

# Seeing Like a Complex Border: On the Methodology of Complexity-Oriented Border Research

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## Abstract

Complexity has become an important point of reference in contemporary border research. Drawing on selected approaches to borders, this chapter elaborates the central methodological cornerstones and challenges of complexity-oriented border research. In addition to sketching a research attitude that can be described as *seeing like a complex border*, it becomes apparent that different understandings of complexity are circulating. In order to increase the degree of reflection of border research, the relationship of different ‘border complexities’ must be spelled out more carefully.

Keywords: Methodology, Complexity, Border Research, Reflexivity

## 1. Introduction

Complexity has become a prominent buzzword in border research in recent years. At its core is the observation that modern borders are complex phenomena, even if public discourse is dominated by positions that reduce borders to a simple dichotomy of open and closed. In this context, the diagnosis of the complexity of borders comes from an analysis of a wide range of border phenomena, including the complexity of cross-border integration (Gelbman/Timothy 2011; Lynnebakke 2020; Ulrich 2021) and variable forms of border crossing (Amilhat Szary/Giraut 2015; Nail 2016; Teunissen 2020), the complexity of socio-technical border control and surveillance systems (Côté-Boucher et al. 2014; Schindel 2016; Burrridge et al. 2017) and of (supranational) border regimes (Nieswand 2018), to the complexity of border experiences (such as in the context of flight and migration) (Brambilla 2015; Banse 2018), and thus to the complexity of borders per se (Paasi 2011; Haselsberger 2014; Gerst et al. 2018). This led to the recent assessment that border studies is currently undergoing a “complexity shift” (Wille 2021).

Indeed, some approaches have already emerged that do not stop at an emblematic designation of border complexities, but rather offer conceptual proposals on how these border complexities can be decoded or deciphered. In these works, the level of methodology is addressed—sometimes explicit-

ly, but more often implicitly. In doing so, approaches to border complexity that undermine the traditional dichotomy of theory and empiricism, that reflect on what borders are and how they can be actively explored as a genuine part of the engagement with border complexities become highlighted. It seems that in order to identify adequate methods of description and analysis, the complexity of border phenomena requires a shift toward research practices and strategies. By doing so, complexity-oriented approaches reinforce a more general trend in border studies to negotiate questions concerning the methodology of border research (Wille et al. 2021). Border studies increasingly engages with its own methodological foundations and reflexivity. What is expressed here is a progressive institutionalization of the field, which is making greater efforts to clarify its own acts of research and understanding.

In this chapter, I would like to make a contribution to the self-reflection of complexity-oriented border research by focusing on the methodological foundations and consequences this analytic shift brings. In general, the methodology of border research addresses the procedural level of research practice in which scientific, theoretical, epistemological, conceptual and methodical reflections converge in the process of *doing border research*. This convergence raises questions about the consequence of theoretical considerations for empirical research and vice versa, and procedural aspects, i.e. concerning the technical handling of research problems and questions, as well as epistemological assumptions concerning observation standpoints are also addressed (Gerst/Krämer 2021). In short, methodology is a “global style of thinking used to investigate a research topic” (Gobo 2008, 30), grounding on a specific research attitude, an “analytic sensibility” (Francis/Hester 2004, 72). Against this backdrop, what are the key determinants of a border methodology calibrated to border complexities? What methodological principles inform, or are derived from, the study of border complexities? And what challenges must a border methodology deal with, in this regard?

To address these questions, I will first present selected approaches that are characterized by an interest in the complexity of borders. This is also appropriate because a systematizing discussion of complexity-oriented approaches is still a desideratum. What do these approaches aim at? In what way do they take border complexity into account? In a second step, I will identify central methodological implications on which the reviewed works are based and explore what methodological challenges they face. In the conclusion, I bring together the insights gained about methodological prin-

ciples in complexity-oriented border research and establish a connection to the fundamental understanding of border complexity. It turns out that a reflection on the level of methodology also points to a general need for reflection on border complexities research design: the need to acknowledge that we are not dealing with one, but with many understandings of *border complexity*, and that these different perspectives need to be explained in more detail.

