands in which explicit and implicit negotiations take place about what (responsible) science is and the associated relations between academia and society. Not only scientists, but also science organizations (e.g., universities) come into view as agents that (re)produce knowledge and speech acts (Hartz/Rätzer 2014; Weber/Wieners 2018). According to Foucault (1977, 1980), organizations themselves can be understood as practical ensembles pervaded by a nexus of power and knowledge. This nexus structures the thinkable and the sayable in organizational everyday life and interlinks complexes of (implicit) knowledge about a respectable, unusual, irritating, or unacceptable practice to specific organizational positions (Elven 2021). Science organizations are institutionalized and therefore relatively rigid, practical structures that regulate scientific production. However, the (historical) specifics of the scientific field did not originally produce organizations as a dominant principle of scientific production. Universities organize a certain form of cooperation between relatively autonomous scientists, who are also organized in other forms – for example, in their scientific communities. This practice reflects the basic idea of the freedom of science: The goals of scientific production can only vaguely be formulated *ex ante* and the production of scientific knowledge is largely linked to the specific knowledge and skills of employees. Therefore, organizational standardization is of little relevance. For this reason, Mintzberg (1979) describes universities as a form of »professional bureaucracy«.

Since the 1990s at the latest, a change in organized scientific production has been discussed (e.g. Krücken/Blümel/Kloke 2013). Universities in particular have considered a shift »from being an institution to becoming an organisation« (Kehm 2013, p. 1): Which type of organizational structures do universities have and how strong are they? For this paper, the question of the organizational status of universities is relevant insofar as it is related to the problem of the »university as an actor« (Meier 2009) or the »organizational actorhood of universities« (Krücken/Blümel/Kloke 2009). For the following analysis, I assume that universities can enter the discourse on the MFS as actors; that is, I assume that

1 This requirement is all the more important as the debate about the necessity of neutrality or political intervention shifts the question of who is addressed by ›science‹ into the background. Reflecting the different cultures of science and humanities appears as a blind spot of the MFS, whose organizers proclaim that »the marches will be not just for scientists, but for anyone who believes in empirical science« (Wessel 2017b, p. 556).

they can develop their own speaking position, which is different from that of a doctoral student, a professor, or a dean within the university field. I also thereby follow Luhmann's (1987) assumption that scientists and science organizations can take different, rivalling positions when it comes to the question of a proper configuration of scientific freedom, which also includes the question of responsibilities and relationships between science and society. Nevertheless, universities must be regarded as organizational fields in which their members are positioned and permeated by powerful practical structures (Bourdieu 1990). Depending on the discourse, specific knowledge about the social responsibility of science can be rationalized, organized, and symbolically activated in universities without the organization having its own speaking position.

By applying the Foucaultian archaeology of knowledge (Foucault 2002), I analyze knowledge complexes and statement constellations in those universities that were involved in the MFS Germany. The involvement is spatially defined: In Germany, 22 marches took place in 2017 – 20 of them in university cities. Although numerous German science organizations commented on the events, those universities where a march took place on their doorstep were especially triggered to react to the events. In addition, in most cases, members of the universities directly participated in the regional initiation and organization. Thus, 28 universities can be regarded as ›involved‹ organizations located in ›MFS-cities‹ such as Berlin, Hamburg, and Munich. In analyzing the data, I am interested in how the MFS was considered in the discourses of these universities, what attitudes are documented with regard to the social responsibility of science, and what kind of relationships are (implicitly) produced between science and society.

Empirical access for this research was provided via the websites of the universities. Only three of the 28 universities did not refer to the MFS on their websites at the time of this research. The communications of the remaining 25 universities took various forms: Some universities published speeches by rectors, professors, scientific staff, and students. Other universities published opinions, informational texts and reports, picture galleries, and videos. These documents were collected and archived by our research team at the Philipps-University Marburg after the MFS in May 2017. They constitute the data for the following discourse analysis. We were able to store 96 documents (e.g., text, pictures, videos, and podcasts). For the discourse analysis on which this article is based, only textual material was used (Elven 2021). After a cleanup, in which duplicates and non-textual material were excluded from the data corpus, a database of 51 texts remained.

