Negotiating Sustainability Transitions

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Editorial

Negotiating Sustainability Transitions: Why Does It Matter? What Are the Challenges? How to Proceed?

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Why Does It Matter?

Sustainability challenges pose a significant threat to the life-support systems of our planet [1]. At the same time, the earth's climate system is crossing critical planetary boundaries that activate irreversible tipping points (e.g., [2,3]). Transforming the current locked-in structures and transitioning towards sustainability is a daunting challenge that must be addressed with all cooperative efforts that humankind can provide. Whereas much of the social science research has mainly focused on individual behavior change to combat climate change (e.g., [4]), we would like to emphasize that sustainability transitions require collective decision making via negotiation. These negotiation processes typically involve a multitude of stakeholders across all societal levels. Effective negotiation processes can help accelerate the transformation and facilitate mutually beneficial solutions regarding intergenerational, international, and intersectional sustainability [5].

Various definitions point out the crucial role of negotiations in sustainability transitions. Negotiation is an "interpersonal decision-making process necessary whenever we cannot achieve our objectives single-handedly" [6]. This description highlights the necessity of cooperation and collaboration among stakeholders to reach their own and shared goals. Negotiation is also the "discussion between two or more parties aimed at resolving incompatible goals" and dealing with social conflict [7]. Sustainability transitions often incite social conflicts [8] and, therefore, can best be managed via negotiation. Ultimately, negotiation is "the way how people manage their interdependencies" [9]. Negotiation can help manage both our social interdependencies and the systemic social–ecological interdependencies that must be acknowledged and managed for successful transitions. Given the negotiations' prominent role in the management of transitions and processes of policy design, it is surprising that insights from psychological and behavioral negotiation research have rarely been applied to inform and facilitate the management of sustainability transitions (see for exceptions: [10–13]) and processes of policy design [14].

For decades, scholars have called to investigate conflict management and negotiation processes in the context of global environmental change (e.g., [14–16]). However, conflict and cooperation in sustainability transitions have been predominantly investigated from an individual decision-making perspective (i.e., games of coordination focusing on individuals' moves; [17]) and not from a collective decision-making perspective (i.e., games of agreement focusing on the behavioral act of agreeing; [17]).

In games of coordination (e.g., the prisoner's dilemma or other forms of social dilemmas), the parties usually engage in individual moves to manage the conflict. They do not communicate and discuss potential agreements. In the real world, these moves manifest in struggle between groups and can take various forms, such as physical combat, war of words, unilateral advantage taking, or political contest [7], but the struggle has significant disadvantages compared to negotiation. Struggle is usually very cost-intense (e.g., [18]), implies winning or losing as the only possible outcomes of the social conflict (e.g., [19,20]),

impedes fine-tuned solutions over multiple relevant issues (e.g., [13,20]), obstructs reaching mutually beneficial agreements, and blockades transformative solutions that have the potential to change the status quo [7]. Given these disadvantages of individual moves and struggle, conflict management via collective decision-making and negotiation has substantial benefits and can catalyze sustainability transitions when decision-makers negotiate agreements wisely [10,21]. Nevertheless, psychological and behavioral negotiation research has long shied away from investigating and facilitating negotiation processes that benefit society at large [22] and promote the transformation towards sustainability.

To fill this void and make research on negotiation processes useful for sustainability transitions, we have called for a special collection of articles that shed new light on the vital role of collective decision-making via negotiation in the transformation towards sustainability.

What Are the Challenges?

The articles of this Special Issue, "negotiating sustainability", touch upon crucial challenges for scholars and stakeholders alike and point to characteristic features of negotiation processes in sustainability transitions that have not been the focus of scholarly attention. In this editorial, we seek to carve out these characteristic features, synthesize them with previous research, and highlight potential next steps to move on. With this overview, we seek to initiate a new dialogue on impactful, collaborative, inter- and trans-disciplinary, multi-method research efforts to better understand and facilitate negotiation processes in sustainability transitions.

Climate change, biodiversity loss, resource depletion, and related sustainability challenges often form a common resource dilemma where short-term individual interests are at odds with long-term collective interests [23,24]. Whereas previous research on negotiation processes and conflict management primarily focused on classic exchange negotiations between a buyer and a seller (e.g., [25]), Trötschel and colleagues [26] argue that negotiation processes in sustainability transitions most often revolve around common resource dilemmas. The unique structural features of these dilemma situations suggest that stakeholders primarily tend to claim resources in a destructive way, leading to the exploitation and long-term collapse of resources. The authors argue that stakeholders in common resource dilemma negotiations must overcome this barrier and perform a mindset shift to reach mutually beneficial solutions regarding intergenerational, international, and intersectional justice. Highlighting the structural features of common resource dilemmas from the perspective of negotiation processes opens up new research opportunities, including externalities, climate justice, and novel intervention approaches.

