Social-Ecological Transformation Conflicts over Agriculture

A Theoretical Differentiation of Contested Conflict Goods

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Introduction

Global agriculture is both a driver of and a potential area for mitigating various social-ecological crises. The agricultural and food system accounts for approximately one-third of global greenhouse gas emissions (Crippa et al. 2021). It is also a primary driver of global land-use change and is, therefore, significantly involved in the loss of global biodiversity (IPBES 2019). Additionally, agriculture is responsible for a large share of global nitrogen eutrophication (Schulte-Uebbing et al. 2022) and consumes 70 % of the world's freshwater resources (Fujs and Kashiwase 2023). Among all agricultural practices, industrial animal agriculture – along with monocultural feed crop production using synthetic fertilizers and pesticides – contributes most significantly to the ecological impact of agriculture (Barona et al. 2010; Machovina et al. 2015; Poore and Nemecek 2018).

This connection between agricultural production and social-ecological crises is a breeding ground for numerous conflicts over potential futures for (sustainable) agriculture. These social-ecological transformation conflicts are often discursively intertwined with questions concerning animal welfare, the income conditions for farmers and agricultural workers, global justice across agricultural supply and value chains, and the cultural legitimacy of different dietary practices and entire lifestyles. Currently, agriculture faces the challenge of becoming ecologically sustainable amid unfolding social-ecological crises, while also remaining profitable and competitive within the economic

logics of global agrarian capitalist production, and ensuring the long-term supply of healthy, high-quality food.

Despite its immense societal relevance, agriculture plays only a secondary role in sociological research on social-ecological transformation compared to other fields such as energy and mobility. This is particularly true for the role of animal agriculture in driving social-ecological crises (Twine 2024; Sebastian 2024). This text proposes a theoretical differentiation of dimensions in social-ecological transformation conflicts over agriculture based on various contested goods at stake. The aim is to contribute to the theoretical foundation for the empirical analysis of social-ecological transformation conflicts over agriculture. In the following, I will give a brief overview of the sociological debate on social-ecological transformation conflicts in general and explain my understanding of the concept. I will then present five dimensions of transformation conflicts over agriculture and the contested conflict goods in each case. Finally, I will outline how an analytical approach for researching empirical cases of social-ecological transformation conflicts over agriculture could be developed on this basis.

Social-Ecological Transformation Conflicts as a Sociological Research Subject

The following section explains what constitutes social-ecological transformation conflicts in general. After that, the article focuses on corresponding conflicts about the future of agriculture. Social-ecological transformation conflicts arise from competing "societal paradigms or imaginations as well as the practical implementation of a social-ecological transformation towards greater ecological sustainability" (Sommer and Schad 2022, p. 455, translated by author). They are therefore future-oriented and open-ended, as they open up a "plurality of transformation pathways" (Görg et al. 2017, p. 5), over which there is no societal consensus regarding their selection and design. Current social-ecological transformation debates over agriculture reveal a multitude of competing and incompatible imagined ideals of future sustainability that include a variety of potential pathways for the development of the agricultural system (for Europe see, for example, Baldock and Buckwell 2021; OECD 2023; European Commission 2023). Following a long historical phase of efficiency- and growth-oriented agricultural path developments (Hirte 2018), agriculture has increasingly become contested. Today, agriculture appears to be a field of

tension in which a complex figuration of social actors with different cultural ideas, interests, and power resources are trying to assert their preferred idea of future agriculture.

Previous research contributions on social-ecological transformation conflicts vary regarding the theoretical basis on which these conflicts can be differentiated. For instance, Fritz and Eversberg identify four distinct "conflict lines" based on the different distributions of cultural and economic capital: "Class Struggle," "Ideological Divide," "Externalization," and "Distribution of Transformation Costs" (2024, p. 43f.). In contrast, Schad and Sommer differentiate three social cleavage lines within various thematic conflict arenas: "Intra-societal Distribution Conflicts," "Cultural and Value Conflicts," and "Transnational Distribution Conflicts" (2022, p. 461ff.). Both concepts emphasize (national and global) social-structural issues of (justice in) distribution, as well as questions of cultural values and mentalities. On the other hand, Görg et al. focus on the modalities of political regulation and governance of the social-ecological transformation, as well as the political negotiation of transformation conflicts, in their policy-oriented analyses (Görg et al. 2017).

