



**Roskilde
University**

Research collaboration for societal engagement and social innovation

Guidelines and reflections for best practices

Dupret, Katia; Umantseva, Anna; Lazoroska, Daniela; Eschweiler, Jennifer

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Authors: WP3 team: Assoc. Prof. Katia Dupret, Post.doc Anna Umantseva, Assist. Prof. Daniela Lazoroska, Post.doc Jennifer Eschweiler, Roskilde University

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Welcome!

We understand research for societal engagement as research that is societally relevant in the sense that it fosters engagement and collaboration among different social actors. If you are interested in research collaboration with multiple stakeholders from inside and outside the university, this guide will provide you with guidelines to initiate, consolidate, and finalize collaborations, while addressing central dilemmas that transdisciplinary collaborators might meet along the way. These guidelines offer a way to engage with such dilemmas, aware that not all dilemmas can always be solved, as they emerge at individual, inter-subjective or partnership level, often structured by institutional and organisational actions or logics that go beyond a particular collaborative project. While we have institutionalized and well documented procedures and rules for ethical and responsible conduct of research and transdisciplinary collaborations, these guidelines address a perspective that is embedded in local needs and practices, and which takes individual situatedness and inter-subjective relations into account.

This guide invites general reflection on aspects related to conducting research with the aim of strengthening and upscaling societal engagement and social innovation. It offers an explorative approach to solution finding in situations of collaboration, inspired by core research responsibility dimensions (RRI – responsible research and innovation) like inclusion, reflexivity, transparency, anticipation and responsiveness and considerations of ethics of care. It thus links bottom-up and social innovation with RRI and interrelational thinking.

We very much hope that you will enjoy and find the guidelines useful.

All the best,

The Roskilde University team

Katia Dupret, Anya Umantseva, Daniela Lazoroska and Jennifer Eschweiler

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How to use the guide

These guidelines offer an accessible go-to list of topics that collaborators might need to address individually or in the team. The aim is to make explicit some of the hidden dilemmas that can be better addressed when verbalized.

In collaborations the temporality and the roles we have as collaborators may change along the way throughout the project. Initiation, consolidation and the finalizing of a collaboration raise different concerns and dynamics. Therefore, it may be an idea both to visit and revisit the guidelines throughout all phases of a collaboration, but you may also use the guidelines in separate, in a flexible and adaptable manner and work with dilemmas that seem relevant to the context of your collaborative project.

When discussing dilemmas in a collaborative setting, we tend to look for (quick) solutions. However, these guidelines cannot offer that. They aim to invite you to reflect on the complexity of transdisciplinary collaboration. The dilemmas identified here are inextricably linked to dimensions of responsibility and care, they can help you and your collaborators to develop an attentiveness towards the different layers in each dilemma and how to collectively explore possible solutions.

We hope you will share your experiences with us!

What and why?

This report seeks to aid collaborators who wish to kickstart and consolidate cross-sectoral and cross-disciplinary partnerships and collaborations. It is developed based on case studies, conducted with the focus on learning from researchers' ideas and practices within collaborative research projects that also include stakeholders' perspectives; on a literature review on collaborative research and the ethics of care (cf. Umantseva et al., forthcoming); and on previous work on responsible research and societal engagement (cf. Dupret et al. 2022).

This research has been conducted as part of the European Reform University Alliance and its follow-up (RE:ERUA) project, funded by Horizon 2020 (101035808). Roskilde University, one of the partners of the alliance, investigated research and innovation from the perspective of collaborative and inclusive societal engagement and social innovation. We do that in line with the aim of the ERUA vision:

'As reform universities, a key motivation to map our trajectory towards the engagement approach is its potential to sharpen our critical edge, which is a core mission for each ERUA member. Collaboration with non-academic stakeholders is a crucial source of renewal and creativity for us and a means to assess existing processes and priority areas of development, test new ideas and ensure that we are indeed contributing continuously to the advancement and prosperity of society.' (<https://erua-eui.eu/re-erua>).

The focus on cross-sectoral and cross-disciplinary scientific collaboration is central to the aims of responsible research and innovation (RRI), where key focus areas are stakeholder engagement, gender equality, ethics, open access, governance and science education (Dupret et al. 2022, p.13). However, interpersonal dynamics of collaboration and the emotion work at stake among collaborators is less attended to (cf. Umantseva et al. forthcoming; Branch & Duché 2022; Smolka et al. 2021).

This guide is based on an extensive study of RRI from the perspective of researchers' own practices (Dupret et al. 2022), a scientific literature review focusing

on research collaboration from a care perspective (Umantseva et al., forthcoming) and the analysis of three collaborative research experiments.¹²

The focus has been on examining possibilities for 'professionalizing' research collaboration kick-offs and consolidation phases with a specific focus on relational and socio-psychological aspects. By professionalizing we mean making collaborative practices and related opportunities and challenges visible through a triangulation process for the applicability of the findings, to offer guidance for fellow researchers and external partners who would like to re-review or initiate collaborative research practice with the goal of societal engagement. Each experiment brings different aspects into view, in terms of how those engaged in collaboration envision, plan, experience and perform the process and its outcomes.

Best practices – provided by 'critical' reflection

As cross sectoral research collaborators we would like to know the golden rules for conducting societally engaged research that has societal impact. Would it be possible to formulate a 'one size fits all' model or create a toolbox? A general understanding of best practices implies a set of procedures that lead the team or individuals performing certain actions to what is considered optimal results. However, a central takeaway from our literature review on collaborative research is that relational matters are core to successful collaboration and that the dynamics and the actual ways of improving these aspects of research collaboration are underexplored (Umantseva et al. forthcoming). Also, responsible research and innovation (RRI) can become instrumental and carry a risk of not taking care of important perspectives of the partners in the collaboration despite following the institutional procedures (Dupret et al. 2022).

This report approaches the concept of best practices as ongoing reflective process where the aim is to provide learning take-aways for the partners involved. It

² See section 'collaborative case studies'

particularly proposes a relational and ethics of care lens on what optimal results of collaborative research might be. This is bearing in mind that relational aspects are connected to institutional and political conditions and contexts. We understand not all partners in a collaborative setting are interested in engaged and responsible research criteria but are rather focussed on research outputs to serve own rather than societal interest. We also know that some countries have no or only weak collaborative and participatory research cultures. Another challenge might be the lack of confidence of certain stakeholder groups to be 'legitimate' holders of knowledge, which might further hamper equal participation in collaborative settings. Therefore, the personal dimension in its organizational and institutional context is in focus. On this basis:

Best practice is defined as the reflective process and procedure that requires time and space to address the social interpersonal dynamics of collaboration. This approach considers how central dimensions of care can be strengthened.

What is a dilemma?

Collaborations are usually characterized by divergent interests, positions, logics at stake, available resources or the lack thereof. Therefore, we have structured the best practices in parallel with analytical dilemmas. They are deducted from the analytical process with the empirical case material while consulting prevalent matters of concern from the scientific literature. Work life research, organization psychology and organization theory define dilemmas in different ways, but they all contrast the incompatibility between different interests of different actors (Dupret & Pultz 2021).

Thus, a dilemma implies choosing between two options, with none of them leading to optimal results. In our research we found that dilemmas signify such points of professional and relational friction, at times silenced, at times seeming like impasses which require considerable action. Rather than "mere" two, we found that ways forward were sometimes multiple. But indeed, while there is no preferred way

forward, openly working through dilemmas certainly generated results that serve as important themes of learning reflection. Due to the nature of interrelational dynamics the selection of dilemmas in these guidelines are aimed to be generic, relevant for other collaborations.

They approach collaborative research from a perspective of ethics of care (for more on ethics of care, see following section) and the question of how ethics of care can be an underlying element of responsible research (Ruggiu 2020). Ethics of care argues that care is a greatly undervalued aspect of culture and social life and suggests the need to recognize relationships of care and interdependence between all human and non-human actors as an underlying element of sustaining life (Bellacasa 2011; 2017). At the same time care is always embedded in relations of ambivalence because caring can also be oppressive and exploitative towards the carer and the cared for (Bellacasa 2017). Bellacasa (ibid.) suggests to approach care not as a normative obligation but as the question of how to care in plural and messy contexts. Hence, following the care ethics approach, the guidelines for collaborative research in this report are not formulated as prescriptive instructions, but as dilemmas and reflective questions – asking collaborators to reflect upon how care can be enacted in their particular research contexts.

Theoretical anchors

The guidelines build on three core themes: collaboration in research from a societally engaged perspective, relations and emotions at work, and ethics of care. But before we go on, we explore what the concept of collaboration might mean in research.

What does it mean to collaborate in research?

In the context of collaboration towards societal engagement, it is important to define what we mean by collaborative research: it is a form of research where researchers come together with other researchers, organizations, or community members. in a consortium. It may be up for discussion to what extent they work together from the beginning to develop research questions, design the study, collect and analyse data,

interpret the results, and provide guidelines for application. Collaborative research can involve sharing resources and expertise, but there can also be clear division of tasks and independent deliverables that are sought to give synergy to other independent deliverables in the collaborative project.

It can also involve participatory elements, like the engagement of civil society target groups or members, citizens affected by the subject of research, or public officials working on a task relevant to the research. Participation can be in data collection, data analysis and/or science diffusion/ implementation (see e.g., Shirk et al. 2012 or Bonney et al. 2016 for different typologies of participation) in different degrees of engagement. It can also be participatory in all aspects, involving community members or stakeholders in defining research questions, designing the study, collecting and analysing data, and interpreting the results.

The goal of collaborative research in the context of responsible research, ethics of care and social innovation understood as societal engagement (Dupret et al., 2022) is to empower stakeholders and/or their community members by making sure that their voices and perspectives are included in the research. Collaborative research in our understanding thus focusses on responsible and caring research processes. Researchers may still take the lead in designing and conducting the research, but in transparent, inclusive, reflexive ways that engage non-academic partners throughout, in anticipation of research results that can somehow contribute to social change, driven by the intent to respond to a social or sustainability problem. Hence there is also a focus on outcome, both in terms of knowledge and of applicability.

Collaboration in research from a societally engaged perspective

The importance of collaboration and societal engagement in science and technology is found to have a positive effect on social innovation (Bauer et al. 2021) and on responsible research (Dupret et al. 2022). Responsible practices are not relegated to political processes alone but are ascribed to all actors involved in the development process (Fisher & Rip 2013).

These guidelines draw upon the democratic tradition of the social innovation research field, with the view of addressing societal problems through citizen engagement and collective decision-making for more equitable socio-economic and ecological outcomes (Moulaert & MacCallum 2019). Social innovation in this reading goes beyond the open innovation initiative promoted by the European Commission (2016), as it focusses on advances in social relations and empowerment in addition to scaling and transferring innovation. We also bring this social innovation understanding to responsible research and innovation (RRI), which includes approaches to societal engagement that address new ways of organizing and empowering participants by including them in research projects through different types of methodologies (Dupret et al. 2022) as well as institutional changes which would promote caring collaborative research.

Following the literature review with a specific focus on how researchers carefully engage in collaborative research with the purpose of social innovation (Umantseva et al., upcoming), we conclude that 'collaborative research' has an external and an internal focus, while acknowledging that they are inherently interconnected.

The *external dimension* implies collaborations between academic institutions and societal actors (e.g., cross-sectoral collaborations, engagement of civil society, etc).

The *internal dimension* can address intersections beyond and across scientific disciplines (trans/inter/cross disciplinary collaborations). Moreover, internal aspects of collaborative research also imply understanding collaborations through the angles of everyday practices of research and underlying structures, such as work conditions, research environment, etc.