## 2. Complexity-Oriented Approaches in Border Studies

This chapter is titled *Seeing Like A Complex Border* to put into words the specific methodological perspective, that ‘global style of thinking’ that guides complexity-oriented border research. This is inspired by Chris Rumford’s seminal work describing a methodological shift in recent border studies—from ‘seeing like a state,’ aiming at a state-centered understanding of one-dimensional borders, to ‘seeing like a border,’ focused on the multiperspectivity and heterogeneity of borderings (Rumford 2014, 42). Rumford proposes the adoption of an observational position from which borders are not to be understood in a limited way as the product of state order formation, but from which the border itself is made the starting point to be able to follow the multiple and heterogeneous ordering performances of the border (also Mezzadra/Neilson 2013; Schiffauer et al. 2018). My extension of this phrase to include a complexity-centered perspective aims at provisionally bringing together emerging complexity perspectives to interrogate them for their methodological guidelines and consequences. What does it mean, then, to adopt a methodological position from which one can see like a complex border? To address this question, in the following section I examine six approaches that are based on the concept of border complexity. The review includes theoretical-conceptual contributions as well as empirically oriented studies. In each case, the aim is to reconstruct—in the sense of my holistic understanding of methodology—the analytical stance expressed therein, in which ontological, epistemological, methodological, and research-practical aspects, interact.

### 2.1 Borderwork and the Messiness of Borders

My exemplary review begins with the ideas of the aforementioned Chris Rumford (2014), who deals with the increasing complexification of con-

temporary borders as a “changing nature of borders” (2014, 3) under cosmopolitan conditions. The core element of his approach is the diagnosis of an increasing dispersion of borderwork, already expressed in Etienne Balibar’s famous description of the “ubiquity” (2002, 84) and “vacillation” (2002, 89–90) of borders and culminating here in the observation “that multiple sites of bordering now exist” (Rumford 2014, 12). The insight that under cosmopolitan conditions borders are no longer to be found solely at the edge of state territories but take the form of border practices at various entry points such as airports, requires an analytical openness to bordering where and how it did not occur before, and directs the focus to changing social as well as spatio-temporal conditions under which borders can supposedly occur everywhere. Based on the culmination that borders still must, at their core, perform a separating and filtering function, Rumford (2014) further points to the polysemic nature of the border, also already articulated by Balibar (2002, 81–82) which indicates that borders mean different things to different people. While it may appear as an insurmountable barrier to one, another is able to cross borders for tourism purposes, for example, without any problems. This multiplicity of meanings of the border makes it necessary to place questions of categorial differentiation at borders—between travelers and migrants, desirables and undesirables, etc.—center stage. This leads to the next observation that modern borders serve as a form of mobility control rather than territorial control and for this reason need to be understood as processes—of blocking, slowing down, redirecting—rather than static entities (also Nail 2016). Finally, according to Rumford (2014), another argument against a notion of static and monolithic borders is the fact that they appear as “increasingly messy” (2014, 16), that is, diffusing not only spatially but also in form. Borders “comprise an untidy collection of activities and sites of action littered across society” (2014, 16) and are therefore neither easily recognizable nor easily navigable. This is mainly because responsibility over borders is divided and no longer exclusively in the hands of the state, and that not all border practices are made equally visible to all people.

