Positionality Reloaded: Debating the Dimensions of Reflexivity in the Relationship Between Science and Society; An Editorial

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Positionality Reloaded: Debating the Dimensions of Reflexivity in the Relationship Between Science and Society: An Editorial

Séverine Marguin, Juliane Haus, Anna Juliane Heinrich, Antje Kahl, Cornelia Schendzielorz, Ajit Singh ∗

Abstract: *»Positionality Reloaded: Über die Dimensionen der Reflexivität im Verhältnis von Wissenschaft und Gesellschaft: Ein Editorial«.* It cannot be denied that reflexivity has become a must in social science methodological discourse in recent decades. The uses and functions of reflexivity in the research process have been well addressed historically, be it with regard to researchers' subjectivity, their perspectivity shaped by social origin and biographical life path, or their possible asymmetrical power relations with investigated actors. Nevertheless, we see an urgent need to discuss these issues. We claim that the practice of reflexivity, seriously shaken by the current transformation of (the understandings of) academic knowledge production, has become a challenging duty to fulfill. There is no straight and easy answer to the big questions of "for whom" and "for what purpose" do we produce "what kind of" knowledge and "how." Struggling for an appropriate positioning within global societal developments, we dedicate this special issue to the search for a critical, and the exploration of a lucid, (self-)reflection of academic research. In this respect, this special issue, *Positionality Reloaded: Debating the Dimensions of Reflexivity in the Relationship Between Science and Society*, sets out to explore how coexisting yet diverse conceptions of academic research and knowledge production can be reflexively considered and related to each other from an epistemological, ethico-normative, and ontological point of view.

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1.   Introduction

In the past, science enjoyed a privileged position in society, with scientists conducting research under the protection of the state as long as they produced enough societal utility. However, since the 1990s, there has been a rising heated discussion regarding the integration of science into society and whether academic researchers are to be generating knowledge for and on par with non-scientific social groups that has direct applications and is widely accepted or not (Jasanoff et al. 1995; Callon, Lascoumes, and Barthe 2009). In discourses about science, technology, and innovation policy, these demands are expressed in the form of newer concepts, such as grand societal challenges, responsible research and innovation, transdisciplinarity, citizen science, and participatory research (Burawoy 2005; Treibel 2017). This development, which is just one side of a multi-sided coin, corresponds with the debate about the new potential role of the scientist – established for several decades as a specialist – as an active participant in the non-scientific realm. Attempts to create new hybrid professionals, such as science entrepreneurs, science communicators, clinical scientists, science diplomats, and so on, bear witness to this imperative (Gregory and Miller 1998; Thomas and Durant 1987; Hendriks, Simons, and Reinhart 2019; Butler 2008; Flink and Schreiterer 2010; Degelsegger-Márquez, Flink, and Rungius 2019).

  Due to the rising complexity of social, political, and technical challenges across the globe, this transdisciplinary orientation of research is being translated increasingly into funding policies and evaluative requirements (Hunt and Thornsbury 2014; Schrögel and Kolleck 2018; Simon and Knie 2021). In research practice, however, it has become apparent that such inter- and transdisciplinary research is facing challenges that cannot be overcome with generally applicable rules. How and which kind of scientific knowledge is produced – knowledge from science for science or heterogeneously produced and primarily socially relevant knowledge (epitomized by calls for the production of Mode-2 knowledge) – continues to spark controversial academic debates (Nowotny, Scott, and Gibbons 2001; Kaldewey 2013; Franzen et al. 2014; Baur et al. 2016; Gingras 2020). These debates illustrate the struggle and the search for a critical and lucid (self-)reflection of scientific work and research, as well as an appropriate positioning within global societal developments and issues. The current pandemic, which has effectively assigned scientists a new role as consultants and decision makers,

has been revelatory and at the same time has accelerated these transformations at work.[1]

As the corona pandemic has dragged on, the public's perception of the role of science and science communication has noticeably changed (Franzen 2020). On the one hand, scholars from different disciplines (epidemiologists, virologists, psychologists, and sociologists) have become sought-after media experts, who were pushed more than ever to position themselves publicly by communicating scientific results under high pressure. On the other hand, it became increasingly apparent that the role of scientists in public discourse is not without controversy. Academic discourses have become visible as a topic of public criticism. Some scientists have even become popular, whereas others seem to represent antagonist positions on how to face the corona pandemic. The mass media in particular has contributed to unduly glorifying scientists or doubting their integrity (Franzen 2020). Although we were aware at the beginning of planning this *HSR Special Issue* that the questions raised about reflexivity and positionality in research are still of great importance, it was impossible to anticipate the actual relevance (zeitgeist) as a result of the corona pandemic.

Against this backdrop and in light of the dynamic discourses emerging in the academic fields related to these issues in Berlin and in the German-speaking world in general, we decided to organize a conference on the topic of positionality and reflexivity in social and anthropological sciences. The planned conference, supported by the Berlin University Alliance, was aimed at building bridges between thrilling positions from the various Berlin universities and research institutions and creating a space for discussion with scholars from German-speaking universities and international colleagues. Unfortunately, due to the COVID-19 pandemic, the conference planned in spring 2020 had to be cancelled. This special issue represents an alternative communication format for the arena we failed to open live.

2.   Reflexivity: A Challenging Duty to Fulfill?

There is a long history of reference to the topic of reflexivity and positionality, starting with Merton's reflections on "The Normative Structure of Science" ([1942] 1973), Knorr Cetina's "The Manufacture of Knowledge" (1981), Haraway's "Situated Knowledge" (1988), Luhmann's "Observation of Observation"

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[1] This can also be observed in the high amount of publications, blogs, lectures, and podcasts regarding the pandemic within the first year. While the natural sciences were working at full speed to identify findings on the virus and how it spread, the social sciences focused on observations of the social effects of the pandemic and its societal consequences, which now – in the summer of 2021 – seem to lead from a corona- to a "postcorona"-society (e.g., Gamba et al. 2020, Kortmann and Schulze 2020, Keitel, Volkmer, and Werner 2020).

(1997), Bourdieu's "Science of Science and Reflexivity" (2001), and Gingras' "Sociological Reflexivity in Action" (2010), to cite only a few.[2] No one can deny the urge for reflexivity in the social scientific methodological discourse. Quite the contrary, everyone would agree that it has become a must. We differentiate three main (intertwined) established perspectives from each other in the methodical and methodological sociological discourses that have addressed the use and function of reflexivity in the research process: the first concerns the researchers' subjectivity, the second deals with their perspectivity as shaped by their social origin and biographical life path, and the third tackles their possible asymmetrical power relationship with the investigated actors.

