# Actor constellations in sustainability contexts.

## Participatory research methods for sustainability – toolkit #13

A person's perception of reality is based on a specific rationality that depends on their expertise and empirical or scientific knowledge. By representing relevant actors in a role play, actor constellations make implicit assumptions about relationships, structures, interaction and actors' knowledge explicit; they reveal the potential of individual actors and coalitions to contribute to solving a problem. Through this method, researchers and practitioners can explore complex systemic constellations and develop new narratives.

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ow actors perceive a wicked problem (Rittel 1971) – and potential solutions – depends largely on their thought style, which is shaped by questions about how things are and how they function (Fleck 1979, see also Pohl et al. 2017). When actors lack a shared understanding of how systems can be transformed to increase their sustainability, the result may be a blame game, in which stakeholders accuse one another of blocking change. Such a stalemate cannot be resolved by individual actions, but requires an integrative approach that fosters a collective understanding of legitimate, broadly supported and feasible solutions.

Originally developed within the context of family or individual therapy, constellation methods are gaining relevance in transformational settings such as organizational development, coaching and consulting, and more recently in sustainability contexts (von Stillfried et al. 2020). As a transdisciplinary approach, actor constellations enable researchers from different disciplines and practitioners to uncover hidden dynamics and possible systemic solutions, and to unlock the potential of shifting perspectives to ultimately develop new narratives. Actor constellations are useful for problem framing when a team is being formed (Pohl 2020), for example to plan empirical inquiries or to identify relevant actors for addressing research questions.

By combining rational analysis with intuition as well as unconscious and implicit knowledge, actor constellations enable participants to consciously perceive systemic effects and causes

In this series, we aim to alert GAIA readers to useful toolkits for participatory research methods for sustainability. If you would like to contribute a toolkit description, contact editorsgaia@oekom.de.

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© 2025 by the author; licensee oekom. This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY) https://doi.org/10.14512/gaia.34.2.22 Received November 20, 2024; revised version accepted February 7, 2025 (double-blind peer review). learned it (Arnold 2017). As participants engage with the thought styles of actors through role-playing, the information provided is not dependent on individual people. Instead, it has been shown that the results of actor constellations are independent of language and culture and can therefore be considered objective in terms of representable patterns (Schlötter 2016).

using an intuitive language that we know without ever having

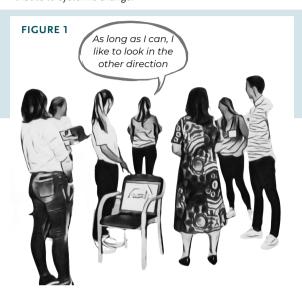
#### Procedure

Actor constellations are conducted in a variety of ways and, depending on the research or practice goals, may be combined with other methods such as guided meditations or nature exercises (von Stillfried et al. 2020), group discussions, or stakeholder mapping and analysis. Participants understand the perspective of actors when they feel affected by a wicked problem or perceive themselves as influencing it. The discussion can sometimes be quite lively, so it is advisable to relieve the facilitator by involving other project members to take pictures and act as observers. As with all empirical research, it is important to obtain clear, specific, and unambiguous permission from individuals before processing their personal data. Actor constellations are not arbitrary, but usually follow certain steps:

- 1. **Problem definition:** The method starts with participants jointly defining the wicked problem to reach a common understanding, for example through a preparatory workshop or participatory problem development. Helpful tools can be group discussions to explore participants' opinions, experiences, and suggestions on particular aspects, or brainstorming and mind mapping methods to explore diverse perspectives on a problem.
- Identifying relevant roles: Actors relevant to solving or exploring the problem may come from scientific disciplines and fields of practice, such as politics and the public sector, businesses, and civil society, and they can be non-human, such as

#### BOX 1: Actor constellations to understand scopes for action in the Austrian agrifood system

The following two examples illustrate how actor constellations were used to explore each actor's scope for action and their willingness to contribute to systemic change.



**FIGURE 1:** A gastronome's willingness to contribute to a more sustainable beef and dairy supply in Austria; other roles included a farmer, a retailer, a politician, a consumer, a processor, an NGO, and the Chamber of Agriculture.

The observation that gastronomes are often too busy and under economic pressure to offer more sustainable food was an important piece of information for taking appropriate precautions in stakeholder identification and management during the project.



**FIGURE 2:** Scope for action of the national procurement agency (left) and the kitchen manager of a public canteen (right) in increasing the share of organic food in Austrian public procurement; other roles included the Ministry of Finance, a catered person, a food wholesaler, an organic farmer, the National Action Plan for Sustainable Procurement and Austria's culturally shaped natural environment.

