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University-led dialogues with society: balancing informing and listening?

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Abstract

In response to a growing understanding that scientific knowledge is not always trusted at face value, many universities organise dialogues to 'open up' to society. In four exploratory case studies at the Dutch Wageningen University & Research, we looked into the adherence to dialogue principles and the roles that researchers performed while engaging in dialogues. We found that researchers face three challenges when interacting with societal stakeholders in dialogues: (1) moving from knowledge provider to "letting in" and listening to different perspectives (2) balancing attention toward knowledge with attention toward values and emotions (3) navigating different aspired and perceived roles of researchers in dialogue (e.g. Pure Scientist versus Issue Advocate).

Keywords

Participation and science governance; Public engagement with science and technology; Dialogue

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Introduction

Knowledge institutes, including universities and research institutes, increasingly realise that, to remain trustworthy and relevant, it is important to 'open up' to society [Berg & Lidskog, 2018] through science-society interactions [Hagendijk, 2004; Wilsdon & Willis, 2004]. This can take many forms, for instance citizen science, living labs, open science, or transdisciplinary research projects [Brandt et al., 2013; European Commission, Directorate-General for Research and Innovation, 2016; Hecker et al., 2018; Kalinauskaite et al., 2021; Wehrmann, Pentzold, Rothe & Bischof, 2023]. Another way of improving science-society interaction is through a specific form of conversation: dialogue. Dialogue is based on principles that can be characterised as (1) participation by different types of actors during agenda setting and during events leads to better outcomes, (2) a diversity of perspectives allows opposing views and/or tensions to surface [Scharmer, 2016], (3) room for values and emotions as they are equally important to knowledge [Pearce & Littlejohn, 1997], (4) safe space to allow people to talk and think freely without having the feeling that they are being judged [Brouwer,

Woodhill, Hemmati, Verhoosel & van Vugt, 2016; Scharmer, 2016; Schein, 1993], (5) deep listening to suspend judgement, and embrace and respect diverse forms of knowledge [Bohm, 2004; Isaacs, 1999; Scharmer, 2016], and (6) openness to new perspectives by the organisers. In a dialogue, participants get the opportunity to gain a better understanding of one's own and the other person's assumptions, thought patterns, emotions and values underlying a particular issue or point of view [Aarts, 2018; Bohm, 1996]. Dialogue is increasingly popular as a multi-directional mode of science communication, also in the scientific community [Aarts, 2015; Balázs, Horváth & Pataki, 2020; Leeuwis, 2022; Lövbrand, Pielke & Beck, 2011] as it holds the promise for experts to navigate polarised debates that they have become part of. The organisation and facilitation of dialogues can be seen as a form of science communication that moves beyond the deficit model [Leeuwis & Aarts, 2016].

Engaging in dialogue is easier said than done, particularly for researchers [Aarts, 2015; Bohm, 2004; te Molder, 2014]. In science-society interactions, researchers can take different roles [Pielke, 2007]: (1) a Pure Scientist, who 'simply brings the facts', (2) a Science Arbiter that serves as an objective resource, standing ready to provide factual information based on requests from societal actors, (3) an Issue Advocate that gives relevant information about one dimension of an issue, or one specific policy direction, (4) a Honest Broker of policy alternatives, who provides information about all options and then lets societal actors reduce the scope of choice [Pielke, 2007]. Turnhout and colleagues [2013] add a fifth role: the Knowledge Mediator who connects and synthesises different types of knowledge from academia and society [Turnhout et al., 2013]. These roles can be at strained terms with the principles of dialogue. A Pure Scientist who delivers the facts, may find it difficult to listen and suspend judgement to someone reasoning from, for instance, religious values or lived experiences. In dialogue, there might also be friction between the different roles of researchers. A Pure Scientist may not appreciate a Knowledge Mediator, or vice versa. How universities and their researchers balance these different roles when they convene all sorts of 'dialogue events' [Lehr et al., 2007] is understudied.

Therefore, in this practice insight we aim to better understand the role universities, and more specifically their researchers, play in science-society interactions that they initiate. This study reports on four qualitative case studies of dialogue trajectories initiated by Wageningen University & Research. We looked into (a) the extent to which organisers adhered to dialogues principles and (b) the roles researchers performed while engaging with societal actors in dialogue. We aim to identify challenges and ways forward for universities and researchers who engage in dialogue with society.