In Plessner's words, the social sciences are based on the eccentric positionality of the researchers, which touches on or emerges from their capacity for a reflexive relationship to self, life, and the world (Plessner 1975). In anthropological literature, this understanding of the self was methodologically developed further for the study of the social, be it by George Herbert Mead with his concept of self, split up into "me" and "I," or by Geertz with his dimension of ethnological reflection and self-reflexivity for the critique of ethnocentrism and universalism. Such reserves against the universalization of academic research achievements are held up and fathomed in concepts such as "situated knowledge" (Haraway 1988). Furthermore, they continue to be critically reflected vis-à-vis the mentioned transformation from mode 1 to mode 2 and incessantly emerging and developing audit cultures in social anthropology and ethnography advocating for open ended-research, which implies "[k]eeping open a place for the unpredictable or contingent" (Strathern 2000, 286). In systems theory, reflexivity is part of the autopoietic turn and secures the communicative processing of social systems (Luhmann 1984). For a controlled approach to one's own subjectivity, the researcher must become reflexive and move from the first to the second and even to a third order when reflexively observing previous observations (Luhmann 1997). However, it is not enough – according to the claim of further sociological methodological work – to let this process run at the subject level. Awareness of one's own perspectivity requires the consideration of the social structures in which the researcher is caught or embedded. In this regard, Bourdieu's work on self-sociological analysis has been fundamental (Bourdieu 2007). He showed how researchers can become aware of their positionality (understood as position and positioning in both the academic and the social fields), which pervades their production of knowledge, be it at a theoretical, methodological, or merely thematic level. Last but not least, reflexivity is assigned an indispensable function in the empirical social sciences to question the research

situation itself and to uncover the influence of inherent power relations in the relationship between researcher and researched during the process of data collection (Bourdieu 1999).

Hence, as a basic sociological concept, reflexivity is deeply rooted in social theory and social analysis. For Giddens (1991, 1994), reflexivity extends across a subjective, societal, and scientific level. Social science is reflexive in the sense that it is always part of the society that it describes and that it shapes through its research. In Garfinkel's (1967) ethnomethodology, the subjective notion of reflexivity is turned social into the indexicality and reflexive accountability of (embodied) practices. In the sociology of knowledge and constructivist program of Berger and Luckmann (1966), reflexivity is based, among other things, on the emphasis on the specific historicity of the social. Mention should also be made of the Marxist and postcolonial approaches (Wallerstein 1974, 1980; Spivak 1988), which have programmatically advanced the critical-reflexive analysis of Western knowledge productions, ethnocentric styles of thinking, and the resulting description of world-societal asymmetries. Other important explorations of and engagements with reflexivity can be found in science studies: the meaning of disciplinary reflexivity (Bloor 1976), the relationship between "reflexivity and knowledge" (Woolgar 1988), and the relevance of "epistemic reflexivity" (Bourdieu and Wacquant 1992, 36 ff.). Referencing this debate, Lindemann refused to accept any a priori definition of the nature of human beings (*Wesensbestimmung des Menschen*). In doing so, she went one step further by suspending the anthropological difference between human and non-human and negating the definition of social actors only as human (Lindemann 1999, 2001). In essence, the anthropological differentiation itself is reflexively made the object of research, an aspect that we will also encounter in some contributions of this special issue.

Being aware of one's own position and positioning in the social field and exercising reflexivity accordingly in order to control the potential or more likely inevitable biases stemming from one's own subjectivity are part of the acknowledged and expected but still important methodological discussion in qualitative research (Mruck, Roth, and Breuer 2002; Roth, Breuer, and Mruck 2003; Kuehner, Ploder, and Langer 2016; Katila et al. 2021). So where do we see the need for an urgent discussion on these issues? We claim that reflexivity, seriously shaken by the current transformation of (the understandings of) academic knowledge production (Gengnagel, Witte, and Schmitz 2017), has become a challenging duty to fulfill. There is no straight and easy answer to the big questions of "for whom" and "for what purpose" do we produce "what kind of" knowledge; rather, we face daily negotiations of the idea of what is/should be academic knowledge in science and the humanities. The distinctiveness of scientific knowledge compared to other types of knowledge is not taken for granted anymore, although its relevance remains acute more than

ever in the current (growing) spread of fake news (Jaster and Lanius 2019; Vogelmann 2018). Moreover, there is next to no empirical research into the everyday practices that correspond with these new discourse formations and daily negotiations about scientificity (Marguin and Knoblauch 2021): What do we as academic researchers actually understand by knowledge? What kind of value does this understanding imply? Does it (still) follow principles of validity, representativity, effectiveness, innovativeness, and exploration, to name but a few non-trivial aspects of knowledge production? And in the long term, what is the purpose of accumulating and circulating knowledge? What kind of (new) scientific regimes do these new expectations of academic knowledge produce?

In this respect, this special issue, *Positionality Reloaded: Debating the Dimensions of Reflexivity in the Relationship Between Science and Society*, sets out to explore how these coexisting yet diverse conceptions of academic research and knowledge production can be reflexively considered and related to each other from an epistemological, ethical-normative, and ontological point of view. Against this backdrop, this special issue brings together selected contributions, mostly from the social and anthropological sciences, that propose specific and advanced approaches, all centered around the concept of "reflexivity" as a tool to deal with the current deep transformation of (the understandings of) science. They share a common purpose to foster an ongoing discussion and (self-)reflection on the conditions and forms of academic knowledge production. In addition, they strive to contribute to more sensitive (transdisciplinary) practices of research and scholarly exchange in the broadest sense.