The first step was to analyze how the universities appeared in the discourse on the MFS, distinguishing between the university as a corporate actor and the university as a structuring instance of a discursive field. The two roles do not form two mutually exclusive poles: universities can both organize the framework of a discourse on the MFS and, as corporate actors, establish their own speaking positions. The second step was to examine the constellations of statements about the MFS. Which (implicit) positioning is expressed in a specific thematicization of ethical questions? Which institutionalized knowledge structures do the statements refer to? What (self-)image do the speakers draw of themselves, of scientific responsibility, and of the relationship between science and society? In a third step, the two inquiries were related to each other.

3.1 Different forms of discourse organization: Who is speaking?

As previously noted, the universities' websites offer a wide range of references to MfS. For example, the places of reference (i.e., the webpages where the MFS is discussed) vary – from press office pages and general news sites; to webpages belonging to the rectorates and deaneries or faculty members, institutes, or chairs; to the pages of individual research groups, professors, student councils, or topic-specific project groups. These localizations provide indication of the university's role. If the reference is made on the pages of organizational bodies such as the press office, this placement signals an urgent (or even exclusive) corporative reference to the MFS. If articulations are also found on the subpages of individual scientific actors or groups with a general affiliation to the scientific field (e.g., the General Students' Committee, the association of non-professorial teaching staff, collaborative research center), this indicates different speaking positions in the discursive space. The references are analyzed by use of two categories in order to be able to structure the form of the statements: 1) the constellation of the speaking actors and 2) the quality of the reference.

1) The constellation of the speaking actors: This category refers to the specific university actors who comment on the MFS on the university websites. These actors may be individual (scientific) actors or groups of actors, such as a research group or a student council. In addition, individual actors can also play a specific organizational role (e.g. rector, head of a research center, or member of a cluster of excellence). The university homepages not only offer an idea of which actors participate in the discourse, but also document specific constellations of actors, which vary from university to university. The following variations can be distinguished:

- ***Exclusive reference by the university:*** The university appears (primarily or even exclusively) as a corporate actor. Rectors, professors, staff, and students appear first and foremost as members or representatives of the organization. Speaking for the university can be done by different actors and also on different subpages – what is decisive is the fact that the actors (primarily) speak as representatives of the universities.
- ***Reference by a few exposed groups of actors:*** Only one (or a few) exposed group(s) of actors appear(s) on the university website. This actor can be the university itself – for example, represented by the rector, which offers information about formal support. However, the actor(s) can also be individual scientists who actively participate in the MFS and use their subpage to take a personal stand. In some cases, collaborative research centers, such as the Excellence Initiative's research alliances, also issue statements in order to establish a link between their special position in the field of science and the MFS.
- ***Multi-stakeholder references:*** In some cases, the university websites were shown to be discursive spaces used (and thereby produced) by different actors, structured on the one hand by the generally sayable and unsayable at a given time and on the other hand by practical-discursive relations of knowledge. Within these discursive spaces, many different actors express themselves, speaking as concerned and involved scientists, citizens, or research groups. The university may appear as a corporate actor, but it does not homogenize individual speech acts. In one case, for example, the university

does not express formal support for the MFS, but has merely published a short information note, while the staff and students participate very actively and express their thoughts and opinions on their subpages. This form of participation is often explicitly emphasized by the members of the particular university field. In this way, the MFS is addressed as a multi-stakeholder project.