Methods

The case selection took place in two steps. First, we undertook a quick scan based on desk research and a snow ball method among university researchers that had organised university-led dialogues. From this, we identified 30 science-society interactions between 2018–2022, that were considered dialogues by WUR researchers. Second, from these 30 cases, we selected four case studies for in-depth analysis. The selection criteria were: (I) the case is situated at strategic and/or institutional level (beyond single projects and aiming at more than a one-off event); (II) organisers are committed to the idea of dialogue, (III) the case organisers

Table 1. Topics, level, period, goals and organisation of the four cases.

	CC	*NIA*	*Table*	*WD*
Topic(s)	Technology & society: Gene-editing.	Nature-Inclusive agriculture.	Future of food (emphasis on environmental aspects).	3 programme lines: – Creating our landscape together, – Good food, – The role of science & researchers in the public arena.
Level	Global	Netherlands	Global	Netherlands
Time-frame	2019	2019	Since 2020 – ongoing	Since 2019 – ongoing
Purpose(s) of dialogues	Bring together diverse perspectives on the potential and risks of gene-editing (CRISPR/cas in particular).	Create a common understanding of different viewpoints (among proponents) on nature-inclusive agriculture; inform knowledge agenda.	Facilitate informed dialogue about how the food system can become 'good'; reflect on values, clarify arguments and evidence around issues of concern, and identify points of commonality; Reduce polarisation.	Facilitate meaningful conversations between WUR and society; reduce polarisation; increase competencies of WUR staff in dialogue.
Institutional embedding	Hosted by WUR. Core team consisted of three experts on CRISPR/cas and a communication advisor. Keystone Policy Institute (KPI) was responsible for the organisation of the conference and for the marketing campaign.	Initiated by Wageningen Environmental Research (WENR). Each science group was represented in the core team, majority was from WENR.	Consortium between 3 universities (Oxford, SLU, WUR). Each university is represented in the Board (responsible for the daily management) and Research Directors (strategic guidance). These bodies are responsible for strategic programming. Core team is responsible for executive tasks. Table's Director takes place in Board, Research Directors team and Core team.	WD falls under the Unit Value Creation, WUR Corporate Strategy. Each science group is represented in the WD programme panel. The majority of panel members are from the Communication departments, but there are also researchers represented.

involves/involved societal actors outside the university, and (IV) there was sufficient documentation available.

We selected four cases: (1) a CRISPRcon dialogue (3-days event) that was organised to explore different perspectives on CRISPR/cas, a gene-editing technology (CC); (2) The Nature-Inclusive Agriculture (NIA) dialogues (2 events) that aimed for consensus building and agenda setting. In addition, we studied (3) Table Debates (from now on called Table) which is an ongoing collaboration between Wageningen University and Research, Oxford University and Sveriges lantbruksuniversitet (Swedish University of Agricultural Sciences) and (4) the Wageningen Dialogues programme (WD). The latter two are ongoing and longer running dialogue programmes facilitated and (partly) financed by Wageningen University. Table 1 gives a short overview of the topics, level, period, goals and institutional embedding of the four cases.

Positionality

To understand the decisions that were made during the identification, design, and organisation of dialogues, we engaged in participatory observations for WD and

Table whenever possible. This meant that the researcher was present during some of the internal discussions of the on-going case studies and at some of the dialogue events. The researcher took on the role of reflexive researcher, and also provided feedback on the organisers of the dialogue programs and events. This also provided relevant information about considerations of the case-owners that otherwise would have been difficult to understand. As a consequence of being actively involved in the Table and WD cases, the first author has influenced the people and choices made in these case studies. The observations and reflections discussed in the case studies, resulted in more awareness and in some cases a change of practice of the people involved in Table and WD. One example of this is choices made by Table about how to increase the involvement by people and groups from the Global South. Rather than opting for one partner 'representing' the Global South, Table decided after discussions (among others based on the findings of the interviews) to look for programmatic involvement of several partners/networks from the Global South. With WD, the influence was less tangible but nevertheless the in-depth discussions with the people involved influenced the thinking behind why they organise dialogues and what they want to achieve with them.