According to Rumford (2014), the complexity of modern borders lies in the concurrence of their spatial dispersion, their polysemy, their processuality, and their inherent messiness. Methodologically, Rumford (2014) derives four aspects that an analysis of borders must consider: First, it is important to be open to the diversification of actors, based on the observation that societies have begun to vernacularize borderwork. The prioritization of the question “Who borders?” leads to the consideration

of the “bordering activity of ordinary people” (2014, 18), who are involved in border (de-)stabilization. Closely linked to this, secondly, is a methodological multiperspectivism: to see a (complex) border then means to adopt a border perspective that can be understood as a conglomerate of diverse perspectives of distributed borderwork. Third, the aforementioned processuality of borderwork can be approached by making the un/fixity of borders a guiding analytical category. The permanence and institutionalization of borders are thus never complete—“borders must be made and remade on a regular basis if they are to be fit for purpose” (2014, 20)—and analysis must start from this precariousness and instability to explain how borders can not only be stabilized but also have bordering effects. Fourth, and finally, the connectivity of borders comes to the fore, pointing to the interconnecting capacities of borders at multiple levels, from the local to the global, and paying particular attention to the fact that scale relations are produced at borders in the first place.

## 2.2 Borderscapes

Currently, the most prominent concept for researching complex border relations is that of borderscapes. It has been established in the context of critical border studies and invites “to question the complexity of the dynamics through which *border landscapes* are produced, across and along the boundary lines between different nation-state sovereignties” (Brambilla 2015, 15; emphasis in the original). Extending a processual and anti-essentialist perspective on borders that, similar to Rumford’s understanding of borderwork, conceives of borders not as things for themselves but as processes of bordering, the concept sensitizes to diverse sources of complexity by tracing their coincidence. Thus, first, the spatial dispersion of borderings comes into view, which is fed by multiple processes and manifests itself in the fact that borders can occur at different places within societies—in border regions as well as in different social, cultural, legal, or economic settings—and thereby become visible in different forms. Second, their form is addressed as an aggregated bundle of distinctions that are expressed both symbolically and materially in the form of practices, discourses, interactions, and artifacts. Thus, borderscapes conceal “a complex web of conditions of possibility that are not immediately visible and inscribed in the relationship between space, lived experience and power” (2015, 23). And third, borderscapes denote the heterogeneous horizons of experience

that result from the interplay of borders, territories, sovereignty, citizenship, identity, and othering, pointing to the fact that borders are perspectival entities. The paradox that borderscapes denote both “*markers of belonging*” and “*spaces of becoming*” (2015, 24; emphasis in the original) points to the need for a perspective that considers the emergent temporality of borders.

When it comes to research practice, the concept is based on a strategy of decentering, which is grounded in the idea of an “ontological multidimensionality of borders” (2015, 26). This means that borderings are not to be analytically presupposed but should be problematized in their actual occurrence in the form of multiple interactions “at/in/across borders” (2015, 25). Thus, a processual ontology as well as a relational epistemology underly the approach, achieving a sensitivity to complex (and sometimes hidden) linkages of geopolitical and socio-symbolic distinctions that rearticulate differences or sometimes give rise to the new. In general, the stated goal here is not only to provide an analytical approach to the complexity of borders, but to address their ethical and normative dimensions. Brambilla (2015) therefore makes clear the opposition between methodology and method, emphasizing that borderscapes as a method is a critical practice that aims not only at an analytical understanding, but an emancipatory tactic that seeks to make phenomenological experience visible (Wille forthcoming). Here, I want to focus mainly on the analytical complexity-orientation that translates into an analytical strategy of going to the meeting points where hegemonic and counter-hegemonic borderscapes clash, where strategies of political ordering and the emergence of resistance and dissent meet. Viewing borders as “sites of struggle” (Brambilla 2015, 29) leads to an analysis where emerging conflicts can be analyzed as moments of negotiation and as “intersections of ‘competing and even contradictory emplacements and temporalities’” (2015, 22). Linking genealogical with conflict-sensitive approaches, borderscapes can be described as multiperspectival sites of social change. Since borders are seen as mobile, this requires a multi-sited approach. As Brambilla (2015) points out with reference to Rumford’s (2014) ideas on the multiperspectivity of the border, an analysis methodologically set up in this way then leads to a “pluritopical and plurivocal interpretation” and ultimately to the description of “border variations” (Brambilla 2015, 25) along scattered borderscapes. With reference to Mol/Law (2005), analytically bringing together borderscapes from the point of view of variability provides insight into “the complexity of boundaries in their materialities, their paradoxes, their leakages, their fractionalities, and their practical en-

actments” (2005, 637). Here, Brambilla uses the image of the kaleidoscope to express this complexity.