2) The quality of the reference: Universities as fields of discourses differ in the way they publicize participation in the MFS on their websites. The spectrum ranges from an informative role (announcements and reports) to demonstration of support, which in some cases is only formal in character, but in others includes publishing the availability of locations for meetings or contributions by members. Finally, some websites also document constructive participation. As different agents of a university can be involved (multi-stakeholders), the quality of the reference can diverge within the organization. This divergence is particularly relevant if the university, as a corporate actor, establishes a different kind of relationship to the MfS than the employees do. The following qualities of a reference can be distinguished:

- ***Informative:*** Informative participation is limited to the provision of information, such as framework data (e.g., dates, meeting points, running routes, programs) and reports that provide information about an event at a later date. The texts are written in a neutral manner. If the University expresses *formal* support, it is expressed in a plain and sober diction (»University X supports the March for Science« [U24][2]).
- ***Supportive:*** In supportive participation, agents express their endorsement of the event. This form of participation usually occurs as formal support if conducted by the university as a corporate actor. In some cases, the university websites call for participation or explicitly welcome the participation of members of the university, such as by means of speeches or statements. The websites also provide a forum for the participation of the organizations' members. In addition, reference is made to various support services, such as the provision of event locations. However, nobody appears as the initiator. The ductus is benevolent, but less politically committed than in the case of a constructive reference (»The importance of science and research for our society cannot be overestimated. It's time to send a signal for this. Therefore, we support...« [U23]).
- ***Constructive:*** In constructive participation, the university itself or other actors or groups of actors are the main pillars of the event. They elaborate on concepts, organize demonstrations, and actively participate in the discussion about the MFS. Members of the particular university field frequently appear as (co-)initiators or relevant thematic initiators. In most cases, there is also an explicit political positioning. The style of the texts is therefore committed and explicitly normative (»The Presidium of the University X will participate. […] In political discussions about phenomena that also affect science – such as populism, restrictions on academic freedom, tolerance, religious freedom, but also freedom of thought – University X is commonly perceived as a university which has a special role to play in safeguarding these values« [U15]).

2 The quotations are anonymized and translated passages from the university web sites. They are assigned with a case key [U01-U25].

In a slight majority of the 25 university websites with an explicit reference to the MFS, the university appears as a central corporate actor: 13 universities participate in the discourse as powerful interpretative actors. Conversely, 12 universities can primarily be understood as discursive spaces in which the universities themselves play a subordinate or no role as corporate actors. Above all, the universities represent an organizational structure in which the discourse takes place. However, this does not mean that the universities do not have a powerful effect on the discourse. After all, they form an essential structure that creates powerful and less powerful speaker positions, produces and organizes knowledge, and eventually influences the sayable and the unsayable. In seven cases, the universities form a discursive space in which individual exposed actors comment on the MFS. These are often professors with a strong formal reputation (e.g. actors from the field of the Excellence Initiative). Only five university websites form discursive spaces for a multi-stakeholder setting. In these cases, actors from different status groups are involved: In addition to professors and research groups, doctoral students and student associations (e.g. AStA) also have their say. Here, the discursive space is not characterized by one (or even a few) central speakers, but by a decentralized structure.

The discourse on university websites is rarely characterized by an informative style. In six cases, a primarily neutral-informative attitude is evident. Meanwhile, the majority of the discourses can be classified as supportive (11), and in eight cases, the respective university field produces a constructive discourse. In particular, those discourses with a multi-stakeholder structure are constructive in character: The actors refer to their active participation in the marches, locate themselves politically, and publicly discuss new possibilities of thinking about the social responsibility of science and of putting it into practice. In addition, individual exposed actors – whether universities or individuals – produce a development-oriented discourse. Conversely, an informative style is only evident in cases in which the university appears as the central actor.

Table 1: Constellations of actors and quality of reference

		Constellations of Actors		
		Multi-Stakeholder	*Exposed Groups of Actors*	*University*
Quality of Reference	*Constructive*	5	2	1
	Supportive		5	6
	Informative			6

When scientists do not speak as members of their university, but rather adopt their own, separate speaking positions, they express a normative attitude towards the MFS. However, in the opposite case, universities as corporate actors do not exclusively adopt a position of scientific neutrality. After all, seven universities act in a supporting and constructive manner. Which correspondences can be found between the formal differences in the discourses on the level of content?