All authors are working for the university that is being studied. This influenced our research approach. Rather than the 'objective' outsider, we opted to act as constructive and reflexive colleague. This has as advantage that the authors could get easy access to insiders' information (e.g. internal considerations, progress meetings, etc.), which is otherwise not accessible. This provided valuable information about researchers' struggles and considerations. On the other hand, a critical outsider may have been able to observe relevant practices, which the authors did not even notice.

Two of the four case studies had ended by the time of data collection: CRISPRcon (CC) and Nature-Inclusive Agriculture (NIA). Semi-structured interviews were held with two members of each team that organised the dialogue-events and with two participants of each event. In addition, we analysed existing meeting notes of preparatory meetings, project descriptions, and reports of the event(s). For CC, the website was also analysed, including available videos of the sessions.

The other two cases were on-going: (a) the Wageningen Dialogues (WD) programme with multiple dialogue events organised on different topics; and (b) Table Debates, which is a collaboration between WUR, Oxford University and Swedish University of Agricultural sciences. For these two cases, we employed a reflexive action research approach [McNiff, 1988; Reason & Bradbury, 2008]. Data was gathered during a period of participatory observation of 15 months. The first author observed several internal meetings of WD and Table (nine for WD and eight for Table). The first author also presented initial observations during dedicated reflection sessions (two sessions for WD and two for Table), and had numerous one-to-one meetings with members of WD and Table, referred to as 'personal communication'. Finally, thirteen semi-structured interviews were held with core team members of the two on-going case studies. These interviews focused on dialogue principles, they ways in which dialogues had been facilitated, the roles of participants, and governance of the programmes and projects. Other data were project descriptions, annual reports, and reports or videos of events. For Table, this included several podcasts and online events.

We coded the documents and interviews for the use of the dialogue principles and the ways in which these had been facilitated, and for the five roles described above. The reflexive research approach implied that the observer (the first author) shared her intermediary observations with the cases during 7 joint reflection sessions (4 for WD and 3 for Table). As a consequence of these reflections, the author influenced the course of action of these case studies. The way that this took place will be described in the discussion.

Results

University-led dialogues and the dialogue principles

Participation of different type of actors

Participation of different types of actors can be evaluated before the event (who participates in identifying topics and boundary setting of event/process topics) and during the event (who participates in the event or process itself).

In all case studies, decision-making before the event, for instance about programmatic and event topics, was done by a small group of like-minded people, mostly researchers. In the case of CC, the core team consisted of CRISPR/cas experts and a communication staff member. Together with Keystone Policy Centre (KPC) they determined the agenda of the 3-days event. The KPC ensured that in addition to contribution of researchers, also contributions of others were programmed. In WD, besides researchers, also WUR communication staff were involved in agenda setting. Communication staff often added a specific focus on what citizens may find exciting or interesting to get out of participation in a dialogue. In the case of NIA, an employee of the Dutch Ministry of Agriculture was involved in determining the topic. Even though the facilitator proposed to invite external stakeholders as part of the core team, the initiators were hesitant to do so. Their main concern was that they first wanted to clarify certain issues internally, before they would invite 'the system' into their discussions (Interview 8). The core team knew that there were politics involved in formulating this knowledge agenda and they wanted to avoid these politics (Interview 7). In the case of Table, the main challenge is to be a *global* platform about the future of food, while its institutional base is North-West European. The (marginalised) voices from the Global South have not been included in agenda setting so far. The main reasons are that the core team mostly focused on themes that are relevant for Western Europe (e.g. alternative protein, ecomodernism), and that the team has limited networks in the Global South so far.

The diversity of actors who participated in specific dialogue-events was also rather limited. In the case of NIA, farmers and NGOs were considered to be important because of their expertise. Citizens where not considered as participants (Interview 8). Also Table had many researchers and members of NGOs as participants, and limited number of citizens. Again, revealing a focus on scientific dialogue rather than a science-society interaction. All case studies had trouble to reach groups who have a stake but limited influence in the system, in particular non-academic actors (e.g. farmers, elderly, poor households) (see also Table 2). This was most apparent for WD, who struggles with organising a dialogue programme that is not too topic-specific nor too general (observations, personal communication).