Theoretical Dimensions of Social-Ecological Transformation Conflicts

I expand on this research by proposing a new typology of theoretical dimensions of transformation conflicts. I place the role of different types of contested goods at the center. This analytical approach is based on the assumption that social-ecological transformation conflicts, in general, revolve around the current and future distribution of various contested conflict goods. I understand contested goods broadly as potential objects of a conflict that actors can control. They are mutable and potentially divisible, allowing access to these goods to change. Conflict actors assert claims to these goods. Social-ecological transformation conflicts over agriculture can be differentiated based on the cultural, institutional, economic, political, and infrastructural dimensions of these conflicts, as different contested goods are at stake in each case. Established access for some social actors to these goods can become contested, while new access opportunities for other actors may emerge. Thus, the directions in which the social-ecological transformations are steered significantly influence the future societal distribution and access to these contested conflict goods. I argue that this theoretical differentiation allows for a deeper analysis of the relevance of different conflict dimensions and their interactions in specific empirical cases

in the area of agriculture. By analyzing simultaneously contested goods across different theoretical dimensions of a transformation conflict, we can better understand the complexity of the societal challenges and barriers facing current social-ecological transformation efforts. I will discuss this below using the example of social-ecological transformation conflicts over agriculture. Thus, when referring to transformation conflicts in the following, the term specifically denotes social-ecological transformation conflicts, distinguishing them from other possible societal transformation conflicts.

Cultural Transformation Conflicts

Cultural transformation conflicts are waged over the cultural values and ideals associated with agriculture. They primarily revolve around the struggle for normative authority in interpretation. Here, I define culture as the system of prevailing cultural ideas in a society (Archer 1996; Lepsius 1990; Pfau-Effinger 2005). This includes values, ideals, and worldviews that frame the actions of actors by providing guidance on what is legitimate, valuable, right, and appropriate – without deterministically defining those actions. Cultural ideas are mutable, fragmented, and potentially contested. The question at stake is: Which value orientations should form the foundation of future agriculture?

In cultural transformation conflicts, actors advocate for the legitimacy and cultural validity of the cultural ideas they represent regarding agriculture. These conflicts can be waged over specific cultural values concerning the legitimacy of particular agricultural practices (such as intensive pig farming) or overarching cultural ideals like ecological sustainability, growth, efficiency, or social and intergenerational justice. Cultural change can trigger new transformation conflicts, putting formerly established agricultural practices under increasing pressure for justification. Cultural transformation conflicts are decided by the cultural compatibility of different transformation proposals. This compatibility may relate to society as a whole, as well as to the hegemonic cultural ideas of a field or social group.

The objects of cultural transformation conflicts are numerous. They range from the question of whether beef production and consumption should be condemned as a climate-harming practice, or whether, in particular, cattle farming is unjustly labeled as environmentally harmful (Levitt 2021) to the fundamental legitimacy of industrial livestock farming and the use of pesticides (Monbiot 2022), as well as the struggle for dignity and social recog-

nition among agricultural actors who perceive themselves as unjustly morally stigmatized (Sebastian 2021). The social-ecological transformation of the agricultural and food system is polarizing (also) because cultural ideas about agriculture and agricultural practices are in societal conflict.

Institutional-Regulatory Transformation Conflicts

Institutional-regulatory transformation conflicts are waged over the question of which agricultural practices should be permitted, restricted, or prohibited. These conflicts revolve around the formalized sanctioning of social practices, whether positive or negative, and the formal granting of claims. Here, institutions are understood, following neo-institutional theory, as a set of formalized rules that frame human action based on positive or negative sanctions (Hall and Taylor 1996; Streeck and Thelen 2005). The goal of the actors involved in institutional-regulatory conflicts is to successfully enforce their own preferences through the positive or negative sanctioning of relevant practices.