3.2 Different logics of discursive recourse: What can be said?

In the following paragraphs, the MFS is reconstructed as a focal point of the current discourse within the scientific field on the social responsibility of science. This focal point is where different strands of the scientific discourse on responsibility and the general relationship between society and science intersect and disrupt each other. The reconstructed discourse may therefore be characterized as the public positioning of universities and individual academic actors on questions concerning the responsibility of science. These positions, in turn, are articulated via the topics of the MFS. The MFS is thus understood as a discursive framework in which it becomes apparent what can be articulated about the responsibility of science. Three discursive formations can be distinguished, which follow different logics, although they partly overlap in their discursive production. These three formations are grouped around 1) the freedom of science, 2) the function of science, and 3) the relationship between science and society (Elven 2021).

1) Freedom of science: This discursive formation refers to the freedom of science as a high good and as »essential« to enlightened, »democratic, and liberal societies« [U22]. Scientific freedom entails juridically protected autonomy of research and teaching, which enables unlimited accumulation of knowledge on the grounds of scientific methods.

> »The freedom of research and teaching, which is protected by our constitution, the acquisition of knowledge on the base of scientific methods and an open discourse are indispensable for a democratically constituted society and for political decision-making. Together, we will stand up for this value.« [U07]

This discursive formation highlights the importance of »thinking without borders« [U10] and the free exchange of thoughts and ideas. Free science is marked as a guarantor of progress and refers to the past and present success of the concept of scientific freedom. Essential traditions of the idea of freedom (Enlightenment, Humboldt's ideal of education) represent an argumentative point of reference, as do historical phases in which the freedom of science was restricted (in particular, National Socialism). These references illustrate the central value of scientific freedom as well as the risks in cases of restriction. The MFS is used as an opportunity to explain the scientific values of freedom, justice, and truth, and at the same time to mark them as inviolable privileges.

This discursive position is conservative: It emphasizes the (traditional) importance of science, but at the same time assumes a warning and defensive stance. Current threats to

scientific autonomy are identified and illustrated with concrete examples. In particular, political and economic restrictions on the freedom of science play a key role. Recent developments in the US are perceived as moments of acute political threat to autonomy. For example, »antiscientific defamation and ignorance campaigns« are emphasized as a »threat to science of historical proportions« [U21]. This discursive formation also harshly criticizes the obstruction of politically inconvenient fields of research (e.g., environmental research) and the lack of interest in a serious science policy. The practice of impairing research fields that are not in line with political narratives by cutting budgets is just as problematic as the tendency to judge science by its short-term and immediate economic benefit. The position that is constructed in terms of content is that of a far-sighted and knowledgeable admonisher who recognizes the bigger picture and simultaneously keeps an eye on the well-being of mankind. This position is based on an implicit logic of development that must not be obstructed in order to not endanger social progress. Otherwise, there is a threat of regression. The position expresses an implicit claim to objective, universal truth, which exhibits paternalistic and authoritarian traits.

2) Function of science: Within the framework of this discursive formation, the tasks, duties, and responsibilities of science are the focal point.

> »Our entire lives are based on the results of science, but many people are not aware of this. The primary goal of the March for Science in Germany is to make it clear to society that it is not viable without research.« [U02]

Science is understood as a clearly defined functional field of society that guarantees progress (e.g., technical, medical, social). The focus is on scientific inventions, as well as the profound reflectiveness of academia, its »critical thinking and sound judgement« [U24]. Furthermore, the liberal, democratic, and just constitution of modern societies, which can benefit from prosperity and peace, is attributed to the achievements of science. In this view, scientific productivity is rooted in scientific methods (i.e., the plurality of the scientific community, as well as the strictly rational, analytical, and logical principles of scientific work). Thus, the usefulness and success of science depend on the conditions that have proved functional in the academic field (e.g., openness of results, dependence on methods, rationality, dependence on facts, scientific culture of dispute). This discursive formation is linked to the essential (social) technological developments (»achievements for mankind« [U22], such as medical progress, information technologies, increase in life expectancy through improvements in working conditions, hygiene, social welfare). The effectiveness of methodically controlled and object-oriented acquisition of knowledge through experiments, statistical procedures, logical argumentation, and source work is emphasized. In addition, the critical-reflexive function of science is stressed, for example in the regulation of weapons of mass destruction or the avoidance of environmental damage. Conversely, the misuse of (pseudo-)scientific findings is condemned (e.g., for destructive, propagandistic, and inhuman purposes during National Socialism [U21]).