Based on the review, we found that collaborations that have the privilege to develop over time, and are infused with trust, can provide meaning and value for the different parties involved. Caring research that values the process (developing reflexivity, transparency, inclusion, attention to emotional labour of participants etc.) as much as the output, needs time and embodied resources, which is often in conflict with institutional cultures of quantifiable research evaluations and production metrics, such as publishing and quotations.

In line with our previously mentioned definition on best practices focusing on the reflective process and procedure that “*requires time and space to address the social interpersonal dynamics...*” we can add that successful research collaborations consider both the internal and external aspects of the collaboration.

If the goal is social innovation what then is participation?

While these guidelines are focusing on collaboration with external stakeholders in research, we also find it important briefly to mention participation, as the focus of the collaboration is social innovation. As argued previously we opt for a social innovation approach where both collaborators on a strategic level and participators on a practical benefit from the collaboration. Benefiting can of course encompass many things. But it requires from the collaborators to think and facilitate how participation is conducted, and with what aim.

A very broad definition of participation including many (if not all) types of human interaction, in combination with interactions with texts and technologies. When theorizing about participation in relation to collaboration, power may at times remain rather secondary. Depending on research field and theoretical flavour simply put, the *sociological* approach defines participation as ‘taking part’ while the *political* approach defines participation as ‘equalising power relations’ (Carpentier 2016). For stakeholders and beneficiaries to get access to power and resources in social innovation processes it is needed to consider what participation from a democratic perspective is. Avelino (2021) is a relevant source that particularly address power in relation to social innovation and justifies how and why responsibility and care dimensions are to be attended to by diving into the micro-processes of participation in the collaborative dynamics. Even though power conceptualizations are contested extensively (ibid) for the purpose of understanding and engaging with collaboration in relation to societal engaged research the following academic contestations are of relevance; *power ‘to’ vs power ‘over’ and centred vs. diffused power* (Dupret et al. 2024/in press). How participation can be accommodated and not least how influence and struggle for reaching some form of consensus of what to change across manifold perspectives.

So, for collaborators to define the “why” participation, requires them to think with theory. Are we inviting participants ‘to take part’ at different stages of the project and letting them engage with dimensions that we as collaborators stage for them, or are we distributing power and inviting participants to challenge and take decisions on core dimensions through social design, co-production and co-creation processes of the project? That is for the collaborators to decide.

Relations - Emotion work

Although emotion work as a fundamental basis of collaborative work has been acknowledged and empirically researched in various professional areas, for example, nursing or charity and social economy organizations. (Miller et al., 2008; Huynh et al. 2011; Dupret & Eschweiler 2022) emotion work in collaborations on academic settings and academia/practitioner collaborations is still a budding topic.

Some examples from the literature touch upon emotion work in collaborative research include, for instance, the work by Davies and Horst (2015) who explore the importance of affective labour and care in responsible research. They conclude that the meaning of doing responsible science can be about taking care of the research group, supporting colleagues’ careers, and creating a nourishing environment in the research group, as much it is about producing knowledge. The authors point to these aspects as invisible dimensions of scientific practice – *“the private, emotional, embodied, messy, and insoluble, as opposed to the calculable and controllable”* (375). Smolka, Fisher, and Hausstein (2021) talk about the affective dimension of collaborative research as a way to re-think interdisciplinary collaborations, not as strategic alliances, but as spaces of reflexivity, where affective elements, notably, disconcertment, using the body as a source and sensor, could be approached to generate knowledge, to identify epistemological differences when engaging in transdisciplinary collaboration, and hence, facilitate recognition of what has so far been taken for granted in different disciplines.

For Latimer and Gómez (2019), affect and intimacy transform the notions of research collaborations from instrumental tools for achieving socio-economic goals to ‘possibilities of our being-in-common’ (ibid: 280) and creating collective attachments around things researchers and participants care about. Dupret and

Pultz (2021) show that working extensively with high levels of moral and affective commitment in collaboration with external stakeholders, like volunteers in civil society, demands specific availabilities and competences that may have negative side-effects in terms of feelings of exhaustion, insecurity and loss of critical thinking towards work conditions in general. Also, the greater external organisational purpose does not necessarily correspond with personal values, which can result in a form of normative control encouraging the employee to work harder and give more of themselves, without the need for other incentives (cf. Fleming and Sturdy 2009). In other words, though there may be an acknowledgment of emotion work in some collaborative settings, there is both a lack of attention to the different types of resources this work requires and instruction on how to manage it.

Ethics of Care

The generic and most widespread definition of ethics of care is that “[care] includes everything that we do to maintain, continue and repair “our world” so that we can live in it as well as possible. That world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web” (Tronto 1993, 103). With the inspiration from feminist scientists like Gilligan, Tronto, Bellacasa, ‘care’ has had a political, philosophical and psychological arenas for discussion (Dupret, lecture in philosophy of Science, Roskilde University 12.oct. 22). Care has, furthermore, both had a troubled history as a concept and as a practice. Feminist analysis and gender/labour scholars such as the forenamed have addressed care as part of the invisible labour that women and other less powerful groups in society have been socially obliged to perform.

Care is irreducible to mechanization, particularly when it comes to care for children and the ill, as well as work required for maintaining social ties and emotional lives (Federici 2012). According to Fraser (2016), the capitalist economy in which we are all emersed in both relies on the practices of caregiving, but it also treats them as they are free. In extension, powerless groups and individuals are the ones who are burdened to perform it with no or little remuneration. Or in other words, who are socially expected to care runs along gendered and power lines. Any attempts to make visible the labour of care or the strain it creates are treated as a backward

residue and an obstacle to 'true' liberation (ibid.). Its invisibility is thus maintained. From the perspective of its troubles as a concept, it is worth mentioning that care is used in many professional contexts. Scholars no longer pose the question what they care about, let alone about how they are *"putting in the work to 'care for'"* (Bellacasa 2017, 5). This may be because we get increasingly used to the question of doing good as being a questionable and relative endeavour. Questions of the good now come with new standardized procedures that we must adhere to. Yet those standardized procedures reduce our capacities to imagine good science (Bellacasa 2017). Examples of standardized procedures for conducting good in science are open data requirements about making findings available in repositories, or providing informed consent to all subjects, or providing impact measures of research on society. Care ethics can help us attend to our capacities to imagine good science.

Ethics of Care is a relational approach to moral that differs from traditional universally oriented approaches by focusing on context, interconnectedness and empathy as central for our common existence. Even if it can have normative implications, it also has epistemological and ontological significance, that goes beyond judging moral dilemmas.

Rather than rights and rules, Ethics of Care focuses on needs and relations. One reaches beyond the trap of *"nothing but critique"* and engages in *"Cultivating response-ability requires much more from us. It requires the risk of being from some worlds rather than others and helping to compose those worlds with others"*. (Latour 2004, 178). Cultivating response-ability is central to how we approach collaboration. Researchers need to put attention to not only for whom one cares, *"but also 'Who cares?' 'What for?' 'Why do 'we' care?', and mostly, 'How to care?'"* (Bellacasa 2011, 96).

Thus, Ethics of Care suggests that morality is rooted in our relationships and that we have a responsibility to care for others, especially those who are vulnerable or in need. In some readings it differs from ethics of justice, exactly because it focuses on needs rather than rights and rules (Hamington 2014). At its core, Ethics of Care is about valuing and nurturing relationships. It suggests that caring for other(s) is not just a matter of fulfilling our obligations or following moral rules, but it is a

fundamental part of acknowledging our interconnectedness to each other and to the world. Ethics of Care emphasizes that care is an essential component of morality and that it should guide our ethical decision-making and ways of being in the world.

Care in itself is not positive or negative. Nonetheless, a lot of suppression has been conducted in the name of care, e.g., through imperialism or paternalism.³ Care can be practices in ways that have coercion as consequence which should be closely scrutinized when collaborating and engaging with society.

Overall, Ethics of Care emphasizes the importance of empathy, responsiveness, responsibility, and relationship-building in moral decision-making but goes beyond that and touches upon what types of knowledge(s) are acknowledged and what are silenced. It suggests that by prioritizing these principles, we can create a more compassionate, just and caring (responsible) world.

Responsible research towards societal engagement

In line with an ethics of care approach, responsibility has assumed a proactive, positive and collective role which changes its overall meaning in the scope of responsible research and innovation (RRI) (Jonas 1984; Grinbaum & Groves 2013; Stahl 2013; Owen et al. 2013 in Gianni et al. 2019).

The European Commission describes RRI as a *“comprehensive approach of proceeding in research and innovation in ways that allow all stakeholders that are involved in the processes of research and innovation at an early stage (A) to obtain relevant knowledge on the consequences of the outcomes of their actions and on the range of options open to them and (B) to effectively evaluate both outcomes and options in terms of societal needs and moral values and (C) to use these considerations (under A and B) as functional requirements for design and development of new research, products and services”* (EC 2013, 3). It includes

³ Imperialism is a policy of extending a country's power and influence through colonization, use of military force, or other means. Paternalism is the policy or practice on the part of people in authority of restricting the freedom and responsibilities of those subordinate to or otherwise dependent on them in their supposed interest.

methods such as citizen science (e.g. Skarlatidou & Haklay 2021) or citizen-enhanced science (e.g. Zourou & Ziku 2022), as well as collaborative research.

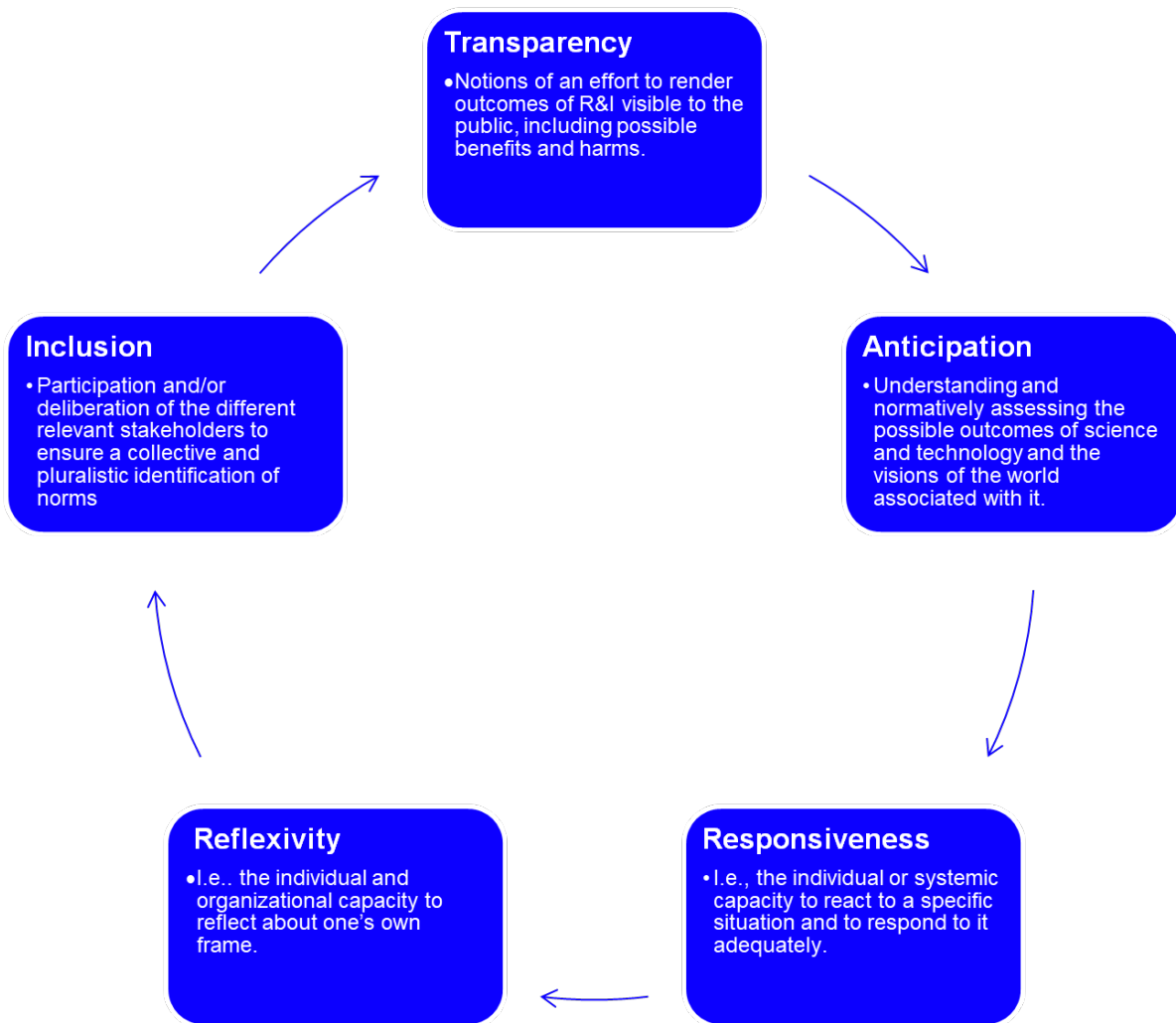
An often-quoted point of departure of (RRI) is that it is “*a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view on the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technological advances in our society)*” (Von Schomberg 2011, 9). This definition is rather generic and has at least two limitations.