The objects of social-ecological transformation conflicts concerning the institutional-regulatory framework of agriculture are the possible development pathways of rules such as laws, policies and guidelines. These include, in particular, various forms of political regulation of agriculture and range from specific, contested policies to the question of the existence or fundamental nature of central institutions, such as the Common Agricultural Policy of the EU. They encompass all laws and other rules that regulate the practical execution of agricultural activities and their preceding conditions and subsequent effects, such as animal welfare regulations, emission protection laws, fertilization regulations, documentation requirements for nitrate input, regulations on different uses of agricultural land, subsidies, and more. In addition to legal regulation, institutional-regulatory transformation conflicts can also be conducted through industry-specific standards, codes of conduct, or voluntary commitment declarations.

One prominent example is the decades-long dispute over the implementation of the EU Nitrates Directive (EU Council Directive 91/676/EEC). In Germany, the large-scale use of liquid manure from intensive animal agriculture as a fertilizer has repeatedly led to legally permissible maximum nitrate levels in the soil being exceeded. Farmers, agricultural associations, environmental NGOs, agricultural politicians, citizens' initiatives, and other interested par-

ties are fighting fiercely over the specific form this agricultural policy should take.

Economic Transformation Conflicts

Economic transformation conflicts are waged over the existing or anticipated economic consequences of current or potential social-ecological transformations in agriculture. They involve struggles over the advantageous or disadvantageous distribution of economic goods (such as profits, profit margins, incomes, costs, and prices). These conflicts often encompass trade-offs between economic growth and profit generation dynamics on the one hand, and measures to mitigate climate change, global biodiversity loss, and other ecological crises on the other (Henle et al. 2008).

Within economic transformation conflicts, actors attempt to achieve the most advantageous distribution of various economic goods in their favor. Social-ecological crises and the various measures taken to address them change the conditions for economic activity and labor in agriculture in multiple ways. This includes, for example, the changing conditions of farmers due to environmental, climate, or animal welfare regulations, increasing ecological risks (such as droughts, floods, or heavy rain) as well as shifting consumption patterns, the distribution of incentives and sanctions through taxes and subsidies, and access to increasingly scarce resources such as land, soil, and water. Many German pig farmers, for example, perceive the economic dimension of the social-ecological transformation of agriculture as a business challenge and often as an economically existential threat (Herrmann 2023). At the same time, agricultural interest groups and lobbying organizations, in particular, seek to influence the social-ecological regulation of agriculture in their favor (Ewert 2023). Actors within economic transformation conflicts must respond to the dynamics of agrarian economics; their adaptability largely determines whether they become economic winners or losers in the social-ecological transformation.

Political Transformation Conflicts

Political transformation conflicts are waged over the claims and rights of actors to representation and/or participation in political decision-making processes.

In the context of political representation, actors have the opportunity to be represented by delegates they perceive as legitimate (Dovi 2007). In terms of participation, they have the chance to actively engage in the political field. The issues at stake include actual, institutionally guaranteed claims to political consideration and participation, as well as claims from other actors who have been politically underrepresented or excluded from participation. Since not all interests and perspectives of all members of a society can be equally considered in political processes (Runciman 2007), struggles for representation and/or participation are characteristic of democratic societies (Jenkins and Klandermans 1995).

In conflicts over representation and participation, actors aim to have their positions more strongly represented in the political process. Within the context of social change, the opportunities for representation and participation of a societal actor can shift, and new political claims can emerge. In the debates surrounding the social-ecological transformation of agriculture, it is not only farmers and agribusinesses demanding consideration; increasingly, marginalized groups within agriculture, (critical) consumers, ecological NGOs, and other civil society organizations are also claiming stronger agricultural and food policy representation and participation. Additionally, new demands for political representation are arising for more-than-human actors or entities, such as animals (Donaldson and Kymlicka 2011) or ecosystems (O'Donnell and Talbot-Jones 2018), as well as for the political consideration of the interests of future generations (Page 2006).