The attitude expressed in this discursive formation is a reflexive and functionalistic one, which is expressed in explicit statements during the MFS and in decisive positioning

against a »post-truth[3] notion and alternative facts« [U07]. For example, deniers of climate change and opponents of vaccinations, as well as conspiracy theorists, are problematized for endangering the common good. The position stresses that critical thinking and well-founded assessments are only possible on the basis of reliable facts and a systematic classification of information. It warns against the consequences of public and private decisions based on »perceived truths« [U05] and against the associated blurring of the boundaries between secure knowledge and personal opinion. In this view, ignorance and discrediting of scientific findings endanger the foundations of human life and the survival of future generations. The logic of this position is that of a rationalist science that is actively facing up to its responsibility, of experts who analyze current developments in a public discourse and make recommendations for further measures. This attitude reacts to populist hostilities with irritation and indignation, contending that scientific skepticism turns against the obvious social relevance of science. From this perspective, the public welfare function of research is so evident that science requires no explicit justification. In this respect, this position is also marked by a distanced impatience, which strives to make it clear that science fulfills its social tasks, while other segments of society – especially politics – do not adequately perform their duty.

3) Relationship between science and society: The third discursive formation is grouped around the reflection, concretization, and negotiation of the relationship between science and society. The status quo of this relationship is conceptualized from a scientific point of view:

> »Science [...] thrives on curiosity, the free exchange of ideas, and the motivation to contribute new and reproducible insights to the social discourse. We want and will carry on striving to explore our world thoroughly and to provide reliable findings instead of perceived truths. Scientifically sound facts are an indispensable basis for fact-based debates. Thus, knowledge always contributes to the foundation that constructive dialogue needs – which in turn is immensely important for a good social togetherness.« [U18]

Social currents that fundamentally negate and discredit scientific knowledge find expression in some current political regimes, but the roots are deeper. This discourse formation is therefore marked by great concern about the »rampant hostility towards science« [U23]. It fears that social peace will be threatened by the political incitement of resentment and the trivialization of social inequality structures. The simultaneous attacks on science, the press, and the judiciary in states that currently tend towards totalitarianism are seen as a (partly intentional) destabilization of a pluralistic and democratic society. In contrast to the other two positions, this discursive formation is more closely oriented to the present. On the one hand, it criticizes recent events (such as the disappearance of universities »from the scientific map« [U10]). On the other hand, it is explicitly oriented towards a reformulation of scientific tasks and an updated assessment of the relevance of

3 Original term: »postfaktisch«

science. Accordingly, science has a social duty to assert itself against populism. The MFS and global solidarity among scientists are (critically) reflected as an instrument of this commitment. The scientific community must cooperate on a global scale to find solutions and must not surrender to talk of the »post-truth age[4]« [U22]. It must also defend itself against political instrumentalization. The restoration or maintenance of a constructive, future-oriented social dialogue is one of the most urgent current tasks, for which new paths may be explored.