1. *“It does not reflect how responsibility in research is affected by the link between the individual researcher and its organizational framework.*
2. *It is rather oriented towards technological outputs that do not take citizenship and its empowerment into account in aiming for “(ethical) acceptability, sustainability and societal desirability” (Dupret et al. 2022, 13).*

Hence, these guidelines address how both the individual researcher and the process itself affect the collaboration. Also, responsibility from an ethics of care perspective acknowledges that responsibility comprises many types of activities (including the development of science, technology, and innovation). It is characterized by the intentions behind the actions that seek to “*maintain, continue, and repair our “world” in order to “live in it as well as possible”* rather than the conditions for responsibility or objective outcomes to achieve (Pellé 2019, 270), and the intentions are not merely technical but morally defined (Tronto 2013) in Dupret et al. 2022.

The responsibility dimensions are:

Graphic 1: Responsibility dimensions, adapted from Owen (2019)



Collaborative case studies

As the theoretical framing on responsible research from a care perspective and the background knowledge from the literature review is described previous sections, the methodology of the field work with collaborative case studies will be described in the following.

Three research collaborative experiment are the basis of the qualitative data. They were initiated through two open calls in the alliance between the five reform universities (Roskilde University, Paris 8 - Vincennes, University of the Aegean, New Bulgarian University and Konstanz University). The open call enabled researchers

from the alliance universities to conduct minor pilot projects with participants from at least two universities and societal actors. Three pilot projects were awarded funding of 10,000 Euro. The projects were selected based on inclusion criteria: involvement of at least two alliance partners, involvement of external stakeholders, development of innovative collaborative methodology, formulation of the project's social innovation/social change aims.

The Roskilde University group of researchers were in close contact with all project groups and followed their collaborative trajectory in the fall 2022 till summer 2023. They conducted observations of the cases during online meetings, participated in their onsite workshops, seminars and similar events during onsite visits in three of the respective countries of the case partners. The RUC team has either recorded or taken notes during all the meetings with the cases. Follow up interviews have been conducted with 5 participants from the 3 cases. The interviews have been conducted online, and onsite when possible. The interviews addressed the collaborator's motivation for participation, their experiences and reflections on how they collaborated and what they might have done differently, as well as the (qualitative) impact they experience their collaboration has had. The interviews have been partially transcribed. All researchers on the RUC team have analysed the data qualitatively and collectively, consisting of meeting notes (online and onsite), and interview transcripts. All data has been anonymized.

The three selected projects can be described by different intersecting criteria of cross-disciplinary and cross-sectoral collaborations:

Cross-disciplinary and aim of social innovation:

- 1st collaborative experiment; political science, online learning, citizen science. Exploring research activism in the light of climate change.
- 2nd collaborative experiment; economy, social innovation, social psychology, management. Engaging with cooperative ways of organising within the sanitary sector to understand its impact in times of global crises.

- 3rd collaborative experiment; engineering, coding, digital humanities. Co-developing digital tools to increase democratic engagement and cultural awareness with deprived communities and youth.

Cross-sectoriality and dynamics of roles/relations

- 1st collaborative experiment: Scientist/activist and external stakeholder/activist (NGO) involved in the collaboration since the beginning, co-production of outputs.
- 2nd collaborative experiment: Scientist/wp expert group member/ activist (cooperative), external stakeholder (cooperative); scientist/wp board member, scientist/wp board member, scientist/head of research of the guidelines. Changes of and blurring of external and internal roles throughout the collaborative process. High level of long-term exchange with the field, and informal consultations, and collaboration on a strategic level with no co-production of outputs.
- 3rd collaborative experiment: Scientists, gradual identification of external stakeholders and development of external stakeholder engagement strategy. Cross-sectoral collaboration is kept on a strategic level.

Collaborative dilemmas

The following dilemmas are derived from:

1. The particular type of collaboration, engaging collaborators from different universities, disciplines and sectors, who in most cases did not collaborate with each other before.
2. By approach to collaboration, informed by theoretical strands of RRI, democratic tradition of social innovation, and ethics of care.
3. Research collaboration reflects the complexity of concerns they seek to address internally and externally. There are seldom simple answers to challenges.

Dilemma 1 - Are you a planner or a player? Detailed structure vs. flexibility

“Zoom meetings were just to organize the workshop. But the objective was not to create a common culture between different backgrounds. (...) We did not talk about perceptions, what was our role in the project. We started the project directly. The objective was to have outputs, but not to communicate, to exchange visions. Maybe I would do that differently if was employed (read: engaged) from the beginning. I did not see the implication of each other, I did not see the role of each other. Meetings were short organizational meetings. Not on the conceptual level or about the main theme of the research” (Researcher)

“So, for the (data collection) we leave people very open to statements, reflections? We will not have a very specific approach; we will leave people free to express themselves?” “That’s the idea” (Researchers)

“I think it is ok that we do it in a way that we don’t set the agenda too much. They are not like our guinea pigs that just feed us data for an article. That’s not the idea of this” (Researcher)

“From what I hear we might need to sit ourselves down and to stake out what is the scope of what it is that we want to do in terms of publication. It sounds to me like we are coming from different expectations, from different objectives”. (Researcher)

“I appreciated the informal character of the workshop. But this way of exchanging can also be trapping. It motivates, it encourages us to act, but I have the impression that there is not anything concrete for a post-workshop obligation. But I do not perceive this negatively, the workshop was the first moment where we settled trying to discuss without trying to formalize. And the formalization will perhaps come later. So, for me it was very interesting” (Researcher)

“One advantage is that our partners are super-efficient. With enough experience of project management. Very important and gives organization, schedule, objectives, goals. In a very efficient manner. What I am thinking even if it might be blurry what the outcome is, at least we know there are the deadlines, the key dates. Corner stones that we have to respect. And that gives us a clear and coherent, logical way, path to follow. (...) It is necessary to have deadlines and minimum of guidelines. (...)”

Even if everything is perfect you are not 100% sure that at the time of the conference, I don't expect the situation. You have to live with that, the risk. To me it's important to have a minimum of structure and in between you can have different ways of getting to the milestone. The paths can be different, but you have to get to this point.” (Researcher).

How much planning and guidance should be provided for an inclusive process - and who should be in charge? It seems that collaborations based on equality tend to appear easier and more exciting at the beginning than when it comes to seeing through and finalizing it. At the initial stage, collaborators have much to celebrate and look forward to: likely, their hard work in applying for funding paid off, they are thrilled about the new project and the prospective outputs. If the collaborators are relatively new to each other, in the first meetings they can share their interests and motivations to take part in this collaborative research enthusiastically. This “collaborative excitement” can encourage an organic and flexible workflow – new ideas are enthusiastically welcomed, and everyone seems to agree on most points. On the other hand, contemporary academic and other sectors work with projects with relatively limited time frames for organization and production. This implies a need to create structures with timelines and milestones and a clear definition of roles and responsibilities that enable the collaborators to organize their work, resources and availability.

Consequences

The “organic” workflow, which a player might propose to approach the management of resources and deadlines on an ad-hoc basis, can be problematic for collaboration. It can impede transparency, inclusivity, and reflexivity, and ultimately create barriers to the productive outcome of the collaboration. If the organic workflow becomes a default mode of collaboration, it can turn into a “no-questions-asked” unspoken agreement, where it becomes uncomfortable for collaborators to voice their questions and doubts, presenting them as less competent. These dynamics would likely impede the possibility to question what has been so far taken for granted in the collaboration and detect differences (in participant’s scientific approaches,

visions of the project's objective, etc.) (Smolka et al., 2021). The “no-questions-asked” mode, where decisions are expected to be smoothly accepted, can often reinforce existing hierarchies between players and planners, granting the person with the most experience in such collaborations the authority to lead, without collective negotiation. This will likely impede the learning process between the collaborators. Finally, the flaws of the organic workflow might become visible only towards the final stages of collaboration, when it becomes apparent that the collaborators had different expectations of the outcomes during the entire process.

It might seem that doing everything by the book from the beginning is better than an open and organic workflow. However, a formalized and procedural approach to collaboration may also constrain the creativity and enthusiasm of creating something of value together. It may even reduce the reflexivity and questions of who to care for, how to care and why, as the planning mentality tends to put a distance to our own emotional and embodied connection to the world and to each other.

The following questions help to reflect about the pros- and cons of on the one hand working with structure and transparency in planning and on the other hand keeping and nurturing space for flexibility when defining and progressing the collaboration, also considering different institutional logics, workflows and objectives of transdisciplinary stakeholders.

Reflective questions

Question	RRI dimensions	Process stage
1. Does your project have the time, space, and capacity required to address issues such as different planning styles, resources available or project feedback methods?	Transparency, inclusion	initial
2. How do you think your external collaborators would feel most comfortable building a trusting relationship with you? Through complying by ethical guidelines and procedures? Or by giving them the mandate to decide what to do next, and how to define the problem of concern in your mutual project?	Inclusion, reflexivity	throughout
3. Have you experienced that not raising one of your own issues of concern in a collaboration has bounced back at a later stage in the collaboration? What happened? How did you solve the conflict?	reflexivity	Post project
4. How do you deal with questioning the big and small premises of the project along its way?	transparency	throughout

Dilemma 2 - Many roles and alliances: problem or advantage?