Given the wide range of contributing disciplines from the social sciences and beyond, as well as the genuine focus on transdisciplinarity, this special issue is intended to address a broad readership within academia and across different realms of expertise. It represents an innovative extension of the previous well-curated methodological *HSR Special Issues* on anthropology (25.2, 2000), qualitative social research (30.1, 2005), grounded theory (Suppl. 19, 2007), discourse analysis (33.1, 2008), qualitative data (33.3, 2008), spatial analysis (39.2, 2014), and methods of innovation research (40.3, 2015).[3] In a vast array of literature, this volume focuses on the production mostly from the perspective of the sociology of science, sociology, and social science itself, which is referred to as "sociology of sociology" (Bourdieu 2001), similar

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[3] 25.2: https://www.gesis.org/en/hsr/full-text-archive/issues-1978-2005/2000/252-anthropology;
30.1: https://www.gesis.org/en/hsr/full-text-archive/issues-1978-2005/2005/301-qualitative-social-research;
Suppl. 19: https://www.gesis.org/en/hsr/full-text-archive/2007/suppl-19-grounded-theory;
33.1: https://www.gesis.org/en/hsr/full-text-archive/2008/331-discourse-analysis;
33.3: https://www.gesis.org/en/hsr/full-text-archive/2008/333-qualitative-data;
39.2: https://www.gesis.org/en/hsr/full-text-archive/2014/392-spatial-analysis;
40.3: https://www.gesis.org/en/hsr/full-text-archive/2015/403-methods-of-innovation-research.

to the works by Camic, Gross, and Lamont (2011), and more recently and specifically by Hauer, Faust, and Binder (2021) about the positioning of ethnographic practice.

Our special issue, *Positionality Reloaded: Debating the Dimensions of Reflexivity in the Relationship Between Science and Society*, promotes a debate that takes a unique position particularly on the current questions of social change and the necessary methodological repositioning of reflexivity and positionality in transdisciplinary oriented social science research. The related questions also have an impact on the description of societies diagnosed as a "knowledge society" relying on expert cultures (see Knoblauch, in this issue). In the "reflexive modernity" (Beck, Giddens, and Lash 1994), heterogeneous actors with different stocks of knowledge, as it is quite evident in the case of citizen science or participatory research, actively enter communicative contexts and social arenas of research in order to participate in the empirical production of (scientific) knowledge (Herberg, Staemmler, and Nanz 2021). This not only affects the ways in which scientific knowledge is socially constructed but also the positionality of social science itself.

The purpose of our special issue is twofold. On the one hand, it aims to sharpen the specificity of one's own academic positioning in the controversial discussion with other approaches. It thereby aspires to gain insight into the particular strengths, limits, and blind spots of the respective perspectivation. On the other hand, it presents – by means of concrete examples and case studies – possible methodological procedures for a more reflexive positioning of academic researchers in their everyday research practices. The volume's innovative potential lies in its ability not only to bring and string together different and controversial positions on the topic of reflexivity and positionality in science, but also to initiate a real dialogue on the consequences of adopting one or the other position for practical empirical research. As a result, it provides a practical orientation for researchers on precisely this topic.

In order to tackle the complexity of the debate, the selection of the contributions for this special issue has been structured around three main axes, which led to what at first glance might seem like a slightly unorthodox but in fact is actually a carefully curated choice of authors: *firstly*, we searched for various epistemological social-theoretical frames; *secondly*, we looked for different ways of perceiving the relationships between theoretical and empirical; and *thirdly*, we focused on propositions dealing with the positioning of researchers in society in order to comprehend this current groundbreaking transformation of knowledge production.

2.1   Different Epistemological Frames

The contributing authors were chosen in an effort to address a panorama of ontological, epistemological, and social theoretical positions on positionality and reflexivity in research. The heterogeneity of the group of authors constitutes an intentional curatorial gesture with the aim of scanning the spectrum from various mostly contradictory positions. Therefore, a series of different epistemological approaches from science studies, sociology of knowledge, and anthropology – as well as from a methodological perspective from ethnography or participatory research, which are currently the subject of vibrant academic discussions in Germany[4] and on the international stage – have been selected to address the reflexive positioning of academic researchers in society. These include perspectives from communicative constructivism, ethnomethodology, science and technology studies, new materialism and more-than-human ontology, Bourdieusian field theory, actor network theory, pragmatism and experimentalism, and Deleuze and Guattari's deterritorialization theory.

Furthermore, for a more precise understanding of the historical (dis)continuities, as well as the conceptual approaches and theoretical shifts (including gender, postcolonial, methodical, and temporal diagnostic perspectives), our editorial selection was guided by the consideration of various turns that have been (re-)structuring social and cultural sciences as well as the humanities for about 100 years now, such as the linguistic, communicative, and interpretive turn; the cultural and performative turn; and the postcolonial, spatial, and iconic turn, to name a few (Bachmann-Medick 2006; Allolio-Näcke 2008). In this regard, the questions of materiality, space, and postcolonialism are central to our issue.

2.2   Relationship Between Theoretical and Empirical

The contributions will explore different approaches concerning the relationship between social theory and "reflexive" methodology (Knoblauch 2018, 2020) and explain to what extent these relationships are manifested in their respective empirical research. The authors have been asked to discuss how the characteristics of their empirically investigated objects and the specifics of their fields of research play a part here. How do they position themselves in relation to disciplinary, interdisciplinary, and transdisciplinary research

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[4] You will notice a certain overrepresentation of Berlin-based colleagues among the invited authors (Hubert Knoblauch, Jörg Niewöhner, Nina Baur, Stephan Gauch): this is based on the original funding for the planned conference by the Berlin University Alliance, which aims to foster cooperation between Berlin's universities. Nevertheless, it reflects a dynamic debate about the issue of positionality and reflexivity in Berlin's academic field. Following the same logic, our group of editors is composed of researchers from Freie Universität Berlin, Technische Universität Berlin, Humboldt Universität zu Berlin, and the Berlin Social Science Center.

approaches? Considering the dimensions of reflexivity, this special issue explores where the different research perspectives place their emphasis. In doing so, the possibly varying significance of reflection loops in different phases of knowledge production will be taken into account, as well as the requirements for reflection when interacting with the object of investigation and with actors in the field. Last but not least, the authors were invited to argue and locate their approaches with regard to their scientific and social relevance and their normative positioning.

2.3 Positioning of the Researchers in Society

We recognize that there is a wide consensus among researchers that it is necessary to adopt a reflexive position as regards structuring the field, collecting data, and analyzing and disseminating results if the research is to be fruitful when carried out primarily with and on societal actors. Nevertheless, the normative questions of what is desirable with respect to distancing, involvement, intervention, and/or activism remain controversial, while new regimes of reflexivity and new forms of pursuing professionalized self-inquiry and collective self-reflection emerge. These different stances are no longer regarded simply as a gradation but rather as relational or symmetrical vis-à-vis the social groups under investigation. In order to conduct research not only *about* but also *with* actors *from* and *in* the field, basic methodological assumptions and rule-based standards need to be renegotiated (Holmes and Marcus 2008; Boyer 2015; Niewöhner 2016). What demands of a democratically constituted community can contemporary science live up to if its actors also aim to produce usable knowledge effectively whilst at the same time meeting or keeping up its internal standards? In response to these publicly and politically connoted discourses on science, this publication also focuses on the question of to what extent science and its research practices need to specifically include reflexivity and possibly self-reflection to continue being meaningful for and in society.