This position is oriented towards a liberalizing and democratizing attitude. Science should establish a tolerant and open exchange with the public. Global academic networks should »build bridges« [U10] and science communication must be able to argue comprehensibly in order to make its voice heard when dealing with social problems. Thus, a process of democratization by simplifying scientific language is also called for, enabling scientific findings to achieve a greater societal reach. Furthermore, science must seek a constructive dialogue and reflect on the diversity of social perspectives. It must also reciprocate the privileges of free and open research by contributing to prosperity and societal progress. This discursive formation reveals a thoroughly self-critical attitude ready for dialogue in the search for a (new) relationship between science and society (»The dialogue between science and society must lead to a transparency that generates trust« [U03]). It takes the accusation seriously that science overwhelms the majority of the population and tries to find the reasons for this criticism and to self-critically work on them in order to regain the trust of the public. Together with the (open-minded) public, it also tries to solve the problem of growing scientific skepticism. Due to its inquiring attitude, however, this discursive position is also particularly heterogeneous and sometimes diffuse. The focus is often on taking stock and formulating (self-critical) requirements; solutions are less tangible.

3.3 Connecting analyses of the form and content logic of discourses

When the forms and contents of the discourses on the university websites are related to each other, differences in the homogeneity of the utterances become apparent. It is not surprising that universities that act as corporate actors in an informative manner hold a relatively uniform position. The same applies to universities that are supportive. In both cases, content-related positioning in terms of the »function of science‹ is evident. The universities thus address the societally relevant tasks of science that they want to defend against political assault. Nevertheless, they express themselves not in a justifying manner, but rather in an explanatory and evidencing way. This stance expresses a naturalness that is promoted by the institutional power of the university as a corporate actor. Universities as corporate actors less frequently adopt a position of »freedom of science«. If this happens, it is a matter of brief statements, especially by traditional universities. Statements that are oriented towards the »relationship between science and society« are not, or are

4 Original term: »postfaktisches Zeitalter«

only marginally, found in discourses in which universities appear as corporate actors. One exception is the university which positions itself in a constructive way: In terms of content, an orientation to all aspects takes place here – the university thus uses all strategies of argumentation in order to contribute to the MFS in a constructive way. In this case, the university as an actor is polyvocal.

This polyvocality also comes to light when the discourse is dominated by a central group of actors at the university. Both the supporting and the constructive actors usually argue along different content-related dimensions. If it is not the university, but another scientific actor that is central in the discourse, polyvocality already begins in those discourses that are merely supportive. Universities with a supportive orientation speak univocally and mostly in the rationalistic logic of scientific functionality. In multi-stakeholder discourses, there is often a kind of distribution of roles: Although there are certain actors who address all argumentation logics, in most cases, the distribution of speaking positions also leads to a differentiation of the positioning in terms of content. For example, an alumni organization represents the conservative attitude of freedom of science, while public relations offices produce the rationally distanced style of scientific functionality and particularly established and respectable professors propose new paths for the relationship between science and society.

If universities position themselves as corporate actors, they generally lean towards conservative and functionalistic argumentation strategies. These universities are irritated by the growing skepticism towards science and react with admonitions and explanations, which are intended to reestablish the unquestionable relevance of science. Although a few universities present themselves as progressive, it is primarily individual scientists who are discussing new ways of communicating science or ways of liberalizing and democratizing science. They contribute new readings to the question of the social responsibility of science and seek answers through societal exchange. As these positions polarize, it is easier for individuals to represent them. If universities speak as corporate actors, the speech act is oriented towards an anticipated minimal consensus, because the rationalistic notion of scientific functionality as well as the conservative-humanistic attitude of scientific freedom correspond to traditional logics embedded in the cultures of science.

4 Conclusion: The discursive production of scientific responsibility

This paper offers the following three main takeaways regarding the positioning of universities as corporate actors and individual scientific actors in the discourse about the MFS:

1) The dilemma of nonpartisan science: The sociological discourse around the MFS exposes the dilemma between the implicit standards of scientific nonpartisanship and the social obligation to politically defend science. The discourse analysis of the university websites sheds light on organizational strategies to deal with this problem. A large number of the universities involved publicly express their support or grant their members the opportunity to announce their own opinions. However, differentiation exists regarding the form of solidarity. While universities that appear as corporate actors mostly homogenize their public

statements and thereby represent a functionalistic-rationalistic or conservative-humanistic attitude, individual actors express themselves as eager to change. These different attitudes influence the discursive production of the relationship between science and society: While the former tends to produce distance, even a hierarchical divide, between ›knowing‹ science and the ›unenlightened‹ population, the latter tends to emphasize participation and open dialogue without asking about the possibilities and conditions of participation.