Table 2. Decisions around who participates in events.

	CC	*NIA*	*Table*	*WD*
How to determine who to invite?	– No stakeholder mapping and analysis done. – KPC helped to broaden the scope of who to invite.	– Stakeholder mapping to identify participants of event(s). – Invitation of speakers is mostly done based on professional network of the core team.	– No stakeholder mapping and analysis done. – Invitation of speakers is mostly done based on professional network of the core team.	– Stakeholder mapping and analysis is done. – Initial connections of WD panel members are decisive in who is invited (e.g. good food dialogue).
Reaching diverse audience(s)	– KPC brought in 'American inclusivity'; ensuring ethnic and generational diversity in the audience. – 94% of the participants of CRISPCcon was feeling either hopeful or enthusiastic about gene editing [Macnaghten, Shah & Ludwig, 2021].	– NIA found it difficult to reach farmers.	– As a Global Initiative, Table faces a challenge of attracting audiences from the Global South.	– Challenge in reaching stakeholders with limited influence (e.g. citizens, elderly, people with limited purchasing power).

> *"One of the key challenges for me is how we should decide who is our target group — in relation to the purpose of the dialogue. If we focus on general issues, I fear the dialogue may not go deep, also because citizens may not be attracted as the topic may lack a sense of urgency. But by focusing on a specific issue, for instance food dilemmas in elderly homes, we only attract those who are directly involved in elderly care or elderly themselves…" (communication expert during internal discussion, July 2021).*

In the CC case, participation of different stakeholder was the most diverse. The partnership with KPC contributed significantly to diversifying the voices during the event, because this institute ensured that religious perspectives, indigenous voices, youth, and people from different continents were represented in the audience.

Diversity of perspectives

Each case intended to include a diversity of perspectives. However, in practice, they all avoided or excluded certain perspectives in the science-society interaction either explicitly or implicitly. In the case of NIA this was an explicit decision; the team made the conscious choice to work with 'a coalition of the willing' only while exploring the topic of nature-inclusive agriculture. The NIA core group reported that they did not want to get stuck on competing fundamental ideas (Interview 7 and 8). Participants and organisers appreciated that the dialogues were 'not obstructed by dissonant voices' and a shared knowledge agenda was created. But, potentially relevant diverse and opposing perspectives of opponents were not taken into consideration (Interview 8 and 10).

In the other three cases, we observed more implicit ways in which specific perspectives were excluded. For example, WD tended to avoid the more 'extreme

points' of view (personal communication). Their idea was that 'feeding such voices' would deepen polarisation (Interview 6, observations). Table's core team is strongly embedded in the environmental sciences, which implicitly crowds out space for other domains (e.g. human nutrition, animal science, political science, food safety). However, Table puts significant efforts to explore the diversity of viewpoints, by inviting representatives of different viewpoints as speakers, write essays, participate in pod casts, and participate in dialogue-events (Interview 2 and 3, observations).

In the case of CC, the core team consisted of CRISPR/cas experts and a communication expert. In terms of speakers, some diversity in content was achieved since both natural and social science themes received attention. There was a bias towards showcasing technological opportunities [Macnaghten, Shah & Ludwig, 2021] (Interview 11).

Room for values and emotions

Rather than just being technical knowledge-based, dialogues are also convened to address values and emotions. In the CRISPRcon case the majority of presentations were based on scientific knowledge. This entry point determined to a large extent a dominance towards technical knowledge at the expense of attention for values and emotions [CRISPRcon website, 2019]. In the case of Table, its core team expressed a desire to organise exchanges at the level of biases and values. In practice, Table events were characterised by presentations from scientists meant to inform the audience, for example when an online audience listens to expert views (for instance the 'Dialogue on Regenerative Agriculture' [TABLE, 2021a], or 'Ask the Author — Considering plant-based meat substitutes and cell-based meats' [TABLE, 2021c]). Generally, at Table dialogue events, the majority of panellists or speakers are scientists. In the case of NIA, the organising team attempted to remain focussed on the science. In practice however, the conversations often took place at the level of values and how these inform knowledge questions related to nature-inclusive agriculture (Interview 7). In WD however, in many of the dialogue-events there was ample space for values and emotions. For instance, one of the opening questions in a dialogue 'Space for the farmer and nature in the Netherlands was: *"Who has strong emotions related to the nitrogen issue in the Netherlands?"* [Wageningen Dialogues, 2022b].

