Role(s) of researchers

In conventional research, the goal of developing new knowledge or understanding that builds from (and builds on) the existing body of disciplinary work is commonly regarded as objective and free from values and norms. While this assumption of value-free objectivity is hotly contested, even in conventional research circles, researchers are trained to aspire toward objectivity, impartiality, and truth-seeking. TDR, however, is in part defined by a problem-focus; that is, starting from recognizing that an issue, situation, or process is causing harm, increasing risk, or generating other undesirable outcomes. The idea that research has a role to play in reducing harm for human or non-human entities in complex societal challenges implies a degree of normativity [see *Normativity concept*] and shifts the role of researcher from that of a detached, impartial truth-seeker to an action-oriented person aligned with or at least working in the tension of divergent subjective goals, values, and judgments. What does this mean for the role of the researcher?

A transdisciplinary researcher should carefully consider their role in the broader social and political context of their chosen problem, and this can start with a clear understanding of their own perception of the problem itself. What are the main concerns or issues being addressed? Who or what is most affected by the problems that currently exist? Who would the successful completion of the research help, why, and in what way? Answers to these questions may sometimes seem obvious, redundant, or feel irrelevant, but they are fundamental to becoming self-aware and conscious of the nuances of TDR, and thus to being able to embrace this different mode of research. For example, if the research is concerned with "justice" or "marginalization," the researcher is taking an active stance on a social, economic, and political issues. Even if the research is seeking to "increase biodiversity" or "reduce CO2 emissions," researchers are also taking a position about what is right, good, or better in relation to these challenges. Still further, the people, communities, or organizations they are working with will also have views about what is desirable. In this way, transdisciplinary research is inevitably political, and being aware of the political commitments embedded in the conceptualization of the research problem opens up a range of roles the researcher can then take.

The idea that researchers can play diverse roles in relation to complex issues is not at all new, and these different roles do not change underlying principles and practices of rigorous, transparent, accurate research. It may be helpful to think of the different roles as being on a spectrum of social and political action – from the relatively less active role of building new understanding of a complex issue by developing an evidence base, to full active representation of communities or individuals in political processes. In between are roles that are focused on supporting and fostering the empowerment of others toward transformative change, or challenging powerful actors with strategic critical assessments. Of course, a researcher may take on several of these roles simultaneously (empowering marginalized entities while critiquing powerful actors, for example) or sequentially ("wearing different hats") at different stages of a project. This can help researchers adapt to changing circumstances or situations, and take advantage of opportunities that may arise.

For example, if a researcher has focused on working with a community to generate a relevant evidence base on their chosen problem, and are then invited to present their findings to a political forum, the roles can change very quickly!

Another value-driven stance lies in the integration of knowledge itself. For example, researchers who believe it is critical to integrate scientific knowledge with the tacit knowledge held for millennia by an Indigenous tribe are taking a sociopolitical stance on the nature and relevance of science itself.

While some researchers welcome and seek out more active social and political roles, others may feel uncomfortable stepping into a space that seems more aligned with advocacy than science. Recognizing that this is all possible within the TDR process can help researchers with any discomfort – it is not "wrong" or "unscientific" to move to a more overtly or deliberately politically active part of the spectrum. Political action in TDR is still evidence-based and built from careful and systematic consideration of different perspectives, experiences, and interpretations of complex issues. Yet it is also grounded in the holistic values and normative commitments that we hold as participants in complex research-action arenas.

Further reading:

- Bulten, Ellen, Laurens K. Hessels, Michaela Hordijk, and Andrew J. Segrave. 2021. Conflicting Roles of Researchers in Sustainability Transitions: Balancing Action and Reflection. *Sustainability Science* 16 (4): 1269–83.

- Hilger, Annaliesa, Michael Rose, and Andreas Keil. 2021. Beyond Practitioner and Researcher: 15 Roles Adopted by Actors in Transdisciplinary and Transformative Research Processes. *Sustainability Science*, October.

- Pohl, Christian, Stephan Rist, Anne Zimmermann, Patricia Fry, Ghana S. Gurung, Flurina Schneider, Chinwe Ifejika Speranza, et al. 2010. Researchers' Roles in Knowledge Co-Production: Experience from Sustainability Research in Kenya, Switzerland, Bolivia and Nepal. *Science & Public Policy* 37 (4): 267–81.