2) The scientist as a sentinel: It is reasonable to assume that science organizations tend to perpetuate institutionalized forms of work such as value-free research, as they can bind these forms into organizational structures. In this view, scientists who want to act as sentinels have to emancipate themselves not only from the scientific community, but also from the organizational structures surrounding them. However, the analysis demonstrates that universities as corporate actors can also act as sentinels. It is therefore not a question of *whether* they can do so, but rather *how*. In the context of the MFS discourse, universities tend to uphold a classical-humanistic or functionalistic understanding of science. Yet, both positions are dependent on an insightful and benevolent society: While the defense of the »freedom of research« depends on a strong social dissemination of the ideals of enlightenment, the functionalistic attitude builds upon an assumption of societal rationality. The growing skepticism toward science, however, raises doubts about a corresponding common sense. Although both positions defend the value of science for the benefit of the general public, their defense strategy runs the risk of being inoperable. The question of how universities can function as sentinels should be extended to include the question of how this protective role can be practically produced so that its effect can be unfolded. One benefit could be that universities would be able to organizationally deal with the individual fear of losing reputation, as mentioned by Jamieson et al.

3) The competition between universities and academics for discursive power of interpretation: Where universities appear as corporate actors, their statements tend to be homogenized and also oriented towards preserving the prevailing conditions. Yet, where universities primarily form discursive spaces, a particularly dominant position may also emerge. This position is usually occupied by actors who possess a strong reputation. The difference, however, is that in these cases a very differentiated, wide-ranging orientation in terms of content is usually apparent. Multi-stakeholder discourses are rare. However, they usually offer scope for different positions in terms of content. The impact of the organizational structures of universities appears to be considerable. They tend to prevent a diversity of opinion – at least in public appearances. This effect is problematic for two reasons. Firstly, there is a risk of reinforcing a »scientistic reductionism«, a common view of the sciences as a homogeneous and coherent set of facts; (organized) science communication takes part in the reproduction of this perception (Strohschneider 2020). Secondly, there is a risk of repercussions on the scientific production itself, as the underlying positivist position is given an official, organizationally legitimated character by the homogenization of communication.

The discursive referencing to the MFS seen on university websites is special. Although the role, function, and responsibility of science are discussed, there is a remarkable absence of critical reflection. The comments demonstrate different shades of neutrality and positivity, while negative positions are discursivized elsewhere. For example, Armin Nassehi (2017,

p. 6) advocated at the annual meeting of the German Rectors' Conference (HRK) against treating the complex and multi-layered relations between science and society in the mode of »science kitsch« practiced by the MFS. The (apparent) uniformity of scientific knowledge is also problematic due to the unification and simplification of the political voice of scientists (Strohschneider 2020), which is mainly to the disadvantage of the humanities and cultural studies or, more generally, of non-positivist research. This blind spot of self-critical consideration is understandable – after all, the question of support is an essential framework for website statements. Nevertheless, this stance is problematic. In the worst case, the university itself perpetuates a naïve understanding of academia.

In conclusion, in most cases, the discourse around the MFS evokes long-established understandings of the social responsibility of science. The universities examined in this research are by no means neutral in defending this responsibility. However, they tend to keep the sayable and the imaginable in conservative tracks. New impulses or attempts to reformulate the relationship between science and society in an innovative way are largely pursued by individual scientists. Science seems to exhibit a strong tradition of serving as a sentinel of society. It is given the responsibility not only to produce knowledge, but also to assess its own consequences and to critically reflect on the present. From academia's point of view, the defense of this responsibility is also a duty to protect society. The question is whether society agrees to this idea.

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