Safe space

Creating a safe space is a crucial condition for dialogue [Brouwer et al., 2016; Isaacs, 1999]. It stimulates trust-building and helps to create the conditions for other forms of listening (see below). The case studies that involved a dedicated process facilitator from the start (NIA and WD) were able to some extent to create a safe space through the setting and careful facilitation, in which participants were listening to each other. Table 3 gives an overview of the extent to and ways that safe spaces were observed in each of the case studies.

A common practice in all four case studies was that the conversation often took place at the level of 'what ought to change' or 'what should happen' rather than 'what was my role in creating or sustaining the patterns which created this

Table 3. Safe space.

	CC	*NIA*	*Table*	*WD*
Setting	– Mostly public with expert presentations. – According to the organisers and a participant, the discussions in the side events were more honest and in-depth; there was more space for contestation.	– 2 closed, face to face events, organised at a farm. – Appreciative inquiry helped to identify why people have certain viewpoints.	– Public setting (online, recorded), often with expert panels. – Written outputs (explainers), podcasts, discussion forum on website.	– 60%: Public setting, panel discussions. – 40%: closed sessions in smaller settings. – Participatory methods.
Dealing with differences	There was limited space for fundamental critique. A panellist (NGO) argued that 'ethical dumping' has risks for Africa. An African panellist replied that Africa 'doesn't need to be paternalized by Europeans'. This received a huge applause by the audience. The European panellist kept silent after that. This example shows that there was limited space to express concerns.	– Having proponents only created a container to safely discuss options. – The focus on identifying knowledge questions moved the attention away from politics (i.e. fundamental changes in farming in the Netherlands that are needed for circular farming).	Despite efforts of the moderator to look for differences, panellists and speakers tended to emphasise where they agree with each other, rather than points of disagreement.	With few exceptions, participants and panellists were generally uncomfortable to openly disagree with each other.

problem?' (e.g. 'Space for the farmer and nature' [Wageningen Dialogues, 2022b], 'Omnia Opening Dialogue' [Wageningen Dialogues, 2022a], 'What is Ecomodernism?' [TABLE, 2022], 'An open ended conversation on power in the Food system' [TABLE, 2021b]). Although this created a safe space in which personal differences were less important; this also tended to lift the conversations to an abstract level, and steered away from dialogue at the personal level.

Listening

Overall, the setting and facilitation tools in the dialogue events in all of the cases were mostly suitable for information delivery. This stimulated mostly 'downloading' and absorbing information while listening [Scharmer, 2016]. This was most obvious in the case of Table whereby events were often panel discussions with expert presentations. With WD events, there was some variation; sometimes this encouraged collaborative inquiry which stimulated empathic listening. In NIA generative listening was also observed (Interview 8), which means that the participants were able — through active listening — to jointly imagine and generate novel ideas [Scharmer, 2016]. Facilitation tools that helped empathetic and generative listening were: joint mapping exercises, creative and visual brainstorms, or appreciative inquiry (all in small groups of 4–6 people). For CC, besides facilitation tools that were mostly meant to deliver information, there was not sufficient data to make any further claims on this aspect.

Table 4. Openness to new perspectives by organisers.

Openness	*CC*	*NIA*	*Table*	*WD*
During event(s)	– Researchers were invited to share their knowledge. – The vast majority of participants were pro-CRISPR with limited intention to change their mind.	– Participants were interested to hear about viewpoints of others; open to new insights and come to a new, joint understanding. – 'Open space' in the programme allowed for new insights to emerge. – During the second event, some of the stakeholders were not able (or willing) to let go of their organisational mandate; this hampered true listening and breaking through assumptions.	Participants and panellists generally came with an openness to acquire new knowledge about the topic (download), not with the intention to change their mind.	– Organisers were eager to learn new insights. – Participants generally came with an open mind to learn more about the topic.
Programme level	Stand-alone event.	– The dialogues were part of a process to inform the knowledge agenda. – There was no openness for arguments against NIA; – Sub-themes were pre-defined	Stand-alone events.	– Stand-alone events.