### 2.3 Borders as Boundary Sets

The impulse to start with the multiperspectival and polysemic formation of the nation-state border also underlies Beatrix Haselsberger's (2014) approach. She understands nation-state borders as “complex social constructions, with many different meanings and functions imposed on them” (2014, 507). Her complexity-oriented analysis aims to decode the inherent complexity of the border—understood as functional and semantic multiplicity—while making the border itself the starting point of analysis. Taking Austria's borders as an example, she proposes a methodological two-step procedure. The first step is to identify the manifold components and processes of the border that are involved in its construction and deconstruction. Here she speaks of various “boundaries” that mark individual semantic as well as functional aspects of the “border” and must be differentiated analytically; specifically, she distinguishes geopolitical, sociocultural, economic, and biophysical “layers” that can be understood as aggregations of a multitude of concrete differentiations and in turn come into focus in the form of “bordering practices” (2014, 510–512). The assumption is that socially dispersed practices such as visa policies (geopolitical), the preservation of cultural heritage (sociocultural), national strategic marketing (economic), or the construction of bridges over border rivers (biophysical) carry within them a nation-state distinction whose interplay determines the form and function of borders. The focus on practices making distinctions reflects the view that the boundary architecture of a border must be understood not as a rigid scaffolding, but as a practical and everyday stabilizing performance. The second step is then to reconstruct the “border spaces” that are created in this way, each of which emerges in parallel, overlaps dynamically, and thus makes the border, understood as an accumulated “boundary set,” appear as “thick” or “thin” (2014, 17–19).

For Haselsberger (2014), the inherent complexity of the border as an institution of the state emerges from its multidisciplinary and its own historical uniqueness and thus produces multiple relational geographies: For example, as the cross-border reach of national visas, as national memory spaces, as (national) economic markets, or as the impassable terrain of border rivers. Their disintegration or collapse characterizes the border—un-

derstandable as a practical aggregate, as more or less permeable. Methodologically, two particular strategies are applied here: On the one hand, the linking of diachronic and synchronic descriptions leads to the prioritization of the temporal dimension of the border, insofar as the complex historical becoming of the border is put in relation to its practical formation. On the other hand, a merging of semantic as well as functional analyses takes place, which makes it possible to reconstruct the complexity of the border in terms of a categorially-driven logic. Haselsberger's (2014) decoding of the border in terms of boundary sets can be described in this sense as a description of the complex semantic as well as functional potentials that determine the shape of the border in terms of actual border practices. The necessary sensitivity to the complexity of the border is captured in a model derived from the previous review of existing literature and serves as a heuristic matrix during the analysis, as a "dynamic border interpretation framework" (2014, 11), in order to be sensitive to the border complexity that manifests itself in border practice.

#### 2.4 Border Assemblages

Similarly to the concept of borderscapes, for Christophe Sohn, the complexity of the border is rooted in its "ontological multiplicity" (Sohn 2016, 184). This results from the attribution of diverse actors, practices, objects, and representations that establish borders not as internally coherent, but contradictory and ambiguous. For analytical navigation, he utilizes Deleuze and Guattari's (1987) concept of assemblages, which focuses on heterogeneous groupings of material and semiotic resources. These do not form borders as holistic entities; instead they are characterized by multiplicity and ambiguities, which are related in terms of contingent and always merely provisional connections. It is thus not a matter of the mere presence or absence of border-related meanings and elements stabilizing these meanings, but rather their specific linkages. In this respect, the concept of border assemblages does not only allow for a mapping of relevant border resources; rather, the approach aims at elaborating the complex relational order of assemblages. Thereby, in a poststructuralist manner, the transformational potential is particularly emphasized over the ability to stabilize border relations. Following a processual ontology, the concept directs attention to the complexity-induced change of borders, which must be seen as unfinished and ongoing. By being able to distinguish between actual group-



ings of elements and virtual possibilities of emergence and transformation, the border comes into view as a complex space of possibility in the making.