Political transformation conflicts manifest themselves, for example, in protests by farmers, ecological NGOs, and social movements, as well as in the actions of lobbying organizations. Mechanisms of representation and participation include new participation formats such as state-initiated dialogue formats or citizens' assemblies regarding the future of agriculture (Schmid et al. 2024), referendums on agricultural policies (Keaten 2024), or lawsuits aimed at strengthening ecological protection in agricultural practices (Bray and Posten 2024). Political transformation conflicts can also occur within the agrarian economic field, such as in power struggles between dominant and opposition agricultural associations over who legitimately represents agriculture to politics, the media, and civil society.

Infrastructural Transformation Conflicts

Infrastructural transformation conflicts are waged over the access to and the developmental pathways of agricultural infrastructures in the course of social-ecological transformation. These conflicts thus revolve around the future trajectories of agricultural practices. Infrastructures are defined as "supply systems, social facilities, and technical systems […] that are intended for collective use and, as societal inputs, predetermine the social, economic, and ecological living conditions in a spatially specific manner" (Kropp and Sonnberger 2021, p. 189, translated by author). The infrastructures of agriculture facilitate and promote food production along food supply chains 'from farm to fork.' Decisions regarding infrastructure development shape the future of agriculture. Once initiated, pathways of infrastructural development can only be altered with significant material and financial investments established infrastructures often create path dependencies (Böschen et al. 2024).

Agricultural infrastructures include, among other things, systems for water supply and treatment, structures and supply chains for the industrial production of agricultural machinery, seeds, and fertilizers; the technical requirements for the digitalization of agriculture, logistics, and distribution systems for food; insurance providers; farm equipment suppliers; animal breeding companies; and slaughterhouses (for meat industry infrastructures see Sebastian 2017, p. 169f.). Transformation conflicts are not only waged over access to infrastructures but also over their development and long-term design. Particularly relevant for agriculture is the medium- and long-term use of land and soils. Conflicts arise not only between sector-specific land use and the interests of local communities (Hilson 2002) but also within agriculture itself. Whether on monocultural cornfields or in biodiversity-promoting organic farming: what is produced – in which form and on which available land – determines its future use. Nitrogen or pollutant overload, soil compaction from agricultural machinery, deforestation, pesticide use, and other interventions in soil ecology complicate an ecologically oriented infrastructure transformation, which also demands enormous financial and temporal resources. Land use conflicts, such as those that can arise during the expansion of "green infrastructures" (Maes et al. 2015) for biodiversity-promoting restoration or for post-fossil energy production (Tittor 2023), are thus also conflicts over infrastructures.

In summary, the five dimensions of socio-ecological transformation conflicts over agriculture are each based on different contested conflict goods. Cul-

tural transformation conflicts are based on the authority to interpret agriculture in normative terms; institutional-regulatory transformation conflicts are based on the formalized sanctioning of agricultural practices; economic transformation conflicts are based on the distribution of financial advantages and disadvantages; political transformation conflicts are based on political representation and participation in agricultural politics; and infrastructural transformation conflicts are based on access to and the future design of agricultural infrastructures.

Outlook: Dynamics of Social-Ecological Transformation Conflicts

The five theoretical dimensions of social-ecological transformation conflicts proposed here allow for the differentiation of the contested conflict goods at stake within empirically observable transformation conflicts. Based on this, a theoretical, analytical approach can now be further developed that serves as the basis for the empirical analysis of real-life conflict processes and dynamics in agriculture. In a preliminary form, the following summary outlines some key points of this analytical approach:

Social-ecological transformation conflicts related to agriculture are driven by a complex figuration of actors (including farmers, politicians, media, NGOs, social movements, civil society organizations, trade unions, businesses, consumers, and others). These actors operate based on individual power and capital resources as well as motivations and orientations for action (such as interests, knowledge, cultural ideas, habitual patterns, or mentalities). They attempt to exert social influence in their favour with reference to one or more dimensions of the conflicts and can engage in cooperative, competitive, or indifferent relationships with one another. In transformation conflicts, the conflict actors employ various action strategies to influence other actors and ultimately trigger mechanisms of social change. It is possible for actors to simultaneously engage in conflicts across different conflict dimensions and to discursively link them, for instance, when the political participation of farmers in agricultural legislation is tied to a critique of the lack of public appreciation for agricultural work. Power is the crucial resource in any conflict arena that determines the outcomes of transformation conflicts. However, the forms of power and the necessary resources to influence others vary depending on the conflict dimension. A powerful actor within one conflict dimension is not necessarily influential in other conflict dimensions.