“In the coming months we are going to have the opportunity to divide the tasks and activities so we can think in which activity we can be more useful. (...) Then we can discuss who is going to be more useful in some activities. (...) In my view, it was difficult in the beginning to get into the..., (... in) the first steps. (To) think of certain tasks and activities. Not all of us (can) do all the tasks together. But (we can) divide and discuss them of course. (We can) see how we can contribute.” (Researcher)

“At the workshop it is important to explain our implications (roles). Our partner is a real activist myself – it is a more analytical perspective, and our other partner– you are between the two”. (Researcher)

“My role was not very clear for a while, I was not able to conceive of it until a useful zoom meeting which clarified who does what” (Researcher)

“There were too many complicated roles: (one was) a researcher on the team and outside it, (another) a practitioner in and a researcher on the case.” (Researcher)

“I am a professional, in my everyday activities I have to question myself, what my role is on a team. How can I do to make things go softer? How can I do to make things work? That is because I have so many other roles, that make me think about that. I am ... When there is a new project. I have to see, what are my skills to get this project done in the best possible way. I have to adapt a strategy, a diplomatic strategy, sometimes taking the example, or doing things. Taking charge of some things that are not my concern to say, let's try to motivate colleagues. Other strategies too, it depends on the project. Personally, I ask myself this often. Sometimes I move from one to another room, and when I come to a new room, I am saying, oh, now I am a teacher, or a new role and have to reposition myself.” (Researcher)

“Being a practitioner and researcher related to the case is not always easy, but it also made certain things possible: there was trust during the interviews, as me and the interviewees had been through so much together already.” (Researcher/ Practitioner)

“My role was never clear. Also, because I have been too distracted by other work.”
(Researcher)

What to do when collaborator's roles are multiple or blurred? How do collaborators define their own and each other's roles? How does this explicit assigning of activities and responsibilities based on collaborators' wishes or expertise, implicit assuming of roles by collaborators based on background knowledge, about each other, or based on their self-presentation affect the dynamics of the collaboration? Can roles change throughout the collaboration? How are roles or alliances affected by internal factors such as collaborators' workload and subsequent multiple other roles they must balance in addition to the one in this particular collaboration?

It is common for partners to take multiple roles in a collaboration – individually and as a group. For example, one partner can combine the roles of being a researcher, a woman, and a practitioner. In the partnership, their foremost role might be that of an expert of this or that, of a gatekeeper with access to the field, or the overall project initiator, with secondary roles at times blending in. Concerning the group, collaboration is expected to bring together actors with different expertise to enrich the research outcomes, and we anticipate this combination of actors to be fruitful and in line with RRI. It also brings together different personal skills, connections, or interests related to tasks in the collaboration. Another dimension which can define roles in a collaboration is related to institutional context - the stage of career in a specific kind of organisation, the national context.

Consequences

Bringing together actors with different expertise, areas of experience, relations and personal skills and thus different roles can enhance collaborative, inclusive knowledge production. Wearing multiple or different hats in collaborative partnerships that lead to transgression of field boundaries can enhance innovation and is important for reflexivity, anticipation and responsiveness of RRI. An inclusive and transparent unlocking of predefined or predominant roles can fully unleash the potential of the collaboration. Strict role predefinition and assignment on the other

hand can be exploitative, e.g., due to assumed gender roles, or roles of junior/senior researchers.

If left unexamined, strict role maintenance and task division in collaborations can reproduce hierarchies of labour and power in wider society (cf. Federici, 2012). Matters that are related to, for example emotion work and relationship maintenance in collaborations, such as preparing meetings, taking notes, writing follow up e-mails, et cetera, are relegated to women and those less powerful. Also, leadership roles can be assumed without being verbally assigned, leading to irritation and sense of exploitation. Gate-keeper functions not shared to can lead to relations of dependency within the team when it comes to access to data, framing research questions, analysis and dissemination.

Especially the responsibility dimension of transparency can be jeopardized when roles and alliances are blurred or layered. However, it is also rather 'old fashioned' to imagine that the world is pure and unpolitical, and that the role assumed within the collaboration is not coloured and affected by other roles collaborators take in their work and private lives. How to engage with the complexity of social relations and roles when aiming for responsible collaboration and societal engagement?

The following questions aim to kickstart reflections about the pros- and cons of on the one hand insisting on all collaborators only having one role in the collaboration in planning and on the other hand engaging with the different roles that all collaborators have – or take on specifically for each collaboration. They draw attention to different power relations and possible obstacles of participation.

Reflective questions

Question	RRI dimensions	Process stage
<p>1. Try to map your own roles and relations and try to do it together with your collaborators/partners (academic colleagues and external stakeholders)</p> <ul style="list-style-type: none"> a. How do collaborators define their own and each other's roles? b. What roles are formally (and explicitly) defined. I.e., head of studies, head of research, coordinator, responsible for the funds, responsible for the mobilizing of volunteers, c. What roles are implicit i.e., wishes, aspirations, background knowledge about the local environment 	Transparency, reflexivity, anticipation	Initial, throughout
<p>2. How are roles connected to tasks (and hierarchy of tasks!) in your project?</p>	Transparency, responsiveness	Initial, throughout
<p>3. What roles change throughout the collaboration? Which roles would you like to develop?</p>	Reflexivity, anticipation	throughout
<p>4. Can the change of your own and your partners' roles help us rethink and reconceptualize inclusion? In what ways?</p>	Reflexivity, inclusion	Throughout, post project

Dilemma 3 - Vulnerability: should one expose oneself?

“(I) never had training as an academic in collaboration.” (Researcher)

“I am not as organized as our partner. So often she had to ask me ‘Have you all the things ready?’, ‘Would you please?’ (Researcher)

“I thought it (the project) was about work with students, we work a lot with students to change the syllabus, or to visit other countries with students, other university systems, or to have joint courses. But then I saw it was a research project. It was my mistake” (Researcher)

“I have always been very committed to being in the field, I didn’t want to deal with my own feelings. I always felt it was a waste of time. But then I appreciated our discussions and reflections and now I feel I have missed this before.” (Researcher/ Practitioner)

“Sometimes I wanted to give up, but one shouldn’t just because there is an issue. I slept over it and reflected about my own principles and knowledge. (Another colleague) kept saying that we are sensitive beings, this is the reason why we did not break relations.” (Researcher)

What are the personal and professional boundaries in collaborative spaces? Are they strictly reserved for research-related topics where there is no space for showing vulnerability, being exhausted, resentful, fearful, doubtful, hopeful? But isn’t the private also political, as the feminist adage goes?

Research is traditionally viewed as a ‘protocolized activity’ where intimacy – affective, emotional, bodily dimensions – is viewed as dangerous, unethical and as a source of bias (Latimer and Gómez 2019, 251). Nevertheless, the *“private, emotional, embodied, messy, and insoluble, as opposed to the calculable and controllable”* are a cornerstone of research practice, although it is often invisible (Davies & Horst 2015, 375).

If collaboration has an external and an internal dimension, which brings workplace related, professional knowledge and personal aspects into collaborative research relations, vulnerabilities can take a seat at the collaborative table, independent of

the person's background or working conditions. Collaborators can e.g., reveal themselves as not knowing or as being unprepared, maybe due to lack of time, lack of clarity about what to prepare for, etc. Admitting this can place the collaborator in a vulnerable position, exposing them as lacking expertise or a clear analytical mind. However, starting the collaboration from the standpoint of not knowing can be a fruitful way to create a safe environment for collective exploration and learning. Moreover, following Smolka et al (2021) the discomfort and emotion work associated with not knowing can be a path towards understanding epistemological differences between collaborators' different disciplines or approaches. Some feminist scholars such as Gilson (2011) argue that usually, vulnerability is understood as a weakness that implies being defenceless and exposed. The author argues for the need to re-think the meaning of vulnerability from an assumed negative category to an ambivalent one – vulnerability is a *“condition of potential that makes possible other conditions”* (ibid: 310), a state that can both limit and enable, and, ultimately, a condition of openness to *“being affected and affecting in turn”* (ibid: 310).

Consequences

Admitting to not being in line with the collaborative dynamics can also be considered an act of exposing one's vulnerability. For example, one can misunderstand what task they are expected to perform or how to perform it but are unwilling to share because the rest of the group seems to be in line with the decisions. Not creating a safe space for sharing these issues can lead to silencing of some concerns and topics in favour of pursuing a “go with the flow” attitude. This can lead to lack of transparency and misunderstandings.

The inclusion dimension of RRI does not only depend on who you open the collaboration for, but also how you do it. Not knowing to what extent and in what form one can share their doubts and vulnerabilities within the collaboration can significantly limit the capability of collaborators to establish trustful interpersonal relations and knowledge creation spaces.

Being aware of emotions and sharing one's vulnerabilities, demanding intimacy in collaborative dynamics can also be exploitative and marginalizing, because it dictates personal commitment in spaces which are often seen as professionalized and detached from emotion work. Hence, it is important to consider and discuss the dangers of exposing and not exposing personal/professional vulnerabilities in collaborative research to avoid imposing unwanted dynamics on participants. It is important for conducting responsible research to be aware of different approaches of collaborators to sharing/not sharing vulnerabilities - for some it is a need, for some it is a boundary.

The following questions aim to kickstart reflections about the pros- and cons of on the one hand sharing own personal concerns and insecurities with collaborators to build mutual trust and an inclusive atmosphere or on the other hand avoid sharing to ensure a more neutral and project focused collaboration.

Reflective questions

Question	RRI dimensions	Process stage
1. Have there been opportunities at the outset, or during your collaboration for the participants to express their doubts and concerns?	transparency	Initial, throughout
2. Could you dedicate time during meetings for sharing doubts and concerns about both the collaborative process and potential disagreements about the methodologies and theories etc. used for the project?	transparency	throughout
3. How could you acknowledge collaborators that do not wish to share?	inclusion	throughout
4. Have you experienced sharing your own vulnerabilities and confusions as an opportunity to reflect on the knowledge limits of our discipline's/sector's/theory's? • What happened?	reflexivity	Throughout, post project

Dilemma 4 - The struggle for professional acknowledgement - who do you then silence?

“It might be better to put an academic first, - for strategic reasons” (Researcher)

“That’s not the first workshop I organize, so it should work out” (Researcher)

“Yes, very lucky because we are researchers. There are specific times for the project. In one year, we make a small thing, but the question is not the result. We need a lot of time. (...). But it's not the end of the project. I have 20 years before my retirement, I have to do some things in these 20 years. (It is a) Long time to do things. (...) This project is one step, but perhaps in 2 years we can do other things. What can we do in 1 year? What can we do ... Or say, sorry, you are not good guys goodbye. Or (on the) contrary, you are great, let us do more.” (Researcher)

“I am very direct and say what I think. ... Maybe I came across as too headstrong with a temperament.” (Researcher/ Practitioner)

How to make sure that social dynamics do not only strengthen the collaboration and thus the legitimacy of each collaborator in the project, but also silence or marginalise certain voices? Establishing one’s personal/professional legitimacy is a routine part of a collaboration, especially in cases where the collaborators do not or hardly know each other, or in cross-disciplinary/cross-sectoral collaborations, which bring the additional challenge of plural backgrounds and frames.

In the early stages of collaboration, especially when collaborative research is short-term, legitimacy can be established through past experiences. Thus, in collaborations between academic and non-academic partners pursuit for legitimacy can be manifested by, for example, the use of academic jargon and showcasing academic knowledge. Non-academic partners can in turn resort to field experience – for example, saying that they work with a societal problem in question every day on the ground. Legitimacy can be claimed through appeal to one’s career seniority (“I have been doing this for 30 years!”), affiliation to an institution or previous successful experiences. Besides, legitimacy can be claimed through one’s position in the collaborative project – a project leader, a funder, etc.

Moreover, legitimacy can be claimed through relational positioning, for example, through compliance or agreement with the position of a collaborator/collaborators: It might be agreement with the strongest opinion brought forward in the group or through familiarity – e.g., we have been working together for many years and know each other's work. As the collaboration continues, partners can establish legitimacy through the quality of their work, acknowledged by other collaborators, creating genuine mutual agreement.

Establishing legitimacy can be an important part of collaborative experience. Following Rondinelli & London (2017) establishing legitimacy in cross-sectoral collaborations is associated with building trust and creating collaborative value.

Consequences

Keeping a strong focus on the necessity to establish legitimacy, especially through conventional hierarchies, can lead to reinforcing conventional power dynamics and limit the potential of empowering change. The urge to establish one's legitimacy is complex because it can reflect the opposite sides of power relations. One might feel the need to establish validity of their voice because of their vulnerable and underappreciated position in the collaboration, or because they want to reinforce their leading position.