Openness to new perspectives

The cases varied in the way they stimulated the openness of participants to new perspectives (see Table 4). In the NIA case, both organisers, moderator and the interviewed participant reported that the participants and organisers seemed open to learn new points of view (Interview 8 and 10). A unique feature of this case was that the dialogues were supposed to inform a knowledge agenda of the University and the Ministry of Agriculture: their contributions could have impact. The exclusion of opponents, along with the formulation of predefined topics by the core team resulted in a container of like-minded people who could safely discuss the topic, without 'noise' or transverse thinkers but it also limited new ideas and perspectives (Interview 10).

In the three other cases there was no ambition to contribute to a concrete result; the dialogue-events were stand-alone events, intended to contribute to societal debates in general (Table and WD). In the case of CRISPRcon, the three day event was part of a wider communication strategy of WUR to promote CRISPR/cas and increase the societal acceptance for this technology (Interview 9). The organisers of CRISPRcon indicated that they became increasingly aware during the conference that including perspectives and concerns from societal actors in their own research process on CRISPR/cas was important (Interviews 12 and 13).

Table 5. Performed roles in the case studies.

Case	*Performed roles*	*Further explanation of roles*
CC	– WUR: Honest Broker & Issue Advocate. – Individual researchers: Pure Scientist & Issue Advocate (some).	– As host of the dialogue, WUR presented itself as Honest Broker. The event was meant to provide a platform for a plurality of perspectives on CRISPR/cas. – Several critical voices were given a platform (from religion to indigenous groups to NGOs to researchers working on ethics). – From WUR, all speakers were promoting the CRISPR/cas, speaking about the potential of this technique as tool for addressing food security and climate change. WUR researchers were presenting themselves as Pure Scientist, sharing the scientific facts about this technique with the audience. In the session on societal acceptance of CRISPR/cas, WUR was not represented.
NIA	– WUR: Issue Advocate. – Individual researchers: Pure Scientist or Science Arbiter.	– Issue Advocate: WUR was asked by MoA to provide the facts and policy options for nature-inclusive agriculture as a future agricultural policy. By accepting this invitation, WUR performed the role of Issue Advocate. – Individual researchers (core team) were only interested in sharing scientifically valid information, and leave it up to the Ministry to make political choices that follow from this. Even though individual researchers consider themselves as Pure Scientist, by only including pro-nature-inclusive options, they perform the role of Issue Advocate. – Other role: 'listening in'. WUR researchers listen to learn from societal perspectives.
Table	– Honest Broker. – Depending on scientist: Pure Scientist, Issue Advocate, Science Arbiter.	– Honest Broker: in events and explainers, Table enables diverse schools of thought to exchange viewpoints. – Individual researchers that were represented in the panels and podcasts often present themselves as Pure Scientist bringing in certain facts and perspectives from their respective discipline. – In some cases experts were presented as advocates of a specific perspective (e.g. ecomodernism), or as Science Arbiter.
WD	– WUR: Honest Broker. – Individual researchers: Pure Scientist.	– Honest Broker: enabling diverse schools of thought to exchange viewpoints, while individual researchers presented — from their discipline or perspective — 'what science says' about a certain issue. – Other role: 'listening in'. WUR researchers listened to learn from societal perspectives.

Researchers' roles in facilitating or participating in dialogue

The analysis of the different roles WUR and its researchers in each of the cases ranged from Pure Scientist to Knowledge Mediator. Table 5 presents an overview of roles for each specific case.

The multiple roles that researchers performed resulted in several challenges. First of all, role conflicts occurred. For example, in the case of CC the individual scientist in this case saw him/herself as Pure Scientist, while WUR was perceived as an Issue Advocate by the general public:

> *"This event made me realise that researchers are not seen as objective when it comes to CRISPR/cas. As a scientist who uses this technology I try to be objective and neutral, and I use scientific methods to come to my findings. But part of the audience sees me, and WUR, as an advocate of CRISPR/cas. In new research projects we work together with social science groups and communication experts using transparent communication to stakeholders and the public." (Interview 13).*

This quote shows that it can be challenging for the individual scientist to convince others about his/her objectivity. On the other hand, one of the participants found it difficult to believe that WUR-researchers were objective:

> *"It became crystal clear for me during this event that WUR has vested interests in CRISPR/cas technology. The way that the event was organised, with 'lightning presentations', and the consistent message of WUR researchers in the presentations, was basically that this technology is inherently good. It's going to save lives, that's what they wanted to convey." (Interview 11).*

A second challenge that emerged was a conflict between a professional role, for example Honest Broker, and personal values in relation to the issue. For example, in the case of Table, core team members experienced some degree of internal conflict between their own values and normative viewpoints about certain elements of their work, and their desire to be an impartial Honest Broker. As one of the interviewees put it:

> *"Table positions itself as a neutral, impartial host. However, recently, I've come to realise that underlying ideologies and concerns about the role of corporations and how capitalism is evolving, may find their way in our topics, choices, and outputs. So far we do not make this explicit. This worries me." (Interview 2)*

WD seemed to struggle with the role that WUR and individual researchers have to perform in the dialogues: that of Pure Scientist who simply informs the public, or Knowledge Mediator who synthesises different forms of knowledge, including non-scientific knowledge. This related to the underlying question of what is the wider aim of Wageningen Dialogues: is it to share the (diverse) relevant knowledge/state of the art in relation to a given topic with the wider public? Or, is it to collect knowledge or viewpoints from societal actors? This was discussed by the core team in preparations of dialogues in all three themes. The conclusion was that WD has not been established to share state of the art knowledge with the wider public but more so to be a Honest Broker or Knowledge Mediator, sometimes between researchers working for the same university.

Discussion

This practice insight set out to better understand the roles university researchers can play in science-society interactions, more specifically through dialogues. We looked into (a) the dialogues principles and (b) the roles researchers perform to find out the challenges a university and its researchers face with respect to organising dialogue programmes and events, and with respect to the different roles they can have. Now, what are these challenges?

First, when held against the principles of dialogue and dialogue-events, the science-society interactions of WUR cannot be fully characterised as dialogues. Apparently, for a university it is a challenge to move from providing information to listening and opening up. This is noticeable in who gets to determine the agenda of the dialogues, who gets invited as participant, and consequently the limited diversity of perspectives. But it was also visible in the interactions themselves: there was limited safe space, and limited deep listening during most conversations. We conclude that the conversations in all four case studies excluded or found it difficult to reach less influential non-academic groups such as farmers, the elderly, or households living in poverty. Moreover, it was a challenge to identify and include those with very different (more opposing, or more radical) points of view on the issues at stake. This was partly due to the limited diversity of the

professional networks of those involved, and partly due to lack of experience of the organising teams to identify groups of actors outside the usual pool to draw from. Consequently, the conversations took place among like-minded people. Excluding transversal thinkers bears the risk that the conversation will reproduce 'old patterns', thereby closing down the possibility to hear something entirely new or radically different [Scharmer, 2016]. However, the exclusion of opponents may contribute to coalition building that is necessary for, for example, sustainability transitions, but is at odds with a dialogical ambition. This point is also emphasised by Brouwer and colleagues who found that in some situations it is needed to organise several smaller dialogues among people with similar viewpoints or level of influence in the system, before these groups can be brought together in a wider dialogue [Brouwer et al., 2016]. This did however not happen in the case studies.

A second challenge for a university, and more specifically the researchers involved in the dialogues, is to move from valuing knowledge only, to also giving space to values and emotions in the conversations. Researchers are used to converse in cognitive and analytical ways, and often shy away from making normative, personal and more value based statements. In addition, the public setting (expert panels, recordings) made that people felt less eager to discuss normative or contested viewpoints that really matter to them [Isaacs, 1999; Scharmer, 2016]. The tendency among WD, Table and CC to prioritise *informing the general public* often lifted the conversations to an abstract level. Indeed, it was observed that the conversations were lacking the kind of energy and engagement that are often found in dialogues 'in the real world'. This can be helpful indeed when more information is needed, and in order to prevent full blown conflicts to emerge. However, for a dialogue to take place, this abstract, analytical conversation is not enough. A dialogue is most productive when linked to a specific context and/or change process, something that truly affects the participants [Innes & Booher, 2003; Isaacs, 1999; Scharmer, 2016].