Conflict dimensions typically manifest as interwoven constellations in the empirical reality. The analytical separation of these dimensions based on contested goods allows for the reconstruction of their interactions and relevance in concrete empirical situations. It is possible that not all conflict dimensions are empirically relevant in a particular empirical transformation conflict. Additionally, other theoretically relevant conflict dimensions, specific to the situation, may also be significant alongside the five proposed dimensions. In accordance to the possible interactions between the dimensions of transformation conflicts, empirical analyses should be relational and process-oriented. For instance, institutional transformation conflicts may be pursued to resolve economic transformation conflicts, which may initially require an improvement in the political representation of the actor involved.

The proposed differentiation of theoretically derived conflict dimensions is suitable for the empirical analysis of transformation conflicts at the micro, meso, and macro levels. Different contested goods can simultaneously be the subject of transformation conflicts in everyday actions, within organizations, and during structural change processes. Social-ecological transformation conflicts possess specific spatial and temporal characteristics: concrete conflicts always occur at a given time and in specific locations. However, the proposed theoretically derived conflict dimensions are not limited to specific geographical areas: cultural, institutional, economic, political, and infrastructural conflict goods can, for example, be contested in real agricultural transformation conflicts in both the Global North and the Global South, in rural areas as well as in urban settings.

The analytical approach proposed here makes it possible to more clearly differentiate and categorize the diverse, current social-ecological transformation conflicts that are unfolding in view of the contribution of global agriculture to climate change, species extinction, and similar crises. It is up for debate what role cultural ideals of sustainability should play in competition with other agricultural objectives and to what extent regulatory measures should promote ecological practices in agriculture. It is also unclear which financial interests should be particularly protected in the future and which markets for agricultural products should be strengthened or weakened, whose political interests should be given particular consideration and which social investments should flow into the development of ecologically sustainable agricultural infrastructures. This analytical approach can help to better understand the simultaneity of the diverse objectives, strategies, and motivations of the conflicting actors in the struggle for the agriculture of the future.

Literature

Archer, Margaret S. 1996. Culture and Agency. The Place of Culture in Social Theory. Cambridge, New York, Melbourne: Cambridge University Press.

Baldock, David, and Buckwell, Allan. 2021. Just transition in the EU agriculture and land use sector. Institute for European Environmental Policy. https://ieep.eu/wp-content/uploads/2022/12/Just-transition-in-the-EU-agriculture-land-use-sector-IEEP-2022.pdf (Accesses: January 13, 2025).

Barona, Elizabeth, Navin Ramankutty, Glenn Hyman, and Oliver T. Coomes. 2010. The role of pasture and soybean in deforestation of the Brazilian Amazon. Environmental Research Letters 5. 024002.

Böschen, Stefan, Yannik Schöpper, Sarah Hermens, Christa Reicher, Eva-Maria Jakobs, Frank Lohrberg, Reinhard Madlener, Susanne Mütze-Niewöhner. 2024. Infrastructures and Transformation: Between Path Dependency and Opening-Up for Experimental Change. In: Transformation Towards Sustainability, eds. Peter Letmathe, Christine Roll, Almut Balleer, Stefan Böschen, Wolfgang Breuer, Agnes Förster, Gabriele Gramelsberger, Kathrin Greiff, Roger Häußling, Max Lemme, Michael Leuchner, Maren Paegert, Frank T. Piller, Elke Seefried and Thorsten Wahlbrink, 93-117. Cham: Springer.

Bray, Daina, and Thomas Poston. 2024. Climate Change Litigation Turns Toward Animal Agriculture. Climate Law. A Sabin Center blog. https://blogs.law.columbia.edu/climatechange/2024/08/26/climate-change-litigation-turns-toward-animal-agriculture/ (Accessed: January 13, 2025).