Another aspect linked to internal aspects of collaboration is the need of partners to “legitimize” themselves or their institutions through the collaborative project. For instance, depending on career stage, the status of the institution or the discipline, partners can put different weight of importance on the collaborative project at hand, which might result in uneven workload distribution or emotional distress. Responsible collaborative research does not only imply direct responsibility towards the object of research or ethics related to research participants. It also means reflecting upon power structures and underlying mechanisms in research teams themselves and how they affect our research process – the positioning of research questions and objectives, the choice of methodologies, and the inclusion/ exclusion of certain aspects of the research question.

Establishing and negotiating legitimacy in collaborative research is closely related to negotiating, challenging or reinforcing power structures in research teams. Keeping away from thinking about and discussing these rather sensitive matters can hinder the inclusion, transparency, and reflexivity of collaborative research. Moreover, it affects the aspect of anticipation that refers to the ability to foresee and anticipate the consequences of research, of knowledge produced, but also of the relations you produce through collaborative work.

The following questions aim to kickstart reflections about the pros- and cons of on the one hand working hard to create social alliances and building strong relationships for the sake of the collaboration and on the other hand remaining sensitive to how these social dynamics may in fact prevent inclusion.

Reflective questions

Question	RRI dimensions	Process stage
1. Does your collaboration have a strict hierarchical structure based on conventional claims for legitimacy (seniority, affiliation, etc.)? How does it affect your collaborative process?	transparency	initial
2. Does it happen frequently that partners feel the need to establish their legitimacy in the process of collaboration? Why can it be the case? Can it be because they feel that their voices are not heard?	inclusion	throughout
3. What would it require to establish mutual legitimacy without reinforcing conventional hierarchies?	anticipation	Initial, throughout
4. Do you question established hierarchies and inequalities through the way you design, perform or communicate your project?	reflexivity	Throughout, post

Dilemma 5 - Cross-disciplinarity vs mono-disciplinarity?

“Is it scientifically valid if we have the written input from the participants and we add some notes, things that we are going to add as notes as our partner was saying, it will be in a very subjective level, does it make sense?” (Researcher)

“[This is our] first collaboration with this university alliance partner, we have to learn how they approach stuff. And hopefully [develop] future ventures [too].” (Researcher)

“We have remained at the practical and applied level. We have not engaged in more conceptual, epistemological, hermeneutical questions. We will see. (...) What I see in the partner (...), they are practical. They are into applied methods and put them in practice. In our university, we like to have a theoretical background, sometimes a lot of debate on what is a concept. But both approaches are good. We can discuss six months on a concept, or we can move. I personally like to move, but not forget the concepts. Let us move and think about what the concept is while moving. Social scientists have to take approaches into account, but I think we can start on some basic and solid ground.” (Researcher)

“Sometimes different backgrounds are an issue, but more of an opportunity, a chance to learn and to achieve the goals of the project. There were many exchanges about methodology, concepts and theory. It was difficult, because everyone is so so busy with many other things. But I believe we found a balance.” (Researcher)

How do researchers step out of academic norms they are socialized in? How to negotiate different aims of science, which can be data production and analysis, to apply research, or to engage in critical perspectives related to social change? Research on complex socio-ecological issues requires collaboration between different disciplines. Cross-disciplinary collaborations enhance the integrative approach to global issues through knowledge sharing and knowledge translation. However, cross-disciplinary collaborations also come with constraints. The first, and most obvious challenge is the need for time and effort to understand and clarify each other's language: conceptual and methodological. We might have different norms and values around science: some see the values in neutrality, objectivity and

replicability, some understand the fusion between academia and activism as an integral part of being a researcher.

Moreover, we can have certain biases which we reproduce in cross-disciplinary collaborations. These can refer to, for instance, an unspoken hierarchy of disciplines and methods. Natural and technical sciences might see social sciences and humanities as a less valid part of academia. Vice versa, researchers belonging to SSH (social science and humanities) traditions might perceive STEM (science, technology, engineering and mathematics) as over-relying on numbers without space for reflexivity. Besides, cross-disciplinary collaborations sometimes intersect with other normative dimensions, for example gender – SSH often have more female researchers than STEM.

Consequences

Approaching cross-disciplinary collaborations without reflecting upon these pre-assumptions might lead to not only frustrations, but also impede dimensions of responsible research, namely, reflexivity – *“holding a mirror up to one’s activities commitments and assumptions, being aware of the limits of knowledge and being mindful that a particular framing of an issue may not be universally held”* (Stilgoe et al. 2013, 1571)

The following questions aim to kickstart reflections about the potential biases and dilemmas of approaching complex societal problems through interdisciplinary encounters.

Reflective questions

Question	RRI dimensions	Process stage
1. What role does mutual learning and unlearning play in your cross-disciplinary collaboration?	reflexivity	Throughout , post
2. Do you dedicate time in collaborative spaces for “translation” of discipline-specific language (concepts, epistemologies, methodologies)?	reflexivity	throughout
3. Does collaboration with certain disciplines cause unease for you? What are the sources of this unease?	reflexivity	initial
4. Have you tried to openly discuss your presumptions and uncertainties about your collaborator’s discipline? What happened?	transparency	Initial, throughout

Dilemma 6 - Are we lost in translation in cross-cultural collaborations?

“Our objective was do that, do that, do that, respect the timetable. That was my expectation of (the) Anglo Saxon person. French people have objectives but are always late. T(his is t)he first time I partake in work with an objective but will try to see how people are doing together. [To] exchange informally. Symbiosis in the group. That is important. (...) Its a break, a rupture, between the action and the way of living. A very resourcing, there way. They are calm, exchange. And to go into action you need this energy.” (Researcher)

“I’m planning in Danish culture, and you are planning in Mediterranean” (about the differences in when to have lunch in the workshop ed.)”, (Researcher)

“I appreciated the dynamics of Anglo-Saxon exchanges, the opening and closing of the meetings, focusing on the emotions of participants, which goes completely against the French way of doing meetings” (Researcher)

“If I want to understand what you mean, I need to translate what you said. And vice versa. Each people have their own cultural background. Easier when we talk about scientific domains. But each time we need to translate just to make a precision of what do you want. And because we are researchers we explore specific things, with specific concepts.” (Researcher)

“It was not translation that was needed, what we did was sharing. Right now I am not sure what will come next in the sharing phase, but it is not so much about tools and methods, but about articulations.” (Researcher)

“We were lacking time where all team members are together, we are in different countries, not all were involved in all phases.” (Researcher)

Academic collaborations increasingly include partnerships across countries. Partners come together to work on a particular project and outcome, oftentimes performing work online, while still in the countries that are their base. This implies that they might be entering the collaborative space with culturally specific ideas about what working together is and should be, hierarchy, propriety of tasks, gender and division of labour, or even what a meeting is. These aspects have profound, but oftentimes unspoken effects on the dynamics of working together. They are not tacit

because the partners necessarily have an intention of occluding the culturally situated aspects of their professional performance, but perhaps because they are internalized aspects of our identities and socialites. They are the things we do and have been doing for such a long time that we take them for granted. If we often work together with those from similar backgrounds, these presumptions risk going unquestioned, and thus, presumably universal. Moreover, cross-cultural collaborations can frequently be a source of unequal power relations and marginalization, for example, producing unequal processes between scholars from high-income and low-income countries in relation to questions of authorship and compensation (Urassa et al., 2021). Cross-cultural collaborations, following Thomas et al. (2009), are a fruitful ground for reflexivity about researcher-knowledge relations, because collaborating in an intercultural team can accentuate how knowledge is always shaped by one's particular history and culture.

These cross-cultural collaborations are thus an opportunity to experience and take note of frictions, moments of confusion, misunderstandings and potentially conflict. While this can be discomforting, it is also an excellent opportunity to view oneself and the practices one has learned as being appropriate more clearly. Is this the right way? Is this the only way? How are our differences affecting our understanding of our object of collaboration? What are the effects of those differences on how we divide roles, how we speak to each other, what kinds of outputs we work on and what kinds of goals and futures we imagine?

Consequences

Not all the things we bring into collaborations are constructive resources. Some aspects of our naturalized behaviour might in fact be posing challenges and boundaries for working together. Collaborators risk reproducing inequalities in their expectations of themselves and others, creating exclusion and marginalisation. Also, even if ethical guidelines have been followed, one can risk that agreements are still enmeshed in inequalities. From an ethics of care perspective transparency, inclusion and responsiveness are endangered by culturally inflicted power dynamics. On the other hand, we have the opportunity of reflection and anticipation

of outcomes shaped by conscious awareness of how our differences affect our understanding of our object of collaboration, of our division of roles and what kinds of goals and futures we imagine. It requires the art of making the internal dimension of collaboration – the cultural codes of academic work in different countries – visible and negotiated. This requires active engagement with intercultural skill development, starting with reflection.

The following questions aim to kickstart reflections about the pros- and cons of working in cross-cultural collaborations, both helping to make visible differences in cultural identities, power dynamics and how our cultural differences affect the ways we portray our object of collaboration.

Reflective questions

Question	RRI dimensions	Process stage
1. How would it be possible for you to take different ways of understanding and being in the world of your collaborators into account?	Reflexivity, responsiveness	throughout
2. What challenges you most in the way your collaborators perceive and define the problem you work together with?	transparency	throughout
3. What would it require for you to approach the collaborative matter of concern in a different way?	anticipation	Initial, throughout
4. How could you ask your collaborator to suggest a new way of reaching out to relevant stakeholders?	inclusion	throughout

Dilemma 7 - Cross-sectoral collaboration – Multiplying resources or creating misunderstandings?

"I organized many workshops focusing on process not the result. But for our partner, she is more used to be focused on the result. So, in this sense, there were different expectations of the outcome." (Researcher)

"We academics, we are socialized into specific norms. These collaborations are useful to ground ourselves. In collaborations with NGOs for example, you need to think; can we talk about something like degrowth, will they lose the funding, if they talk about degrowth". (Researcher)

"As business partners we don't want to engage in something that is not funded, like MOOCs (Massive Open Online Courses)" (External partner)

"My learnings [from the collaboration] were; learning about my own privilege, my own role – working with someone who is not from my professional world, but from private sector" (Researcher)

How to deal with differences in resources, working styles and opportunities that collaborative partners from different sectors bring? How to avoid, systemic and interpersonal misunderstandings and possible misuse of outputs?

Cross-sectoral research collaborations are aimed at enhancing knowledge democracy and the creation of better interlinkages between research and society. Models such as the 'triple helix' and 'quadruple helix' anticipate university – industry – government and civil society relations beneficiaries – users of research and innovation (Garrett-Jones et al., 2005).

At the same time, cross-sectoral collaborations can be a source of divergence in expectations leading to conflicts. This can be reflected in different ideologies and values, terminology or expectations about process and outcome of the collaboration. Although not universally applicable, differences in institutional and funding structures of academic and non-academic collaborators can predetermine conflicting expectations about the process and outcome of a collaboration, demonstrating the impact and limitations of internal factors on cross-sectoral collaborative settings. Different funding patterns (e.g., funding based on many short-

term projects or on commercialization of a product vs long-term funding or tenure track) can create different expectations of the collaboration's outcome – e.g., results oriented vs process oriented). This funding differences can also be a cause of some partners feeling more vulnerable in the collaboration than others.

Consequences

Failing to tune in to each other's different possibilities and vulnerabilities can hinder transparency, inclusion and reflexivity. Entering the cross-sectoral collaboration with the assumption that partners are aligned in their motivations, conceptual understandings, time resources, and expectations of the process and outcome can place some partners in the position of vulnerability. Moreover, cross-sectoral research is crucial for the anticipation aspect of RRI, understood as *“broader foresight and impact assessments for new technologies, beyond their anticipated market-benefits and risks”* (von Schomberg 2013, p. 51). It requires research and innovation based on societally beneficial objectives or challenges to be collectively negotiated by a plurality of societal actors. Hence, the anticipatory aspect of RRI can be lost if cross-sectoral collaborations are burdened with unaddressed unalignment and misunderstandings.