Starting from this explanation of the intricate but significant differences, the field was expanded on an inter- and transdisciplinary scale in order to explore the practice, relevance, and concepts of reflexivity in other fields, such as medicine, (marine) biology, political science, and architecture, also operating at the interface of science, politics, business, and the general public.

3. Sparking (Mostly) Silent Dialogues: Diverse Contribution Formats

When browsing through this special issue, readers will notice at first glance that the contributions vary broadly in terms of format, style, and length. Readers will find conventional full-length articles, but we would also like to invite you to engage with formats less common such as a written dialogue and the edited transcript of a panel discussion. An openness to different presentation formats grew out of the original plan to engage directly and personally in scientific debate within the framework of a conference. As editors, we were looking for ways of not only presenting individual positions one after the other, but also of bringing representatives of different schools of thought into direct exchange with each other and developing any emerging points of conflict so that they can be fruitful for further discourse. Fortunately, HSR provided us with a publication format and a supportive team that was more than open to making this planned exchange possible within the framework of a special issue.

With this aspiration in mind, we first developed two approaches to enter into conversation with each other. First, we asked all authors who were originally scheduled as speakers at the planned conference not only to write a contribution, but to engage in a cross-review process. The idea behind the cross-reviewers was to confront seemingly contradictory attitudes among the authors, or different attitudes to the same question. While the results of this cross-reviewing might not be directly visible to the reader, we are convinced that this process made it possible to delineate the different attitudes more clearly, but above all to identify commonalities and connections between the contributions, which become apparent after reading the texts more closely.

Second, we held the scheduled panel discussion online and transcribed and edited it in cooperation with the participants for this special issue (Dirnagl, Misselwitz, Ruhrort, and Simon). Maintaining this format seemed particularly important to us. It is true that individual contributions from the panelists, who have their mainstays equally in research and practice, would have been exciting. Nevertheless, they would hardly have been able to match the dynamics of a discussion with an interdisciplinary panel and the insights that are fed precisely by the exchange of views between the diverse disciplinary backgrounds.

In addition to these two approaches from the team of editors, the authors brought forward various suggestions for alternative text formats that they considered suitable for addressing their positionality and their processes of

reflection.[5] Incorporating these suggestions seemed extremely important to us in order to touch on the different dimensions of reflexivity. After all, reflecting on our own position in the relationship between science and society requires different – at times quite personal – approaches, which in turn might very well require new forms of expression. Accordingly, this special issue embraces a written dialogue between colleagues (Bogusz and Holtappels), a shorter and more pointed commentary (Dean), and a (self-)reflective essay (Breuer). In addition, all authors of the volume were explicitly invited by the editorial team to include autobiographical elements in their reflections. Introducing one's own approach and one's own use of reflexivity leads genuinely to self-reflexivity, especially when the main focus of the special issue is our positionality as researchers in society.

4. Navigating the Social-Theoretical Variety: The Contributions at a Glance

As already introduced, the aim of this publication is to compile a broad spectrum of social theories and different turns. In this section, we will present the contributions one after the other. Please consider this a compass that can be used to navigate between them.

From the social-theoretical perspective of new materialism, anthropologist and environmental scientist *Jörg Niewöhner* suggests in his paper, "Making Evidence in the Future Perfect: Provincializing the Science of Climate Change in the Quest for More-Than-Human Livability," what anthropology can do in these anthropocenic times. Outlining recent shifts in climate change science and his disconcertment with the notion of "evidence-based democratic deliberation," which currently enjoys widespread support in the field, the author pleads instead for the practice of situated modeling as a co-laborating way of producing evidence. It emphasizes the design of minor infrastructures as a means of accommodating multiple forms of knowledge, cross-species kinship, and cohabitation, with the goal of reconfiguring existing knowledge infrastructures and provincializing global climate change science infrastructures.

Sociologist *Hubert Knoblauch* argues from the social-theoretical perspective of communicative constructivism for an empirical theory of science. In his

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[5] We embed ourselves at this point in a longer tradition of the journal *Historical Social Research* leaving a space open for such autobiographical reflection in the context of supplements. See, in particular, HSR Suppl. 29 "Manfred Thaller: From History to Applied Science in the Humanities" (2017); HSR Suppl. 28 "Zeitgeschichte zwischen Politik, Biografie und Methodik" (2016); HSR Suppl. 27 "Politisierte Sozialstruktur" (2015); HSR Suppl. 24 "Contemporary History" (2012); HSR Suppl. 23 "Kollektivbiographie" (2011); https://www.gesis.org/en/hsr/full-text-archive/hsr-supplement.

paper, "Reflexive Methodology and the Empirical Theory of Science," the author pursues the goal of linking the currently disconnected discourses of philosophy of science and the science studies in a way that avoids both the idealism of the philosophy of science and the relativism of science studies. He focuses on the reflexivity of science and by supporting the prevalent diagnostic argument to de-differentiate science with respect to economy, politics, education, or religion, he addresses the urgent need for empirical studies of how science is done and the normative reflection of how it should be done. For this purpose, he proposes the method of reflexive methodology, which makes it possible to investigate three levels of reflexivity: institutional, interaction, and subjective.

In his autobiographical essay "Scientific Research Activities and Their Self-Reflexive Consideration," social-science-oriented psychologist *Franz Breuer* reconstructs the development of his specific positionality as a researcher. His approach to the topic of the positionality of researchers and its influence on the production of research results is twofold. On the one hand, the author presents a reflexive reference to specific autobiographical moments and experiences that he highlights as formative for the development of his scientific position. On the other hand, he reconstructs the development of his scientific work and activity, which results in the establishment of a research style in which the positionality and the physical involvement of researchers in research situations are regarded as relevant resources in the research process and has meanwhile gained wide recognition in the field of grounded theory under the term "Reflexive Grounded Theory."