A third challenge is related to the different roles a university, but also researchers can take in science-society interactions. In one of the cases, Wageningen University and Research as an organisation is considered an Issue Advocate on CRISPR/cas by the general public and media [Zembla, 2023]; while the individual researchers involved in the dialogues considered themselves Pure Scientist. There are risks involved in claiming to be neutral (objective) and at the same time excluding space to voice certain risks or uncertainties surrounding the knowledge about a topic, in particular when framing the interaction as a dialogue. Our findings are in line with an earlier study conducted by Macnaghten and colleagues [Macnaghten et al., 2021], who argued that the CRISPRcon event was mainly used to promote CRISPR/cas among an audience who was already convinced.

For a university to organise and participate in dialogue programmes and dialogues, they must find ways to appropriately balance their roles, and the roles of the researchers, such as Pure Scientist and Knowledge Mediator. Traditionally, a university aims to provide relevant and accurate information on a heated issue. At the same time, to remain relevant and responsive, it is important for universities to listen 'in'. To hear and understand diverse contributions in a dialogue, requires the acknowledgement that everyone, including Pure Scientists, have normative starting points which influence their knowledge production processes.

We identified a number of limitations in this practice insight. First of all, the empirical basis is small (four case studies only) and we have included examples from one university (WUR) only. Future investigations could usefully include the dialogue programmes or science society interactions of other universities. Furthermore, for getting an in-depth understanding of how dialogue principles were being practiced and what roles researchers took on in these dialogues, was sometimes difficult due to the type of data. Future studies should include more participatory observations and more survey data in order to better grasp the quality of the conversations and to have a broader evaluation of the dialogues, by more participants.

Recommendations

For a university and its researchers organising and participating in dialogues, the main balancing act is between giving information and listening 'in'. In order to better balance these two roles, a key factor that emerged from the data, was the design and organisation of dialogues, and subsequent choice of facilitation tools. At the level of dialogue events, when the set-up and methods created an equal level playing field, for instance by having small group discussions or having people draw or write together, the resulting conversation was more dialogue-like. At the programmatic level, professional process support during the initiation and organisation of science-society interaction, including involving a professional moderator during the event(s), greatly steered the science-society interactions towards dialogue. Having an external (and independent) process facilitator helped to create clarity about the purpose of the conversation, induced analysis of the stakeholder arena (and who to invite), and contributed to reflection on roles and potential role conflicts of WUR and individual researchers involved. The level of support differed across cases, and was most present in the WD and NIA cases.

A second recommendation is to include societal stakeholders and transversal thinkers from the start, when the dialogue issues are determined (at programme level and at event level), while ensuring a safe space for researchers and societal actors. Even though all cases were explicitly aiming for science-society dialogue(s), we saw that the scope and boundaries of the issues included in the dialogues were determined almost exclusively by the researchers themselves. Consequently, the ownership over the dialogues remained with the knowledge institute. For an equal level playing field, it may be worthwhile to start with societal questions from (a set of) societal actors, rather than with scientific concerns, or having researchers define what the societal concern might be. 'Letting the system in' may create more inclusive and reciprocal conditions to turn *science-society* dialogues into *society-science* dialogues [Berg & Lidskog, 2018; Dryzek, 2000; Hendriks, 2009]. This also implies to organise the inclusion of transversal or dissonant thinkers in the process and during the dialogues.

A third recommendation is that clarifying roles is important. Combining different roles, in particular that of Issue Advocate with other roles, is at odds with the idea of dialogue. Also, the roles of Pure Scientist and Issue Advocate can be a dangerous combination [Pielke, 2007]. If not governed properly, knowledge institutes like WUR participating in or initiating dialogue and deliberation run the risk of becoming perceived as untrusted knowledge partners. Even though the university may identify with the Pure Scientist role, other societal actors may consider it an advocate with interests.

Identifying (potential) role conflicts for researchers in advance may help participants avoid performing conflicting roles (such as Issue Advocate and Pure Scientist) at the same time when engaging in science-society dialogues. In situations where a knowledge institute has a stake in the technology, it would be wise not to host an event (or dialogue) and avoid presenting itself as a Pure Scientist.

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