*left:* Before the role play, most participants accused the national procurement agency of a lack of willingness to act. However, during the constellation, it became apparent that the agency had limited room for maneuver. This enabled new, more effective coalitions of actors to be explored. *right:* From an observational standpoint, the public kitchen manager recognized his own capacity to implement change. Prior to the workshop he had stated that there was no scope for action regarding the purchase of organic meat. However, adopting the role of observer gave him new insights into his daily practice. As a result, he switched his entire meat range and most dairy products to organic quality.

nature, policy strategies, etc. To identify six to ten roles, participants collect relevant actors who have expertise, power or interest in shaping the solution (Pohl et al. 2017).

- 3. Allocation of roles: Each participant is assigned or chooses a role, whereby it has been found useful to have a role that is different from one's own everyday practice to benefit from the role reversal. If there are more participants than roles, some can act as observers, without taking an active part, but as a point of contact in case of problems and to provide external feedback afterwards. As inactivity in role plays can be difficult for some personalities, this role needs to be well facilitated.
- 4. Constellation work: Start by placing the problem, that is, the mind map or a representative picture, in the center of the room, for example on a chair, and position the roles one by one, either by the facilitator or by the participants themselves, in relation to the chair. The closer they are to the chair, the more they can contribute to solving the problem or the more they are affected by it. It is advisable to comment on each position directly also in relation to the other roles and including

the direction of gaze. Here, participants may indicate which experiences, scientific or empirical knowledge influence their own position towards the problem. If the positions are close to each other, represented actors may have something in common, similar interests, directions of influence or close relationships.

In a second round, the other roles are discussed: Is there a need to clarify roles after they have been positioned? Is a role missing?

In a third step collect arguments for changing individual positions and clarify in between: How do the participants now see themselves in their roles? What movements are they striving for? Do emotions influence their views and how? Which relationships are most important to them? How do others perceive their position and what changes do they suggest?

If all participants are satisfied with their positions and there is no further noticeable improvement, the system can be questioned: Where is the center and why? Are relevant actors missing? How do you see the role of XY? Roles can also be differentiated by expertise, power or interest in shaping the solution.

Finally, there may be intervention questions: How does your position change if, for example, a certain policy instrument is implemented?

5. Debriefing and documentation of results: At the end of the constellation work, it is important to consciously leave the roles and "shake them off". A change of room or a short break may also be useful before the debriefing phase begins. This phase can be guided by the following questions. If observers were involved, they should be asked first. However, also constellation participants may describe their observations of specific actor coalitions as well as their experiences and learning from their own role. What were irritating moments, learnings, wow-effects and emotions in your role? What implicit assumptions did you notice in yourself and as an observer? What potential alliances emerged? Where do you see particular potential for conflict? Which actor can take on more responsibility with appropriate support? After the workshop, thorough documentation (including photos and drawings) can help develop new narratives about the problem and possible systemic solutions and support participants' own recollection of key learning effects.

#### Skills and resources needed

Facilitation skills for moderating an actor constellation include neutrality to ensure a balance of different viewpoints without judgement. In addition, a facilitator needs to be able to deal with and possibly defuse or allow emotions and feelings expressed by people in their roles. While good thematic preparation is advisable to support problem definition and role identification, a familiarization with participants' relations beforehand can help to avoid disputes during the role play. Unlike in family work, participants should have at least some understanding of the sustainability problems they are setting up. They should also be willing to look beyond their own daily lives and seek to better understand processes of sustainable change. Given the systemic nature of wicked problems, it is beneficial if participants bring a variety of knowledge from different disciplines and areas of practical experience. For the setup, a certain amount of space, moderation materials and a camera are required.

### Strength and weaknesses

Actor constellations enable teaching and learning about systemic and multi-causal, inter- and transdisciplinary challenges, such as the recognition of different thought styles and the complexity of overcoming wicked problems. They support stakeholder management and facilitation by helping to clarify understanding of the role of scientists and practitioners in solving wicked problems and anticipating points of conflicts. As a form of role-

play (Pohl 2020), actor constellations exploit the effects of allowing individuals to become someone other than themselves. By reenacting lived experiences, participants generate, interpret, and re-present their ideas in such a way that they exist "simultaneously in two worlds: as a character inside the experience of the 'as if' world and as an actor [observer] evaluating the situation from the outside, within the real world" (Conrad 2004, p. 16). The examples presented in box 1 demonstrate this double learning effect of acting in a specific role while also being an observer. This can be discussed in more detail during the debriefing. As such, actor constellations produce effects similar to those claimed for theater methods. However, their strength lies in achieving such effects within a relatively short timeframe.

How representative and objective an actor constellation can be depends on the selection of roles and the knowledge and openness of constellation participants. While Schlötter (2016) has shown that results can remain robust and independent of individual participants in well-organized settings, this is not always the case – particularly in explorative or spontaneous settings. In addition, actor constellations cannot be used everywhere where they would be useful due to limited financial and time resources or the willingness of participants to engage with the method. Finally, some findings, such as the need for political action, are difficult to influence, which complicates the implementation of solutions.

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