In his contribution, "Algorithmic Reflexivity: The Constitution of Socio-Technical Accountability in Financial Pricing," sociologist *Andreas Langenohl* applies the ethnomethodological (EM) concept of reflexivity to the investigation of automated and algorithmic financial markets (social studies of finance) to gain insights into the question of agency and meaning production in highly socio-technical contexts. His argument centers around the technical mechanism of price formation and how prices can be understood and treated as "reflexive" in a way. Langenohl refers to the recent conceptualization of algorithmic action as a social logic pivoting on the execution of prescriptions. He draws on EM's "accountability" and reconstructs algorithmic finance as a particular distribution of accountability and the constitution of reflexivity among human and non-human financial agencies. Finally, he proposes an understanding of reflexivity that does not necessarily refer to subjects anymore but rather to "non-propositional actions" conceptually anchored in algorithmic agency.

Building on a Bourdieusian perspective, sociologist *Frédéric Lebaron*, in his paper "Geometric Data Analysis as a Tool for Reflexivity," proposes a reflection on the use of geometric data analysis (GDA) as a tool that enables a higher degree of reflexivity regarding data collection, analysis, and sociological

interpretation in the case of social space studies. He argues that the GDA methods allows for a systematic empirical and visual test of potential biases relating to the scholastic vision of the analyst by locating the analyst in the studied multidimensional reality and, in doing so, assessing the effect of his/her position on his/her perception of the field or space. The author illustrates his epistemological and methodological perspective with examples taken from his prosopographical study on the field of French economists and an analysis of European surveys on social inequality.

At the crossroads of sociology and bibliometrics *Stephan Gauch* pleads in his paper, "The Ironic Becomings of Reflexivity – The Case of Citation Theory in Bibliometrics," for a processual understanding of reflexivity. As an equally empirical and theoretical social scientist, he takes Deleuze's thinking further and develops a heuristic in order to conceptualize the becomings of reflexivity. Introducing the perspective of reflexive bibliometrics, he proposes a re-reading of the history of citation theory, striving for an inquiry of both what we may gain and what pitfalls may befall us by taking a reflexive approach in our research. He finally outlines how becomings of reflexivity may turn productive as a potential medium in an incessant search for and generation of new transversal-connections, while at the same time departing from our specialized disciplinary research fields and canons ironically.

In his short statement, "Reflexivity and Its Limits in the Study of Social Inequalities," sociologist *Jon Dean* argues from a Bourdieusian perspective about the pitfalls of "reflexivity as a must." He maintains that this is especially true in studies focused on social inequalities when the researcher is not part of the disadvantaged or discriminated group being explored, where the outsider dimension and the reflexive eye needed in unequal power relations tend to become more central than the results themselves. In his contribution, Dean cautions against the over-promotion of reflexivity and claims that the reflexive methodological work should be the servant of research findings that aim to highlight inequalities and tackle social injustices, rather than its equal partner – a tool rather than an end in itself.

Sociologist *Hella von Unger* dedicates her paper to the topic of "Ethical Reflexivity as Research Practice." She argues that researcher reflexivity should not be limited only to methodological reflexivity serving the purpose of generating valid results, but should additionally embrace ethical reflexivity, which requires researchers to consider possible implications of their work with regard to both participants and the socio-political context. Von Unger uses a qualitative study she conducted on diversity in organizations to illustrate the topic and to address various key points of ethical reflexivity in research practice, such as the challenge of anonymization and pseudonymization.

Following these perspectives on positionality and reflexivity argued from different social theoretical frames, the next section of this special issue will

be dedicated to postcolonial scholarship and research. Sociologist *Nina Baur* opens the debate with her article on "Decolonizing Social Science Methodology: Positionality in the German-Language Debate." She elaborates in depth on approaches to postcolonial social science that are anchored in the history and tradition of German-language sociology. The author critically assesses her own social positioning as well as the positionality of German sociology. Expanding on this, Baur discusses existing approaches to reflexive methodology and explains in detail how she resolves persistent matters of positionality in her own work. The many specific starting points for decolonizing social science not only inspire but also guide imitation.

Under the heading "Counter-Mapping as a Method: Locating the (Semi)Peripheral Self," sociologist *Manuela Boatcă* combines the sociology of absences with the method of counter-mapping in order to offer an approach to sociological reflexivity. She develops a decolonial research tool that makes it possible to deconstruct our social world as shaped by colonial and imperial asymmetries and to (re)locate and relate (semi)peripheral contexts. The author concentrates on Eastern Europe and Latin America as examples and applies the method of counter-mapping throughout the paper.

The last two contributions of this special issue are dedicated to interdisciplinary dialogue and especially to transdisciplinary practices of knowledge production and intervention. The first contribution is a written dialogue between marine biogeochemist *Moritz Holtappels* and sociologist of science *Tanja Bogusz* on "Third Knowledge Spaces Between Nature and Society." The authors invite us, as readers, to participate in their exchange regarding the persistent disciplinary boundaries between the natural and the social sciences as well as conflicting epistemic positionalities. In the context of the Anthropocene, they elaborate on the necessity to consider an increasing number of interwoven and interdependent nature-society relations, which make inter- and transdisciplinary thinking and acting indispensable. By proposing what they call "third knowledge spaces between nature and society," they explain how disciplinary positionalities and explanatory, interpretative, and normative reflexivities could be overcome and made productive.

The last contribution is the edited transcript[6] of a panel discussion entitled "Crossing Borders, Creating Together: An Interdisciplinary Dialogue on Transdisciplinary Knowledge Production." The panelists were neuroscientist *Ulrich Dirnagl*, architect, urban designer, and researcher *Philipp Misselwitz*, social scientist *Lisa Ruhrort*, and political scientist *Dagmar Simon*, all of whom have many years of experience with transdisciplinary knowledge production. From their respective disciplinary backgrounds and with diverse insights into their experience, they debate changes, dilemmas, opportunities, and further development potential in transdisciplinary knowledge production. They

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6   Although the conference could not take place, we were able to conduct the panel discussion as an online format, which brought the editors of the issue together with the four panelists.

elaborate on stakeholders and their respective agendas, tasks, roles, and responsibilities, as well as unbalanced power-relations, hierarchies, and decision-making. They carve out conditions in various disciplinary contexts and fields of action and, finally, they reflect on the implications on their own positionality and their self-image as transdisciplinary researchers.

Complementing the authors' contributions, we will now as editors discuss the interconnections between the various contributions, which, in the view of the editors, form a nexus of crosscutting themes.