In research practice, the assemblage theory is used like a toolbox and not an applicable grand theory. Connected to this is the goal of methodologically securing an anti-essentialist determination of the identity of the border while being adaptable in research practice to the inherent complexity as well as the mutability of the border. If the border can only be considered in the mode of becoming and constantly eludes unambiguous fixation, then a methodological position is needed from which this instability can be accounted for. The analytic strategy formulated against this background comprises several steps (Sohn 2016, 187–188). At the beginning, there is the identification of core dimensions of the so-called “border diagram” (2016, 187) along which the transformation of the border takes place. This refers to the meaning potential that, in the case of nation-state borders, currently form around categories such as territory, citizenship, sovereignty, political control, nationality, or security, and open up a horizon of meaning of what ‘border’ can mean. Second, the determination of one or more “attractors” takes place, which, in terms of border-specific guiding semantics such as “state security” or “geo-economic integration,” bundles plural meanings together which are then realized in the form of combined practices, stocks of knowledge, actor categories, and artifacts (2016, 187). Third, and finally, the determination of the (in)stability of the identity of the border can be accomplished by surveying evolving qualitative distances of meaning between actual border assemblages and guiding semantics. Of particular interest here are historical tipping points at which assemblages cluster around new guiding semantics or new guiding semantics emerge at once, changing the meaning of the border.

## 2.5 Borderstructures

A more actor-centered view of complex border relations is called for by Christian Banse (2018). In his interview-based, sociological analysis of palliative care for migrants and refugees, he shows how patients must locate themselves in a system of multiple boundaries; a system in which political-legal, medical-institutional, ethnic-national, and interactional boundaries and the boundary between life and death condense into a “solidified border structure” (Banse 2018, 89; translated by DG). A border structure can thus be understood as a conglomerate of diverse social boundaries, which in

their specific interaction achieve a border quality that goes beyond the effectiveness of single boundaries (also Fassin 2020). This is experienced as a system of multidimensional uncertainty by patients and relatives, but also by doctors, translators, and other actors, i.e., all “border figures” who are “directly confronted with the dynamics of complex borders, because they live at the borders, so to speak” (Banse 2018, 84; translated by DG). Herein lies the multi-perspectival character of that border structure, which presents itself differently from each perspective.

From the perspective of the actors, however, borders are considered complex because they are interconnected, build up and reconstruct themselves as multidimensional structures with their own dynamics, and thus cannot be clearly defined either semantically or functionally. For the refugee or migrant patients, they manifest themselves as uncertainty about the future, as barriers to access, as contradictions, limits to understanding, and as role conflicts. The complexity of the border structure can thus be demonstrated and deciphered through its phenomenological consequentiality. Methodologically significant access sites thus become, on the one hand, border junctions in the sense of nodes or interfaces of the border structure, which are experienced in particular as a “zone of uncertainty” (2018, 86; translated by DG), but which can also be recognized as passable checkpoints or sites of resistance and reinterpretation. On the other hand, this understanding of complexity calls for a multiperspectival second-order observation—an observation of border observations (also Vobruba 2016)—since, from a phenomenological point of view, it is the nature of the inherent dynamics of such border entanglements to resist comprehensive and unambiguous penetration.