The following questions aim to kickstart reflections about the pros- and cons of working in cross-sectoral collaborations, both helping to make visible differences in time resources, funding structures and impact expectations and understandings.

Reflective questions

Question	RRI dimensions	Process stage
1. Do you take time to address available resources and constraints which come from collaborator's positioning in different sectors?	inclusion	throughout
2. Do you acknowledge you own privileges or limitations which come from your position in academia/private business/ NGO? How do you use this knowledge in the collaborative process?	Reflexivity	throughout
3. What challenges you the most in the way your collaborators perceive/define the problem you work together with? How would it be possible for you to consider different ways of understanding and being in the world of your collaborators?	Transparency anticipation	Throughout, post project

Dilemma 8 - How do you prioritize? Managing resources or relationships?

“But when our colleague comes to our country, and when we go to theirs, there will be... After work we take some beer and eat together and talk about other things than the project. [We will talk about] music and cinema, I don't know. But to do this, we need time other than a video call. Which is to do work. We need a place to meet and talk about life.” (Researcher)

“Before working with someone, we need to smell it” - we say in our language. I think it smells good. Not a question of perfume. Just of someone being a good guy or woman. We can talk together; we can work together. For me, it's the first step. Perhaps my own character is particular. Perhaps I meet different person. Or like me. But I think it's the first step of the work. And after we try to do something. It's like this. Perhaps we are lucky, the majority of our colleagues are interested in difference. We do this job because we want to meet other people. It is easier to meet someone. Because the other also wants to meet someone.” (Researcher)

“There are some basics. Some basics expectations when you collaborate, that you expect that they are on time. If they are not, then there is no commitment. (...) So, our partners, were always on time. In a super, good mood. Very respectful. That to me was enough to say, yes, this is going to work. There are going to be differences, that is common. I try to give back the same respect to them. Inter team, and interpersonal. From our university, my colleague and I have worked together so many times. There has been no real conflict. Conflicts at that point are hour long discussions about concepts, and we will not agree. We will have deep discussions.” (Researcher)

“We were discussing with my colleague. (...) He is already thinking about specific deliverables. He is willing to share with others. (...) He is present, I think that having the structure is useful. And we are lucky. It gives us time, and I don't have to worry. For us, if I feel backed up by the engagement and my colleague's energy, I would be ready to discuss more. Perhaps I would be willing to discuss with him more into depth. In an epistemological way. I would challenge him in a more conceptual level. I know that it will happen in the airport, or when coming back from the June [meeting]” (Researcher)

“(...’s) role was difficult because of different hats, at times (they) were emotional and sensitive. I appreciate how (they) found a way to balance the roles. Sometimes it was difficult to separate the two, or it was confusing, especially for (...) and (...). (Researcher)

“Collaboration needs optimism and positive mindsets, they are the most important drivers.” (Researcher)

How do we deal with interpersonal differences in collaboration? This dilemma is mostly related to the internal dimension of collaboration which becomes to some extent externalised through collaboration. When we enter new relationships, we are resourced (or not) by our experiences and trajectories, our interests and personalities (Dupret et al. 2022). These differences can be embodied in things such as different work styles, different energy levels, different paces of production, different communication styles et cetera. These aspects, which broadly fall under the category of the individual and their personality, are most often not addressed or attempts to do so can seem irrelevant or unprofessional. The individual is nevertheless a component of collaboration, as collaborations are relationships, and the individual and their background, life stage et cetera, is the resource of the relationship. This is a call to acknowledge the situatedness of knowledge and possibility for or constraint upon action (cf. Haraway, 1988), that renders the knowing, or in this case, collaborating subject as one embedded in power relations specific to their subject position.

Consequences

Acknowledging each other's subjective difference can enable the collaborators to feel seen and included. Likewise, acknowledging the effect of individual engagement can make us feel resourced, or the opposite, make us feel redundant, and our efforts wasted. If left unexamined, these kinds of differences can be a source of tension or conflict. They require that the partners have an awareness about what their working and communicative styles are and how they might impact the ways in which they perform collaborations. Being mindful about individual aspects in the collaboration can help us with reflection of our collective frames,

inclusion and responsiveness within the partnership, and help negotiate the ethics of care dimension of anticipation of normative effects of collaborative actions. On the other hand, rendering issues as 'mere' questions of personality can de-politicize and move the focus away from what could be rooted in structural conditions or resources that need to be addressed on these levels too.

The following questions aim to kickstart reflections about the pros- and cons of addressing personal perspectives and approaches that may affect collaborations., keeping in mind structural conditions that may affect collaborations also.

Reflective questions

Question	RRI dimensions	Process stage
1. Have you attempted to get to know your collaborators, and inquired on their motivations for participating in your project?	inclusion	Initial
2. Have you provided your partners with the opportunity to discuss any constraints on the extent and way they collaborate?	Transparency, anticipation	throughout
3. What is holding you back from sharing a particular perspective on your project or work together? Are you holding someone else back?	Reflexivity, inclusion	Initial, throughout, post project

Dilemma 9 – Are you an excellent researcher or an excellent social change innovator?

“I am one of those stupidly collaborative people, I like working with people. That also means I will not be a professor anytime soon” (Researcher)

“(We want to) involve the non-academic stakeholders in the research design, not use them. (We are) not extracting information. But involving the participants to design the methodology to extract the information.” (Researcher)

“In (the) human, social sciences; it is lots of women in the staff. (There are) practical tasks that feel normal that we do but add up to time consuming. (...) It is a whole different job, but people say it is easy. As there is no time dedicated for that. To see how research projects are framed. Excellence works in a different way where you do not have dedicated all this time.” (Researcher)

“The idea was to make this the beginning of a larger European project, but then (two research partners) pulled out of the field work, they seemed to be less committed. My commitment was strong because of my proximity to the case, but also because of the work ethics that I share with (one research partner).” (Researcher)

How to juggle collaborative methodologies with academic excellence and performance metrics? Policy makers and funders, such as the European Commission, increasingly require collaborative, interdisciplinary, inter-sectoral and engaged research designs, making collaborative research desirable in the external dimension of collaboration. Likewise, experience in different types of collaborations with a variety of societal actors can be an advantage in academic career development, at least in certain disciplines. This can be taken as recognition of the transformative potential that research can spur in tackling wicked problems in society. Collaborative research, with its numerous tensions, uncertainties and pressures, is a fruitful ground for transformative social change through democratic deliberation and social innovation. On the internal dimension of collaborative research, however, collaborative practice can turn out to be at odds with contemporary research evaluation criteria that increasingly rely on quantitative

metrics. It is also time intensive and can be difficult to integrate in already heavy workloads, making it a matter of personal commitment.

Consequences

Colliding academic merit systems with collaborative practices and requests for societal engagement is not easy. Some would say that these practices are even incompatible, because collaborative research takes up a lot of time and resources away from focusing on more traditional excellence indicators, such as number of publications. This incompatibility is highly paradoxical. While funders increasingly require collaboration, there is little acknowledgement and institutional support at the university level, which leads to misalignment between researchers engaging in collaborative research and research evaluation metrics. Moreover, integrating the dimensions of responsible research in collaborations by developing reflexivity, inclusion, transparency, etc. requires even more effort. Building relationships and building trust are different results than articles and H-index outputs. An increasing number of researchers and initiatives are calling for a re-evaluation of how impact, evaluation and excellence are defined and approached in research, particularly where societal engagement is involved. This strand highlights the need for qualitative or context-dependent ways for conducting these endeavours, taking into consideration the time and relationality involved in stakeholder interactions (cf. Dupret et al. 2022, Reed et al. 2021). Similar institutional conditions might also affect non-academic collaborative partners.

The following questions aim to kickstart reflections about the dilemmas in focusing on conducting collaborative research while at the same time having to comply to excellence measures or institutional/ organisational goals.

Reflective questions

Question	RRI dimensions	Process stage
1. Is collaborative research an asset or an obstacle for you in terms of conducting responsible research? And in terms of the academic career? Why? Do you have to compromise? For practitioners: Do the benefits of researchers outweigh challenges such as extra time needed, negotiating different institutional logics?	reflexivity	initial
2. How does your collaborative research contribute to your goals and ambitions of conducting research for social change?	responsiveness	Initial, post
3. Do you feel that collaborative research is backed up by support structures (in your organisation, by funding bodies, or at the policy level)?	reflexivity	throughout

Dilemma 10 – Boundaries: Showing integrity or being marginalized?

“I don’t have the capacity to transcribe, and I cannot hire someone to do that. It is not viable for me. It’s a no. I mean, I can, but it would be abusive (...). This is a small project, I cannot do” (Researcher)

“I can give an opinion, but I have no experience in such things. Especially in psychosocial research. The other partner and I are [doing research] on an institutional level. Most of the research is not on that level, not trained to observe people on such a micro scale. I don’t give recommendations or learning take-aways as part of my research. [I’m] not in a position to give advice.” (Researcher)

“My lesson is about translation. We always need to ask other people, if they understand. Generally, I understand. But if you want to be precise, we need to make a new definition and discussion. Ask, “do you understand?”. (...) And it’s always and an exploration when you talk to someone.” (Researcher)

“(University name) has a very vocal culture around collaboration, but that does not seem to be so much the case in other places.” (Researcher)

How can people from different sectors, cultures, countries and personal interests work together relatively harmoniously? Is it possible to agree a workflow without clearly expressing boundaries (of expertise, of willingness to take on work, of tone of discussions and of organisation)? How to negotiate boundaries without being the bad guy for having them?

In our interactions in the collaborative space, we practice openness to each other, but also expose our boundaries. These boundaries come from both the realm of the personal, in terms of motivations for participation, interest in topics, general level of energy and health, and time available as to how much and how one can be engaged. There are also institutional boundaries, in terms of the type of one’s tenure and the time that is allocated to certain tasks. Boundaries could also originate in silenced or tabooed topics, that are rooted in power hierarchies, engagement with hypothetically conflicting issues or partners et cetera. All these types of boundaries converge to the personal level. Some, or all of them might be activated within the collaboration. They might also be transgressed. The individual partner/ participant is expected to

be able to express one's own boundaries, and perhaps be open to negotiate some of them.

But perhaps expressing boundaries has become a tabooed topic. Considering that there is no generally or institutionally agreed upon way to conduct collaborations, there are also no guidelines on how one is to experience or express boundaries. When there is no language for addressing these matters, collaborations seemingly need to flow without any explicit alignment of needs, expectations and boundaries of one's engagement. Katz & Ahmed write that there is a time for 'yes' – and there is a time for 'no', and that 'no' raises boundaries and protects what is precious to us despite our fears (2020). They also add that no is not easy to articulate as everyone seemingly wants us to say yes, but that it is the only way we can create time for our priorities and the things and people we love (ibid.). Boundaries are indeed tricky and setting them is a risky practice (Haraway, 1988). But they are essential, as collaboration both depends on practices that establish connections and exchange, as well as boundaries and delimitations, be it of the new object that the collaboration is attempting to constitute, or of the personal integrity and wellbeing of those involved. The former should not threaten the existence of the latter.

Consequences

It can be difficult to voice one's boundaries. Especially in heterogenous teams with cross-cultural or cross-sectoral dimensions and hierarchical status, one might feel unsure what is a norm and what should be a no-go. When boundaries are only expressed after they have already been transgressed and have become a particular individual experience, the tone can become that of outrage, framing the situation as conflict. From a care ethics perspective such an atmosphere undermines transparency and inclusion, and probably threatens responsiveness. Expressing boundaries need not wait until they are transgressed. As one of our informants suggested, it is a communicative process in which one can both present one's own positioning, as well as explore that of the other.