5.   Methodical and Methodological Novelties: Approaches to Reflexivity in Becoming

The authors' contributions evoke a variety of research claims and demands that directly or indirectly require specific reflexivities. They present the potentiality and productivity of such reflexivities, while at the same time questioning them critically. The contributions clearly reveal that reflexivity is understood by all participating authors as a methodical question. The contributions show how reflexive questioning permeates all stages and layers of the research process. Reflexivity touches on the construction of the objects of investigation, the research approaches and methodology, the way data are handled and processed, and the way research results are dealt with. In this respect, diverse aspects and procedures of everyday scientific work, which are often linked to questions of positionality, become the subject of reflexive debate. This debate always aims to increase the quality of scientific knowledge production (Knorr-Cetina 1981; Latour 2001, 2005; Jasanoff 2004). The use of reflexivity can therefore also be seen as a quality criterion, in relation both to the quality of the data and to the avoidance of biases in data collection and analysis. In doing so, most of the authors tie their understanding of reflexivity to the well-established threefold discourse that we evoked in the introduction: subjectivity, self-sociological analysis, and researcher-participant relationship. Some of the authors explicitly describe this sequence by providing historical explanations (see the contributions by Baur, Breuer, and Gauch).

The different epistemological interests emphasize different levels of analysis. Certain authors stress at a micro level the physical involvement of the researchers in research processes and the importance of their biography (see Baur, Boatca, and Breuer). Other authors insist on a meso level for the interaction among researchers or between researchers and the participants (see Knoblauch and Bogusz/Holtappels). Lastly, further authors consider the positioning of the researchers in the academic and social fields as primordial at a macro level (see Dean and Lebaron). Of course, these three levels can only

be separated analytically – indeed, they are closely interconnected and inter-woven.

   Beyond these commonalities, the authors set new priorities that "reload" the question of reflexivity and positionality: for example, (1) when it comes to the forms of establishing and carrying out scientific collaboration; (2) the consideration of the ethical implications of research practice; (3) the need to decolonize social science methods and methodologies; (4) the engagement with a changing nature-human-technology relation; and (5) the pitfalls re-searchers may encounter in the context of reflexivity as a methodological and epistemological tool.

5.1 Reflection as a Joint Effort: Cooperation, Collaboration, Participation, and Involvement

Several contributions with heterogeneous positions in social theory concep-tualize reflexivity embedded in cooperative contexts of thinking, research, and practice and link it to demands for intersubjectification, co-laboration, willingness to incorporate external influences, engagement, involvement, and participation. The different concepts of desired cooperative work can be presented in line with their focus on disciplinary, interdisciplinary, and transdisciplinary approaches. Both Hubert Knoblauch and Jörg Niewöhner aim to advance disciplinary research with their different understandings of reflexivity and to operationalize the practice of reflecting as a joint effort. Knoblauch comprehends reflexivity as a necessarily communicative practice that can be understood in terms of intersubjectification. It emerges through-out the process of mutual engagement with research questions, objects, and methodologies and, to a certain extent, arises from collective introspection in the analysis and reflection work. Niewöhner speaks of a "co-laborative prac-tice, that is, temporary, joint epistemic work that is not necessarily predicated upon a shared outcome" (p. 54). This co-laboration gives priority to experi-mentalist entanglement over interdisciplinarity, which is usually committed to a shared outcome. Nevertheless, it does not exclude interdisciplinary co-laboration between scientists in the form of "participatory modeling" (p. 47). Tanja Bogusz's definition of "co-laboration as a practice that explores such uncertainties collectively, processes social and experiential differences and figures out participatory solutions to problems" points in a similar direction (p. 274). However, the direction of collaboration here is decidedly interdisci-plinary and strives to bridge the epistemological gap between social and nat-ural sciences. Tanja Bogusz and Moritz Holtappel's discussion of human-en-vironment interactions extends into transdisciplinary research. Their work not only seeks to foster the profound interchange, transposition, comprehen-sion, reflection, and advancement of research but also endeavors to open up "third knowledge spaces between nature and society" in which "experimental

cooperation" (p. 264) is conducive to better coping with the climate crisis without destroying a shared future. These collaborations inevitably include laypersons, citizens, and non-scientific professionals, and often it is necessary to manage power asymmetries, conflicting interests, role conflicts, double binds, and ethically challenging questions concerning responsibility and accountability. The need to establish transdisciplinary co-laborations is also echoed by Jörg Niewöhner in the concept of "partial withness" (p. 51). Partial is understood in the sense of incomplete, and biased withness refers to the interaction with the research field and means collaboration between researchers and researched practitioners on equal footing. Furthermore, it requires ethico-political commitment to and caring for the field. It is in this caring and commitment that the transdisciplinary involvement resides.

5.2 A Stance on Ethics, Responsibility, and Accountability in Reflexive Research

The contributions gathered in this special issue also reflect the fact that ethical questions and challenges in research have gained increasing attention and relevance in recent years. As Hella von Unger points out in her text, discourses on the ethics of science and research in the wake of the Milgram experiments have for a long time focused primarily on the unintended consequences of research and, in particular, data collection. However, the focus on the relevance and dimensions of ethical issues in the field of science has since broadened considerably. Obviously, ethical concerns also touch on requirements such as responsibility and accountability. In this respect, the contributions by Tanja Bogusz and Moritz Holtappels, as well as Jörg Niewöhner should be regarded not only as a methodological but also as an ethical plea for a stronger consideration of issues of accountability, credibility, and representation in work with actors in the field, which needs to be documented and recorded in a transparent and appropriate manner. The topos of responsibility thus bridges at least two dimensions that have to be taken into account with regard to reflexivity and exploring the positionality of social science research: an ethical-normative dimension and an accountability dimension.

Within the contributions, the first dimension is invoked in connection with the insight that despite the great appreciation for reflexivity, it must not become an end in itself. Stephan Gauch and Jon Dean point out that reflexivity can lead to an endless loop in which one runs the risk of getting lost and losing the point. In light of this, by demonstrating through the intersection of sociology and bibliometrics, Stephan Gauch argues for using the ceaseless becomings of reflexivity to open up across disciplines and to break out of engrained patterns of thought. He emphatically favors these becomings as productive interlinkage not only as an epistemological requirement but also as an ethico-normative gesture toward other schools of thought that we owe

them in reference to the potentiality and diversity of thought. In view of the very same risk of missing the real purpose of a research endeavor, Jon Dean advocates that a normative positioning is needed at certain times to break away from the process of reflection. Even if this implies resetting already recognized blind spots, which we cannot deny, it can be worth it in order to focus on concrete research that addresses, for example, social inequalities and to achieve bona-fide and insightful results. According to Hella von Unger, however, it is also necessary to call into question whether such a break with the process of reflection occurs more frequently in cases in which the topics under investigation are socially explosive and therefore require normative positioning on the part of researchers in particular. Emphasizing the political and social implications of research against the backdrop of global challenges and social inequalities, she calls for key ethical issues and challenges that may become significant in certain research contexts to be anticipated in advance (such as different types of discrimination).