Crippa, Monica, Efisio Solazzo, Diego Guizzardi, Fabio Monforti, Francesco Nicola Tubiello, and Adrian Leip. 2021. Food systems are responsible for a third of global anthropogenic GHG emissions. Nature Food 2:198-209.

Donaldson, Sue, and Will Kymlicka. 2011. Zoopolis. A Political Theory of Animal Rights. Oxford: Oxford University Press.

Dovi, Suzanne. 2007. The Good Representative. New York: Wiley-Blackwell Publishing.

EU Council Directive 91/676/EEC. 1991. Council Directive of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources. https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1561542776070&uri=CELEX:01991L0676-20081211 (Accessed: January 13, 2025).

European Commission. 2023. The EU pathway towards sustainable food system transformation. https://www.unfoodsystemshub.org/docs/unfoodsystemslibraries/national-pathways/european-union/european-union-pathway.pdf?sfvrsn=48850b55_1 (Accessed: January 13, 2025).

Ewert, Stefan. 2023. Lobbyismus im Agrarsektor. In: Handbuch Lobbyismus, eds. Andreas Polk and Karsten Mause, 777-793. Wiesbaden: Springer VS.

Fritz, Martin, and Dennis Eversberg. 2024. Mentalities, classes and the four lines of conflict in the social-ecological transformation. European Political Science 23:39-55.

Fujs, Tony, and Haruna Kashiwase. 2023. Strains on freshwater resources: The impact of food production on water consumption. Data Blog. https://blogs.worldbank.org/en/opendata/strains-freshwater-resources-impact-food-production-water-consumption (Accessed: January 13, 2025).

Görg, Christoph, Ulrich Brand, Helmut Haberl, Diana Hummel, Thomas Jahn, and Stefan Liehr. 2017. Challenges for Social-Ecological Transformations: Contributions from Social and Political Ecology. Sustainability 9:1045.

Hall, Peter, and Rosemary Taylor. 1996. Political Science and the Three New Institutionalisms. Political Studies 44:936-957.

Henle, Klaus, Didier Alard, Jeremy Clitherow, Paul Cobb, Les Firbank, Tiiu Kull, Davy McCracken, Robin F.A. Moritz, Jari Niemelä, Michael Rebane, Dirk Wascher, Allan Watt, and Juliette Young. 2008. Identifying and managing the conflicts between agriculture and biodiversity conservation in Europe–A review. Agriculture, Ecosystems & Environment 124:60-71.

Herrmann, Wiebke. 2023. ISN-Umfrage: Deutsche Schweinehalter so frustriert wie nie. agrarheute. https://www.agrarheute.com/tier/schwein/isn-umfrage-deutsche-schweinehalter-so-frustriert-nie-611238 (Accessed: January 13, 2025).

Hilson, Gavin. 2002. An overview of land use conflicts in mining communities. Land Use Policy 19:65-73.

Hirte, Katrin. 2018. Die deutsche Agrarpolitik und Agrarökonomik. Entstehung und Wandel zweier ambivalenter Disziplinen. Wiesbaden: Springer VS.

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). 2019. Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (Version 1). Bonn: IPBES secretariat. 1148 Seiten. https://doi.org/10.5281/zenodo.3831673.

Jenkins, Craig J., and Bert Klandermans (Eds.). 1995. The Politics of Social Protest: Comparative Perspectives on States and Social Movements (=Social Movements, Protest, and Contention, Vol. 3). Minneapolis: University of Minnesota Press.

Kropp, Cordula, and Marco Sonnberger. 2021. Umweltsoziologie. Baden-Baden: Nomos.

Lepsius, M. Rainer. 1990. Interessen, Ideen und Institutionen, Wiesbaden: Springer Fachmedien Wiesbaden.

Levitt, Tom. 2021. What's the beef with cows and the climate crisis? The Guardian. https://www.theguardian.com/environment/2021/oct/27/whats-the-beef-with-cows-and-the-climate-crisis (Accessed: January 13, 2025).