The following questions aim to kickstart reflections about the pros- and cons of addressing personal perspectives and approaches that may affect collaborations

while bearing in mind that addressing these personal dimensions at the same time risk silencing structural conditions that may affect collaborations also.

Reflective questions

Question	RRI dimensions	Process stage
1. Do you dedicate time for reflection and self-reflection on the personal and professional resources one can mobilize for a project / collaboration at hand and evaluate what is negotiable?	Responsiveness	Initial, throughout
2. If you notice that in the collaborative space your boundary is transgressed, how do you communicate it? Do you communicate it at all?	transparency	throughout
3. How do we become better at being aware of our boundaries and expressing them early on in a collaborative space?	Transparency, inclusion	Initial, throughout

Dilemma 11 - Is it about the output or the ongoing learning experience?

"It has been long time since someone was interested in process of collaboration. Usually we run to finalize, here is the deliverable" (External partner)

"For me, if the objective was to publish something, and we don't do that, for me it doesn't matter, I wouldn't perceive it like a failure, because for people also it is important to create communication" (Researcher)

"Q: How has your project (so far) had an impact? A: "There is an impact on me, I learned a lot of things. Other, different ways of work" (Researcher)

"I think interdisciplinary is interesting. But it's really, I hope we can work together as a team so that in the longer run we can have other projects in areas that seem to interest us all... I tend to work [for a] long time. (...) Note that this specific project is very committing to me." (Researcher)

"We had a good debriefing, it was a positive experience for practitioners to be interviewed. You must allow yourself to be surprised by the results of different approaches and get inspired by them." (Researchers)

"National environments and the ways institutions work are not easily challenged, but collaboration across borders can open your eyes for possible alternatives." (Researcher)

How to deal with different interpretations of the basic aims of a project? How to develop a mutual understanding of sources, individual and collective goals, what to prioritize and how to plan ahead? Or how to develop milestones that can diversify the aim, so that it is not one singular thing, and accommodate several sectors' interests? Different sectors can have different interpretations of what constitutes deliverables or deadlines, and how to uphold them. This is not to imply that one is more flexible than the other, but perhaps that they differ or might differ within the team despite their sectorial belonging. While it is important to uphold deadlines and agreements with funding bodies, it is also important to acknowledge the learning, mutual adjustment and idea generation happening on the part of the collaboration at hand. This implies giving time to acknowledge each other, to merge internal with external aspects of collaboration, to be thankful and take care of each other, as well

as the project one is working on. Highlight any sources of tension. Perhaps the project has a limited time-frame but can be a source of learning and new relationships that one can be taken further in other projects.

Consequences

These guidelines are largely directed towards the dimensions of RRI. However, RRI can be thought of as a “boundary object” that is understood and used differently by different social worlds (Dupret et al., 2022; Ruggiu, 2019). Some opine that agendas such as RRI not only create opportunities for research but simultaneously impose constraints on how science is done by instrumentalizing into one size fits all procedures without the applied knowledge of specific disciplines and local practices and this way narrowing down the focus of research (Latimer 2019). Following Latimer (ibid) there is danger of “*jeopardising the conditions of possibility for intimate knowledge of a subject built over years of immersion, contemplation and collective endeavour*” (p.267). Approaching responsible research alongside the democratic tradition of social innovation (Dupret et al., 2022) suggests the necessity to emphasize the importance of process of collaborative research as much as the outcomes, attributing as much importance to the type of relations created and sustained in a collaboration as to the deliverables. Applying such a processual awareness requires first and foremost the acknowledgement of its importance in the success of the project, but also the willingness to enter a mutual and not least personal space of reflection and learning.

The following questions aim to kickstart reflections about the pros- and cons of working with a specific focus on the outputs, impacts and objectives of the collaboration not including the personal preferences, experiences and empowering potentials in the equation.

Reflective questions

Question	RRI dimensions	Process stage
1. How do you create the space to have fun? Is there space in your collaboration to think about what makes you curious and excited about this research project?	anticipation	Initial, throughout
2. Have you thought what is your own best practice for collaborative research?	reflexivity	initial
3. Do research collaborations give you food for thought and open new research horizons or exhaust you? What can you do to make the collaborative process an exciting endeavour for yourself and the partners? Can you create space in your collaboration for discussing it?	inclusion	throughout
4. What would happen if you included time and space in the collaboration for process-building goals besides outcome orientation?	responsiveness	throughout
5. What would happen if you explicitly addressed learning and unlearning as part of your collaboration both cross-disciplinary and with external stakeholders? Where not knowing, not understanding and not following is an opportunity for collective redefinition of mutual pre-assumptions?	transparency	Initial, throughout, post

Conclusion

The dilemmas that we have addressed herein point to some general principles that we recommend that researchers can attend to when conducting collaborative research – taking into consideration the internal and external perspective. We promised to provide you with any golden rules or ‘one size fits all’ models or tools for conducting the best research collaborations. This report does not give finite answers about what, when and how one should act to optimize collaboration across sectors. Rather, we ask you to recognize the multivocality and the situatedness of the particular collaborative situation you are in. We offer what can be taken as a reminder of the complexity of collaborative work. Your collaboration is unique to you, as it is made from the different kinds of resources, motivations, contexts and personalities that you have amalgamated. So, with this report and its reflective questions we offer you an approach that invites you to view your collaboration

through multiple lenses and see what you might need to address in your case – on a personal level, and with your collaborators and institutions. We hope that we have composed a reminder for you to re-examine your own motivations for collaborative work, as well as pointed towards the value of attempting to see and acknowledge those of your collaborative partners. The reflective questions can be a step on the way towards you collectively and inclusively finding your unique path with your team. We thus propose that the way to improve the quality of your collaborations should be a reflective, open and ongoing process, conducted through a relational and ethics of care lens. The relational, we remind the reader, is connected to particular institutional and political conditions and contexts. When collaborating for social innovation and societal engagement we invite you to take into consideration the following principles:

Keep in mind responsiveness, anticipation, reflexivity, inclusion, and transparency. Based on these analytical venues, we focus on the following aspects which play a role in constituting collaborative research:

- **Relational:** reformulating/rethinking motivations and modes of actions in line with collaborative objectives/individual interests, possibilities and vulnerabilities
- **Plurality of knowledge:** how do participants negotiate, create a dialogue between different disciplines and epistemologies?
- **Practices:** what qualifies a good collaboration (e.g., logistical aspects)
- **Organizational support infrastructures:** how do partner organizations support collaboration?
- What is **the impact** of collaborative practices: 3rd mission, social impact, excellency, changes in practices among stakeholders, increase of reflexivity, inclusion, gender equality
- Openness to each other

Curiosity, seeing each other as a vessel of knowledge

Openness to learn and unlearn

References

- Avelino, Flor. "Theories of Power and Social Change. Power Contestations and Their Implications for Research on Social Change and Innovation." *Journal of Political Power*, vol. 14, no. 3, 2021, pp. 425–48, <https://doi.org/10.1080/2158379X.2021.1875307>.
- Bauer, A., Bogner, A., & Fuchs, D. (2021). Rethinking societal engagement under the heading of Responsible Research and Innovation:(novel) requirements and challenges. *Journal of Responsible Innovation*, 8(3), 342-363.
- Bellacasa, M. P. (2011). Matters of care in technoscience: Assembling neglected things. *Social studies of science*, 41(1), 85-106.
- Bellacasa, M. P. (2017) *Matters of Care: Speculative Ethics in More Than Human Worlds*. Minneapolis and London: University of Minnesota Press.
- Bonney, R., Philipps, T., Ballard, H.L. & J.W. Enck (2016) Can Citizen Science Enhance Public Understanding of Science? *Public Understanding of Science (Bristol, England)*, vol. 25, no. 1, pp. 2–16.
- Branch, T. Y., & Duché, G. M. (2022). Affective Labor in Integrative STS Research. *Science, Technology, & Human Values*, 01622439221143804.
- Carpentier, Nico. "Beyond the Ladder of Participation: An Analytical Toolkit for the Critical Analysis of Participatory Media Processes." *Javnost (Ljubljana, Slovenia)*, vol. 23, no. 1, 2016, pp. 70–88, <https://doi.org/10.1080/13183222.2016.1149760>.
- Davies, S. R., & Horst, M. (2015). Crafting the group: Care in research management. *Social Studies of Science*, 45(3), 371-393.
- Dupret, K., Eschweiler, J., Umantseva, A., & Hyldkrog, R. (2022). Mapping Innovation and Societal Engagement: Responsible research through a care ethics perspective. Roskilde University <https://doi.org/10.13140/RG.2.2.31722.59845>

- Dupret, K., & Eschweiler, J. (2022). How Do Participatory Governance and Reciprocity Impact Working Conditions in the SSE Organizations? An Emotion Work Analysis. *Journal of Social Entrepreneurship*, 1-23.
- Dupret, K., & Pultz, S. (2021). Hard/heart worker: Work intensification in purpose-driven organizations. *Qualitative Research in Organizations and Management*, 16(3/4), 488-508. <https://doi.org/10.1108/QROM-07-2020-1989>
- Dupret, K., Munksgaard, M. & Hansen, A.V. (2024/in press). Participation in social innovation processes: a case study of Roskilde University Impact Hub. In Eschweiler, J. Dupret, K. & Langergaard L.L. (eds.). Learning about social entrepreneurship and management during social transformation. Ethical Economy series. Springer
- European Commission. (2013). Responsible Research and Innovation (RRI), Science and Technology.
- European Commission, Directorate-General for Research and Innovation. (2016). *Open innovation, open science, open to the world – A vision for Europe*, Publications Office. <https://data.europa.eu/doi/10.2777/061652>
- Federici, S. (2012). Feminism and the Politics of the Commons. In *The Wealth of the Commons*, eds. D. Bollier, and S. Helfrich. The Commons Strategies Group. Accessed at: <http://wealthofthecommons.org/essay/feminism-and-politics-commons>
- Fisher, E., & Rip, A. (2013). Responsible innovation: multi-level dynamics and soft intervention practices. *Responsible innovation: Managing the responsible emergence of science and innovation in society*, 165-183.
- Fleming, P., & Sturdy, A. (2009). “Just be yourself!”: Towards neo-normative control in organisations?. *Employee relations*.
- Fraser, N. (2016). Contradictions of capital and care. *New Left Review*. Issue 100, July/August 2016.

- Garrett-Jones, S., Turpin, T., Burns, P., & Diment, K. (2005). Common purpose and divided loyalties: the risks and rewards of cross-sector collaboration for academic and government researchers. *R&D Management*, 35(5), 535-544.
- Gianni R., Pearson J., Reber B. (eds.) (2019). *Responsibility in research and innovation - From Concepts to Practices*. Routledge.
<https://doi.org/10.4324/9781315457291>
- Gilson, E. (2011). Vulnerability, ignorance, and oppression. *Hypatia*, 26(2), 308-332.
- Grinbaum, A., & Groves, C. (2013). What is “responsible” about responsible innovation? Understanding the ethical issues. *Responsible innovation: Managing the responsible emergence of science and innovation in society*, 119-142.
- Hamington, M. (2014). Loyalty to care: Royce and a political approach to feminist care ethics. *Pragmatism Today*, 5(1), 8-17.
- Haraway, Donna. (1988). "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, 3: 575-599.
- Huynh, T., Alderson, M., Nadon, M., & Kershaw-Rousseau, S. (2011). Voices that care: licensed practical nurses and the emotional labour underpinning their collaborative interactions with registered nurses. *Nursing research and practice*, 2011.
- Jonas, H. (1984). *The imperative of responsibility: In search of an ethics for the technological age*. University of Chicago press.
- Katz, D. & Ahmed, S. (2020). *Oh hell no: and some other ways to set some damn boundaries*. Chronicle Books LLC.
- Latour, Bruno. “Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern.” *Critical inquiry* 30.2 (2004): 225–248. Web.
- Skarlatidou, A. & Haklay, M. (2021) *Geographic Citizen Science Design : No One Left Behind*. UCL Press.