Bearing this in mind, she ties in with the second dimension, pointing out that scientists as "ethically accountable researchers" (p. 194) have a responsibility for the protection and integrity of the researched subjects. Taking into account the tensions between analytically relevant data on "ethically important moments" (p. 199) and possibilities of anonymization (especially in the case of qualitative data), we are able to grasp the reverse side of the accountable dimension of responsibility. Instead of securing the attribution of actions in order to hold the acting entities responsible, the aim here is to prevent personalized traceability and identification in order to protect the researched actors from unintended and undesired consequences. The face of the accountability dimension is tackled directly by Philipp Misselwitz in the panel discussion on how to face and deal with the ethical problem of having to build trust as a "white European" (p. 295) in conflictual situations emerging throughout his professional engagement as an architect in transformation processes in the Global South. From his point of view, this is not possible without reflecting on one's own positionality, especially against the background of (post-)colonial structures.

5.3 Postcolonial Reflection: Positioning Oneself in an Unbalanced World

A next thread that can be followed throughout several contributions in this special issue is that of postcolonial reflection. Under the overarching heading of positionality, several authors address decolonizing social science research as one of the most pressing issues of reflexivity. Both Nina Baur and Philipp Misselwitz focus on processes of reflexivity of the individual researcher and provide concrete advice on how we can decolonize our research and thinking. Nina Baur criticizes ahistorical approaches to decolonization and

counters them with an outline of approaches to researcher reflexivity deeply anchored in the tradition of German-language sociology. Building on this, she outlines how we can make these approaches fruitful in our research in order to reflect on our own positionality. She attributes great importance to collaboration between colleagues from the Global North and South (for example, collaborative research projects, common publications) and, among other things, considers how to overcome power structures in the global system of science. For her, reflexivity embraces the courage to seek confrontation with "the other" time and again (for example, through collaboration and ethnographic travelling). In a similar vein, Philipp Misselwitz gives concrete advice for researcher reflexivity in the course of the (transcribed) panel discussion. However, his remarks refer to transdisciplinary cooperation between participants from the Global South and North. His insights into neighborhood development in the Global South illustrate how much the success of transdisciplinary knowledge co-production depends on postcolonial reflexivity. Within living labs, he and his team expose themselves to complex ongoing processes of transformation, whereby a decisive task from the outset is gaining access to local stakeholders. Misselwitz illustrates that reflexivity in this context means approaching a situation without making personal presuppositions relevant.

Manuela Boatcă's and Jörg Niewöhner's contributions, in turn, do not start from individual researcher reflexivity, but rather promote an understanding of postcolonial reflexivity as a collective effort. Both authors frame their contributions by questioning the concept of modernity in the minority world. Manuela Boatcă outlines how we can use the method of counter-mapping to reflect on colonial and imperial asymmetries embedded in and (re)produced by social theory. The research tool she develops is intended to allow for a re-positioning of (semi)peripheral contexts within our social world. Accordingly, she advocates an understanding of reflexivity that embraces a shift away from a "sociology of absences" (de Sousa Santos 2004, 14ff) toward a "sociology of emergences" (ibid.) and thus a shift away from focusing on contexts that are "produced as nonexistent" (ibid.) toward "alternatives that are contained in the horizon of concrete possibilities" (ibid., 25). On a similar note, discussing climate change science in the Anthropocene, Jörg Niewöhner also addresses the "hegemony of Western epistemology and ontology" (p. 47). He proposes a fundamental and far-reaching approach to postcolonial research: the provincializing of persistently hegemonic global research infrastructures. He criticizes existing global research infrastructures for reproducing global power asymmetries and calls for these infrastructures to be reconfigured by situating them. As a solution, he and his colleagues suggest situated modelling: a research framework used in climate change science that is participatory and based on ontological pluralism and diffracting ontologies. Within the context of situated modelling, Niewöhner does not regard

reflexivity entirely as an individual research activity and instead suggests "exploring reflexivity as a distributed process or assemblage" (p. 52). Going beyond postcolonial power asymmetries, Niewöhner's more-than-human approach also takes an explicit look at imbalances within nature-society relations, which are the focus of the next section.

5.4 More Than Human: Redrawing the Boundaries Between Nature, Society, and Technology

A common denominator of some contributions (namely by Bogusz and Holtappels, Langenohl, and Niewöhner) is grounded in the dissolution of the rigid and seemingly insurmountable boundaries from an epistemological standpoint between society, technology/things, and nature. This realization is often linked to the exploration of specific research fields and their respective objects. Consequently, the reflexivity of specific research positions is not static, but rather can change in the course of a scientist's biography as a result of the constant friction with the research field(s). This is evidenced in the debate between Tanja Bogusz and Moritz Holtappels. The reflexive awareness of one's own positional "province" (p. 268; for example, society and not nature) is also caused by the fact that upheavals such as the ecological crisis and climate change have fundamentally shifted epistemic orders and societal and subjective world views – including those of the affected researchers. Hence, if science is always seen as a part of the "knowledge society" (Knoblauch 2021, 60, in this volume.) that it investigates, influences, and changes at the same time through its knowledge, transformations that locate society in the era of the Anthropocene must also be taken into consideration. This addresses not only a change in human-environment relations, but also a new age of reflection and shared responsibilities ("shared concern and careful engagement"; Niewöhner 2021, 45, in this volume), moving toward a natural (environmental) world influenced significantly by the actions of humans – as an important driving force of social change. The "third knowledge places" introduced by Tanja Bogusz and Moritz Holtappels as transdisciplinary places of hybrid knowledge production could act as a possible connecting structure for mediating between nature and society and between everyday-local and scientific-disciplinary forms of knowledge.