## 2.6 Borders as Interfaces

From the phenomenological dimension of border complexities, I would finally like to move to the act of drawing the boundary, i.e., the insight that the complexity of the border is not only inherent in its aggregated form, but already in the act of making any distinction. To clarify this, Athanasios Karafillidis (2018) imports the concept of interface complexity from sociological network studies and science and technology studies. The concept of interfaces has recently been used in border studies (e.g., Nelles/Walther 2011; Cooper/Rumford 2013; Saltsman 2018) to emphasize the connective character of borders. Karafillidis understands the practical production of

boundaries as operations of incision that can then become interfaces, i.e., devices of mediation and translation, when they are observed and thus interpreted and made connectable. Referring to German sociologist Niklas Luhmann, he states, “This conception of interfaces as observable boundaries exposes their complexity. Boundaries are not only structurally manifold, but this structural multiplicity is furthermore observed in manifold ways. Complexity as multiplicity of an entity [...] encompasses both” (Karafillidis 2018, 130; translated by DG). A methodological requirement that arises from this is that an analysis interested in border complexities must observe border operations and their observation or interpretation, which requires a particular research stance insofar as borders “quickly draw attention away from themselves to the entities they demarcate, that is, for example, nation-states” (2018, 131; translated by DG).

The perspective of interfacing introduced by Karafillidis (2018) is supposed to make it possible not to presuppose the drawing “of the border and observe its consequences or the change of the border, but to describe the process that regularly leads to the ongoing reproduction of such a dividing line” (2018, 142; translated by DG). In this, the structure of the boundary itself, its “form of interconnectedness,” (2018, 141; translated by DG) is revealed. Complexity then describes the specific selectivity of possibilities that guides a selection and linkage of those resources that are called upon in the context of a border operation. Supported by an ethnographic study of Greek identity (Karakasidou 1997), Karafillidis (2018) shows that such a turn to nation-state boundary-making processes must bring three dimensions into view: First, the fixing of a distinction, as the Orthodox Church did in late 19th century Greece by mandating the use of the Greek language. Second, the selection of concordant attributes, characteristics, and correct behaviors, as became observable in the public marketplace in the use of national symbols and an ethnic division of labor. And third, the mediation of these contexts, in the example through schooling and a patronage system between influential families. Taken together, these methodological access points enable the uncovering of complex structures of relevance in moments of explicit establishment and further processing of borders, because here their potential for conflict comes to light in the sense of the possibility of divergent observations and thus also intentions and potentials for change. Their processual formation of meaning thus becomes a determinant: “Borders are thus always complex because they have history and are accompanied by histories” (2018, 133; translated by DG).

## 2.7 Interim Conclusion

Before I will turn to the methodological principles that may be derived from these complexity-oriented approaches and the challenges such perspectives face, I would like to emphasize a conceptual point concerning the notion of complexity. Reviewing these approaches with their focus on different border phenomena, it becomes apparent that qualifying border phenomena as complex involves several elements. Based on the shared intention to decode the complexity of borders, three (not always clear-cut) tendencies to grasp border complexities seem to be distinguishable here, each with different complexity-related epistemological interests. First, this concerns the tendency to locate complexity within the idiosyncratic conditions of borders. The border can thus be conceived as a complexity-reducing phenomenon. This is distinguished from a second tendency to describe complexity in terms of uncertain and opaque border effects. Accordingly, borders can be understood as a complexity-producing phenomenon. And third, there is the tendency to aim at decoding the inherent complexity of the border in the sense of a border-analytical introspection. Here, the border appears as a complex phenomenon. The latter approach can be further differentiated into attempts to trace the complexity of boundary operations and to decode the complexity of composite border aggregates. This reveals that we are dealing with a multi-digit complexity assumption and the need remains to discuss how these different notions of complexity relate to each other.

### 3. *Methodological Principles and Challenges in Complexity-Oriented Border Research*

The approaches more closely examined above provide an exemplary insight into how contemporary border studies approach the complexity of borders. On a methodological level, they also show how conventional divisions of object constitution, epistemological interest, and research strategy are increasingly being conflated in the sense of a methodological stance that I have provisionally paraphrased as *Seeing like a complex border*. Now, what are the pillars of such a perspective? And what methodological challenges does it face?