Keaten, James. 2024. Birds, bees and ballots: Swiss voters reject plan to better protect the country's biodiversity. AP News. https://apnews.com/article/biodiversity-switzerland-referendum-ba1053ddf906c191bef116f3dc379097 (Accessed: January 13, 2025).

Machovina, Brian, Kenneth J. Feeley, and William J. Ripple. 2015. Biodiversity conservation: The key is reducing meat consumption. Science of The Total Environment 536:419-431.

Maes, Joachim, Aana Barbosa, Claudia Baranzelli, Grazia Zulian, Filipe Batista e Silva, Ine Vandecasteele, Roland Hiederer, Camino Liquete, Maria Luisa Paracchini, Sarah Mubareka, Sarah, Chris Jacobs-Crisioni, Carolina Perpiña Castillo, and Carlo Lavalle. 2015. More green infrastructure is required to maintain ecosystem services under current trends in land-use change in Europe. Landscape Ecology 30:517-534.

Monbiot, George. 2022. Regenesis: Feeding the World without Devouring the Planet. Londong: Allen Lane.

O'Donnell, Erin L., and Julia Talbot-Jones. 2018. Creating Legal Rights for Rivers: Lessons from Australia, New Zealand, and India. Ecology and Society 23. https://www.jstor.org/stable/26799037.

OECD. 2023. Policies for the Future of Farming and Food in the European Union. OECD Agriculture and Food Policy Reviews. Paris: OECD Publishing. https://doi.org/10.1787/32810cf6-en.

Page, Edward A. 2006. Climate Change, Justice and Future Generations. Cheltenham, Northampton: Edward Elgar.

Pfau-Effinger, Birgit. 2005. Culture and Welfare State Policies: Reflections on a Complex Interrelation. Journal of Social Policy 34:3-20.

Poore, Joseph, and Thomas Nemecek. 2018. Reducing food's environmental impacts through producers and consumers. Science 360:987-992.

Runciman, David. 2007. The Paradox of Political Representation. The Journal of Political Philosophy 15:93-114.

Schmid, Patricia, Léa Lamotte, Michael Curran, and Sabin Bieri. 2024. Creating pathways to just and sustainable food systems with citizen assemblies. Innovation: The European Journal of Social Science Research 37:832-850. https://doi.org/10.1080/13511610.2024.2309173.

Schulte-Uebbing, Lena F., Arthur H.W. Beusen, Alexander F. Bouwman, and Wim de Vries. 2022. From planetary to regional boundaries for agricultural nitrogen pollution. Nature 610:507-512.

Sebastian, Marcel. 2017. Deadly efficiency—the impact of capitalist production on the "meat" industry, slaughterhouse workers and nonhuman animals. In Animal Oppression and Capitalism, eds. David Nibert, 167-183. Santa Barbara: Praeger Press.

Sebastian, Marcel. 2021. 'Die denken immer, man ist ein Killer' – Reaktionsweisen von Schlachthofarbeitern auf moralische Stigmatisierung. Österreichische Zeitschrift für Soziologie 46:207-227.

Sebastian, Marcel. 2024. Tiere und Gesellschaft. In Handbuch Umweltsoziologie, eds. Marco Sonnberger, Alena Bleicher and Matthias Groß, 267-280. Wiesbaden: Springer VS.

Sommer, Bernd, and Miriam Schad. 2022. Sozial-ökologische Transformationskonflikte. Konturen eines Forschungsfeldes. Zeitschrift für Politik (ZfP) 69:451-468.

Streeck, Wolfgang, and Kathleen Thelen (eds.). 2005. Beyond continuity: institutional change in advanced political economies, u. a. New York: Oxford University Press.

Tittor, Anne. 2023. Postfossiler Extraktivismus? Die Vervielfältigung sozial-ökologischer Konflikte im Globalen Süden durch Dekarbonisierung. PROKLA. Zeitschrift für Kritische Sozialwissenschaft 53:77-98.

Twine, Richard. 2024. The Climate Crisis and Other Animals. Sydney: University Press.