Reasons for overcoming these boundaries are also afforded by non-human, highly technological research objects, which are accorded an actor status. We find these considerations, on the one hand, in Niewöhner's already mentioned concept of "situated modeling" (p. 45) and his proposition of an "ontological anarchy" (p. 49) that dispenses with typical hegemonic hierarchizations. In the case of investigating financial markets, on the other hand, it seems almost obvious to ascribe an actor-like status to algorithmic "pricing," as Andreas Langenohl does in his contribution. Here, reflexivity in the

ethnomethodological sense is no longer a category that remains limited to human actions, but rather it is extended to include the accountability of algorithms. Algorithms are thus non-human actors to whom agency is attributed. Accountability should be understood here in a double sense. Algorithms produce their own understandability and meaningfulness, while at the same time they are held responsible with regard to their "performance," though that responsibility is distributed among socio-technical constellations. What remains to be clarified here is what consequences this symmetrization has for the researcher's positionality.

In this context, it is necessary to ask to what extent the "affective entanglement" with the research objects is of significance. Research on climate change, but also on its consequences for nature (as a cultural construction), always shows a connection to social and political action, which cannot be excluded by social or natural scientists (Bogusz and Holtappels). This point is perhaps most succinctly demonstrated by Jörg Niewöhner, who asks, "How can people live together in changing environments and with other species without compromising more-than-human livability?" (p. 44). Finally, an entire anthropological research program can be derived from this question, by, for example, combining ethnographic practice with the relevancies and needs of the field actors instead of distancing oneself from them (Niewöhner, p. 52, in this volume). In this respect, it also becomes clear that research-based interventions involving the preservation of nature cannot only entail a political agenda with the researcher's own (critical and not necessarily critically distanced) position, but also require corresponding theoretical tools that allow for reflexive access to these empirical phenomena.

5.5   Pitfalls of Reflexivity

Finally, there is a warning cross-connection between the contributions, in the form of a critique of reflexivity. Reflexivity, having become a must, should always be critically considered itself. Different dimensions of how reflexivity can become a trap are explicitly addressed in the contributions. The first concern lies in the impossible achievement of the reflexive process that can become an endless reflexive loop. In the introduction to his contribution, Stephan Gauch incorporates the figurative metaphor of the mirror, which exemplifies this danger: like a picture within a picture within a picture, the meta-analysis can be carried on and on from the 1st, 2nd, and 3rd degree. In doing so, the author adds that reflexivity is always a process of becoming: the process can never be seen as completed. In the panel discussion, Dagmar Simon and Ulrich Dirnagl raise the same question in a slightly different manner by asking whether reflexivity provides better research in its outcome or whether it risks distracting research from its genuine purposes. John Dean agrees with the danger, but unlike Gauch and his recourse to irony, he

suggests that the researcher consciously stops the process with the ethical use of his positionality. This can only be done through a normative setting that the researcher makes clear for him/herself.

The second concern lies in the collective danger that unrestricted praise of reflexivity can pose to scientific production itself, as illustrated by Dean: he depicts the case of the entire scientific community being interested only in the reflexive stance of the researcher about power-loaded constellations of enquiry and no longer or not at all in the actual results of the research itself. Dean's contribution points to a growing unease about the position of science in or toward society in a context where methodological self-referential discourse becomes more important than scientific statements about society.

At this point, we as the editorial team would like to make a plea, in the spirit of several authors of this special issue, to use reflexivity only hand in hand with a strong conscious positionality, which requires engagement with the current transformation of the profession as a researcher. What science do we want to produce for what society? Niewöhner in his contribution provides a vivid example of this by asking, "So, if the editors of this special issue ask 'What role should the social sciences play in society?' my very personal answer is: Whatever role it takes to reduce at least some of the suffering caused by global environmental change now and in the future, here and elsewhere" (Niewöhner 2021, 36). We could not agree more.

6. Adopting a Reflected Positionality: Observation, Description, Intervention, or Emancipation

Taking this further, the question is what reflexivity brings about and what effects it has. The collected contributions demonstrate how reflexivity comes into play, be it as a methodological, epistemological, or ethico-normative vehicle: it seemingly functions as a motor for distancing, critique, questioning, it raises doubts, it explores, it maneuvers investigations inconclusively, and thus it repeatedly refers back to the question of positionality.

Regardless of the different emphases, all approaches agree that reflexivity must be put in relation with its effectiveness. The question of the effectiveness of science, social science, and humanities in society widens the spectrum of positionalities. It unfolds along the familiar range from observation and description, to explorative understanding, evaluation, recommendation, and advising, and finally emancipatory enlightening intervention and revolutionary transformation. The key issues related to collaboration, participation, and involvement, ethics, responsibility and accountability, postcolonial reflection and power asymmetries, more-than-human entanglements between nature society and technology, and imminent pitfalls are widely

distributed across the spectrum. The panel discussion finally highlights precisely how positionality is to be negotiated and fathomed in practice. How can and should the engagement and commitment of laypeople (patients, owners, citizens, and so on) be adequately appreciated and, at times, rewarded or remunerated? How much altruism is ethically justifiable? How can we ensure appropriate representation of stakeholders in complex work contexts without alienating the representatives from the stakeholders they represent? How can, should, and may we involve heterogeneous groups in a way that is equally fruitful, judicious, and purposeful without exploiting or overriding them, manipulating them, or putting too much at stake? How can we deal with the considerable differences in knowledge? The list could go on and on.

In the changing context of science, researchers are increasingly required to act in multiple collaborative constellations, for which they must constantly renegotiate their socially situated positionality. To do this, they must constantly reflect on the situation anew. In these various situations, reflexivity can serve as a vehicle to ensure that these positionalities do not remain locked solely in one direction, tending to build hardened fronts, and instead are continually renegotiated and adjusted. We see this as a stimulus encouraging us to affirm a well-considered, aptly situated, and reflected positionality.

All contributions in this special issue culminate in the question of how and to what extent intervention by science in society is legitimate, desirable, normatively forbidden, or prohibited. This special issue contains different propositions and answers with regard to the conditions under which this intervention can take place appropriately, legitimately, purposefully, meaningfully, and profitably for all human and more-than-human actors involved. We have tried to understand established positions in relation to each other, to take up critical reflections, and to contribute to the changing dialogue around reflexivity. We hope you will enjoy our decidedly broad and diverse approach to questions of positionality and reflexivity, and we hope that the stylistic diversity of the contributions will be not only entertaining but also stimulating for your own reflections. We would like to take this opportunity to thank all the authors and panelists in this volume for sharing their understandings of reflexivity and positionalities and for their willingness to engage in this continuous exchange, including the cross-review process that made it possible to compile various research perspectives.

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