- Smolka, M., Fisher, E., & Hausstein, A. (2021). From affect to action: choices in attending to disconcertment in interdisciplinary collaborations. *Science, Technology, & Human Values*, 46(5), 1076-1103.
- Stilgoe, J., Owen, R., & Macnaughton, P. (2013). Developing a framework for responsible innovation. *Research policy*, 42(9), 1568-1580.
- M.S. Reed, M. Ferré, J. Martin-Ortega, R. Blanche, R. Lawford-Rolfe, M. Dallimer, J. Holden. Evaluating impact from research: a methodological framework. *Res. Pol.*, 50 (2021), Article 104147, 10.1016/j.respol.2020.104147
- Latimer, J., & López Gómez, D. (2019). Intimate entanglements: Affects, more-than-human intimacies and the politics of relations in science and technology. *The Sociological Review*, 67(2), 247-263.
- Miller, K. L., Reeves, S., Zwarenstein, M., Beales, J. D., Kenaszchuk, C., & Conn, L. G. (2008). Nursing emotion work and interprofessional collaboration in general internal medicine wards: a qualitative study. *Journal of Advanced Nursing*, 64(4), 332-343.
- Moulaert, F., & MacCallum, D. (2019). *Advanced introduction to social innovation*. Edward Elgar Publishing.
- Owen, R., J. Stilgoe, P. Macnaughten, M. Gorman, E. Fisher, D. Guston (2013) A framework for Responsible Innovation. In R. Owen, J. Bessant, M. Heintz. *Responsible Innovation: Managing the responsible emergence of science and innovation in society*. Wiley Doi:10.1002/9781118551424.ch2
- Pellé, S. (2019). Responsibility in research and innovation: The potential of care ethics. In *Responsible Research and Innovation* (pp. 268-285). Routledge.
- Rondinelli, D. A., & London, T. (2017). Stakeholder and corporate responsibilities in cross-sectoral environmental collaborations: Building value, legitimacy and trust. In *Unfolding Stakeholder Thinking* (pp. 201-215). Routledge.
- Ruggiu, D. (2019). Models of anticipation within the responsible research and innovation framework: The two Rri approaches and the challenge of human rights. *NanoEthics*, 13(1), 53-78.

- Ruggiu, D. (2020). Inescapable frameworks: Ethics of care, ethics of rights and the responsible research and innovation model. *Philosophy of Management*, 19(3), 237-265.
- Shirk, J. L., H. L. Ballard, C. C. Wilderman, T. Phillips, A. Wiggins, R. Jordan, E. McCallie, M. Minarchek, B. V. Lewenstein, M. E. Krasny, and R. Bonney (2012) Public participation in scientific research: a framework for deliberate design. *Ecology and Society* 17(2): 29.
- Stahl, B. C. (2013). Responsible research and innovation: The role of privacy in an emerging framework. *Science and Public Policy*, 40(6), 708-716.
- Thomas, R., Tienari, J., Davies, A., & Meriläinen, S. (2009). Let's talk about "us" a reflexive account of a cross-cultural research collaboration. *Journal of Management Inquiry*, 18(4), 313-324.
- Tronto, J. (2013, March). Democratic caring and global responsibilities for care. In *Annual Meeting of the Western Political Science Association* (pp. 1-10).
- Tronto, J. C. (1993). *Moral boundaries: A political argument for an ethic of care*. Psychology Press.
- Tronto, J. C. (1998). An ethic of care. *Generations: Journal of the American Society on Aging*, 22(3), 15-20.
- Umantseva, A., Dupret, K., & Lazoroska, D. (forthcoming). Collaboration in responsible research and innovation (RRI) through ethics of care – a literature review. *Journal of Responsible Innovation*.
- Urassa, M., Lawson, D. W., Wamoyi, J., Gurmu, E., Gibson, M. A., Madhivanan, P., & Placek, C. (2021). Cross-cultural research must prioritize equitable collaboration. *Nature Human Behaviour*, 5(6), 668-671.
- Von Schomberg, R. (2011). Towards responsible research and innovation in the information and communication technologies and security technologies fields. Available at SSRN 2436399.

Von Schomberg, R. (2013). A vision of responsible research and innovation. *Responsible innovation: Managing the responsible emergence of science and innovation in society*, 51-74.

Zoukou, K. & Ziku, M. (2022) Citizen enhanced open science in cultural heritage. Review and analysis of practices in higher education. Citizen Heritage Project. <https://www.citizenheritage.eu/wp-content/uploads/2022/07/CitizenHeritage-O1-July-2022.pdf>

Annex: Checklist for collaboration for societal engagement

Dilemma 1 Are you a planner or a player? Detailed structure vs. flexibility

Question	Process stage	Checked?
<p>Does your project have the time, space, and capacity required to address issues such as different planning styles, resources available or project feedback methods?</p>	<p>initial</p>	
<p>How do you think your external collaborators would feel most comfortable building a trusting relationship with you? Through complying by ethical guidelines and procedures? Or by giving them the mandate to decide what to do next, and how to define the problem of concern in your mutual project?</p>	<p>throughout</p>	
<p>Have you experienced that not raising one of your own issues of concern in a collaboration has bounced back at a later stage in the collaboration? What happened? How did you solve the conflict?</p>	<p>post project</p>	

Dilemma 2 Many roles and alliances: problem or advantage?

Question	Process stage	Checked?
<p>Try to map your own roles and relations and try to do it together with your collaborators/partners (academic colleagues and external stakeholders)</p> <p>a) How do collaborators define their own and each other's roles?</p> <p>b) What roles are formally (and explicitly) defined. I.e., head of studies, head of research, coordinator, responsible for the funds, responsible for the mobilizing of volunteers,</p> <p>c) What roles are implicit i.e., wishes, aspirations, background knowledge about the local environment</p>	Initial, throughout	
How are roles connected to tasks (and hierarchy of tasks!) in your project?	Initial, throughout	
What roles change throughout the collaboration? Which roles would you like to develop?	throughout	
Can the change of your own and your partners' roles help us rethink and reconceptualize inclusion? In what ways?	Throughout, post project	

Dilemma 3 Vulnerability: should one expose oneself?

Question	Process stage	Checked?
<p>Have there been opportunities at the outset, or during your collaboration for the participants to express their doubts and concerns?</p>	<p>Initial, throughout</p>	
<p>Could you dedicate time during meetings for sharing doubts and concerns about both the collaborative process and potential disagreements about the methodologies and theories etc. used for the project?</p>	<p>throughout</p>	
<p>How could you acknowledge collaborators that do not wish to share?</p>	<p>throughout</p>	
<p>Have you experienced sharing your own vulnerabilities and confusions as an opportunity to reflect on the knowledge limits of our discipline's/sector's/theory's?</p> <p>○ What happened?</p>	<p>Throughout, post project</p>	

Dilemma 4 The struggle for professional acknowledgement - who do you then silence?

Question	Process stage	Checked?
Does your collaboration have a strict hierarchical structure based on conventional claims for legitimacy (seniority, affiliation, etc.)? How does it affect your collaborative process?	initial	
Does it happen frequently that partners feel the need to establish their legitimacy in the process of collaboration? Why can it be the case? Can it be because they feel that their voices are not heard?	throughout	
What would it require to establish mutual legitimacy without reinforcing conventional hierarchies?	Initial, throughout	
Do you question established hierarchies and inequalities through the way you design, perform or communicate your project?	Throughout, post project	

Dilemma 5 Cross-disciplinarity vs mono-disciplinarity?

Question	Process stage	Checked?
What role does mutual learning and unlearning play in your cross-disciplinary collaboration?	Throughout, post project	
Do you dedicate time in collaborative spaces for “translation” of discipline-specific language (concepts, epistemologies, methodologies)?	throughout	
Does collaboration with certain disciplines cause unease for you? What are the sources of this unease?	initial	
Have you tried to openly discuss your presumptions and uncertainties about your collaborator’s discipline? What happened?	Initial, throughout	

Dilemma 6 Are we lost in translation in cross-cultural collaborations?

Question	Process stage	Checked?
How would it be possible for you to take different ways of understanding and being in the world of your collaborators into account?	throughout	
What challenges you most in the way your collaborators perceive and define the problem you work together with?	throughout	
What would it require for you to approach the collaborative matter of concern in a different way?	Initial, throughout	
How could you ask your collaborator to suggest a new way of reaching out to relevant stakeholders?	throughout	

Dilemma 7 Cross-sectoral collaboration – Multiplying resources or creating misunderstandings?

Question	Process stage	Checked?
Do you take time to address available resources and constraints which come from collaborator's positioning in different sectors?	throughout	
Do you acknowledge you own privileges or limitations which come from your position in academia/private business/ NGO? How do you use this knowledge in the collaborative process?	throughout	
What challenges you the most in the way your collaborators perceive/define the problem you work together with? How would it be possible for you to consider different ways of understanding and being in the world of your collaborators?	Throughout, post project	

Dilemma 8 How do you prioritize? Managing resources or relationships?

Question	Process stage	Checked?
Have you attempted to get to know your collaborators, and inquired on their motivations for participating in your project?	Initial	
Have you provided your partners with the opportunity to discuss any constraints on the extent and way they collaborate?	throughout	
What is holding you back from sharing a particular perspective on your project or work together? Are you holding someone else back?	Initial, throughout, post project	

Dilemma 9 Are you an excellent researcher or an excellent social change innovator?

Question	Process stage	Checked?
<p>Is collaborative research an asset or an obstacle for you in terms of conducting responsible research? And in terms of the academic career? Why? Do you have to compromise? For practitioners: Do the benefits of researchers outweigh challenges such as extra time needed, negotiating different institutional logics?</p>	<p>initial</p>	
<p>How does your collaborative research contribute to your goals and ambitions of conducting research for social change?</p>	<p>Initial, post</p>	
<p>Do you feel that collaborative research is backed up by support structures (in your institution/ organisation, by funding bodies, or at the policy level)?</p>	<p>throughout</p>	

Dilemma 10 Boundaries: Showing integrity or being marginalized?

Question	Process stage	Checked?
Do you dedicate time for reflection and self-reflection on the personal and professional resources one can mobilize for a project / collaboration at hand and evaluate what is negotiable?	Initial, throughout	
If you notice that in the collaborative space your boundary is transgressed, how do you communicate it? Do you communicate it at all?	throughout	
How do we become better at being aware of our boundaries and expressing them early on in a collaborative space?	Initial, throughout	

Dilemma 11 Is it about the output or the ongoing learning experience?

Question	Process stage	Checked?
How do you create the space to have fun? Is there space in your collaboration to think about what makes you curious and excited about this research project?	Initial, throughout	
Have you thought what is your own best practice for collaborative research?	initial	
Do research collaborations give you food for thought and open new research horizons or exhaust you? What can you do to make the collaborative process an exciting endeavour for yourself and the partners? Can you create space in your collaboration for discussing it?	throughout	
What would happen if you included time and space in the collaboration for process-building goals besides outcome orientation?	throughout	
What would happen if you explicitly addressed learning and unlearning as part of your collaboration both cross-disciplinary and with external stakeholders? Where not knowing, not understanding and not following is an opportunity for collective redefinition of mutual pre-assumptions?	Initial, throughout, post project	