Based on the specific case of a common resource dilemma in the context of community planning from Odaka in the prefecture of Fukushima in Japan, Matsuura [27] argues that disasters, such as the great east earthquake in 2011, can fundamentally change negotiation processes in four respects: parties, interests, relationships, and legitimacy. This research highlights the vulnerability of current social–ecological systems and the consequences that their breakdown can have on negotiations and their outcomes. This study introduces a more comprehensive perspective on the social–ecological interdependencies and shows how they can affect collective decision-making processes in sustainability transitions. The author concludes that even in the darkest times of severe disasters, windows of opportunity can change the status quo for the better via successful negotiation.

These articles investigated negotiations in the context of common resource dilemmas with conflicting short-term individual and long-term collective interests. The dilemma situations imply that negotiations and their outcomes create externalities to the collective, namely to other stakeholders not involved in the decision making, stakeholders at other points in time (i.e., future generations), stakeholders at distant locations, or stakeholders who belong to diverse social groups. Hence, the created externalities affect intergenerational, international, and intersectional justice. Thew and colleagues [28] take a close look at the intergenerational aspect by studying young peoples' lived experiences during their participation in the UN climate change negotiations. As younger generations are more likely to face dangerous climate change but lack decisional power in the negotiation

process, their subjective perceptions and experiences of the UN climate change negotiations are crucial for understanding peoples' participation in and acceptance of policy design processes. Considering the interests of stakeholders who are interdependent on the outcomes of negotiations but not directly involved in the negotiation may be a promising line of research on sustainability transitions that can help improve such policy design processes at the community, national, and global levels.

In another line of research, Elgoibar and Shijaku [29] focus on the intersectional aspect of sustainability transitions and highlight the critical role of gender diversity and actor embeddedness in improving social sustainability outcomes in organizations. The authors argue that reaching the desirable outcomes of gender equality and social cohesion depends on integrative negotiations. Accordingly, effectively and integratively negotiating gender diversity and actor embeddedness in organizations might be a game changer in the transition towards social sustainability and help overcome intersectional injustice.

All the examples above refer to diverse processes of policy design that manifest in different forms ranging from informal neighborhood conflict resolution, over participative community development, to highly institutionalized climate change negotiations on the global level. Negotiation processes in sustainability transitions have in common that they follow similar interrelated and sequential phases. Hernandez [30] proposes a new phase model to structure these negotiation processes and highlights the characteristics and implications of each phase. The phases model of the transformation to sustainability can inform policy design processes across all levels of society and support conflict resolution.

By shifting away from traditional research paradigms, the highlighted articles can contribute to a richer understanding of the crucial role of negotiation in the processes of policy design and sustainability transitions more generally.

How to Proceed?

Conflict structures and the negotiation processes in sustainability transitions differ from traditional buyer–seller exchange negotiations in several ways: conflicts often revolve around common resource dilemmas, involve multiple stakeholders or groups of stakeholders, create externalities, include power asymmetries at and beyond the negotiation table, are interdependent from the social–ecological context, take place across all levels of society, or arise over the change of the status quo (to name a few). We want to highlight that these specific structural features offer fruitful starting points to shed new light on how the negotiation process plays out in sustainability transitions, what barriers emerge, and how collective decision making via negotiation can be facilitated to reach mutually beneficial solutions in terms of intergenerational, international, and intersectional justice. We believe that some additional structural features may be of particular interest for future research as they are crucial to recognizing and realizing mutually beneficial agreements between stakeholders: They include, for instance, time, risk, and uncertainty in negotiations, the valence of negotiation issues as benefits and burdens or polyvalent resources, conflict situations involving more than one primary conflict, or asymmetric interests of the stakeholders.

Negotiation scholars have often emphasized that it is not only crucial how we characterize conflict situations from an objective perspective [31], but also how individual stakeholders mentally construe these objective conflict structures [32,33]. We believe that investigating how stakeholders subjectively construe the specific structure of negotiation processes in sustainability transitions may provide new insights into the psychological and social barriers toward more integrative agreements and transformative solutions. The stakeholders' subjective construals are particularly interesting since their roles vary widely in the collective decision-making process (e.g., stakeholders with vs. without decisional power).

A greater understanding of diverse stakeholders' subjective representations may offer leverage points for new intervention approaches to facilitate conflict resolution. Subjective construals are often a barrier to integrative agreements. However, intervention approaches can directly target subjective construals and transform them into mental representations of the conflict that correspond with the objective structure of the conflict in sustainability transitions. In particular, processes of policy design may benefit from such interventions to

synchronize the many diverging subjective conflict structures. We believe that the interplay of objective structural features, stakeholders' mental representations, and their transformation into more cooperative conflict structures with potential for win-win agreements offer an extensive research area for scholars who seek to promote sustainability transitions via negotiation. Indeed, more and more scholars must join in and deepen interdisciplinary collaborations, diversify research methods, and generate knowledge in dialogue with societal stakeholders. If we make this collective effort, we can leverage the apparent benefits of negotiations to reach win-win agreements for intergenerational, international, and intersectional justice.

Conflicts of Interest: The authors declare no conflict of interest.

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