### 3.1 Methodological Principles

The central point of reference of complexity-oriented approaches in border research is the rejection of an ontologically unifying definition of *the border* as a research object. The insight that borders are not natural objects is by no means new. The constructivist turn in border research has led to taking borders seriously in their constructional character (Newman 2006). What is new, however, is the fanning out of the border into constitutive characteristics and features, which shifts the view from the singular act of bordering to the interplay of diverse border accomplishments and the resources made relevant in doing so. From the ontological relativity to which constructivist approaches refer with regard to the performative character of bordering, the view swings to the ontological multiplicity and heterogeneity of the border itself, which arises from the distributed work on it. Four aspects accompany this shift in perspective.

First, the tension between separability and connectivity comes into view. If border research has already come to the important insight that a central characteristic of borders is rooted in the supposed paradox that they both connect and separate, i.e., the transgression of the border is already inherent in its determination (e.g., Nail 2016); then, with the complexity orientation, an increased dynamization of the both/and relationship of these two border capacities takes place. Contrary to a dichotomous either/or resolution, which is paradigmatically laid out in the oppositional pair of opening/closing and leads to the insight that borders form a specific selectivity, connection, and separation, opening and closing appear in a complexity-oriented perspective as poles of a border continuum that could be described as a variable and dynamically changing density or as a constantly reweaving network. In terms of research strategy, this is considered in that connection and separation are not played off against each other in the sense that one of the two is given analytical priority in advance—in the form of a clear research agenda oriented toward exclusion or border crossing, for instance. Instead, they are taken seriously as potential organizing capacities of borders and analyzed in their actual manifestations. In doing so, the analysis does not end with the identification of, for example, a selective border crossing or a geopolitical order, but explains them in contrast to phenomena worth explaining. The aim is then to trace their emergence against the background of complex conditions, the arrangement of which determines the quality of the permeability of the border.

Second, there is a turn towards the multidimensionality of the border, which aims not only to identify border dimensions but to describe them in their differentiated and inherent logic, and thus to be able to show how complex shapes emerge from the interplay of individual border dimensions. The focus here is primarily on the spatial, social, temporal, and material dimensions of the border (also Schiffauer et al. 2018; Wille 2021). From a spatial perspective, it first becomes apparent that the locatability of borders as sites of bordering as well as the emergence of border spaces—which have always marked the privileged phenomenal area of border research—is also of great importance from a complexity-oriented perspective. However, central to the complexity-oriented view is the diagnosis of the spatial dispersion of borders, which is associated with both intensifying transnational interconnections and changing border regimes. In addition, the relationship between this spatial, i.e., political-territorial dimension, and the socio-symbolic dimension of the border takes center stage. While a central progress of border research in recent decades has been to understand territorial *bordering*, political *ordering*, and social *othering* as an intertwined process (van Houtum/van Naerssen 2002; also van Houtum 2021), a more complex understanding can now be gained. A one-dimensional othering (us vs. them) is replaced by an understanding of a complex regime of distinctions composed of a multitude of boundary-related categorical differentiations, expressed in terms of intersections of diverse social boundaries (Wonders/Jones 2019). The border thus becomes a site where established distinctions become relevant, intertwine, and from which new axes of differentiation emerge. This is, then, the key to understanding the ever-growing polysemy of the border; as perspectives on borders become more differentiated, the arsenal of meanings of the border also grows, that is, what it can mean from differing perspectives.

Furthermore, the approaches outlined above indicate that these connections cannot be conceived of without a temporal dimension. While the temporality of the border beyond its linear historicity has long been neglected (also Donnan et al. 2017; Pfoser 2022), a complexity perspective sharpens the view not only for the temporality of border processing itself, but also for the multiplicity of temporalities; Little (2015, 431) speaks of “complex temporality” that must be synchronized at borders or leads to heterogeneous time structures. In this context, borders sometimes produce their own temporal horizons (of waiting, e.g.), which refer to complex entanglements of space-times (Weidenhaus 2015) and social boundaries. Finally, a material dimension of the border is made accessible, bringing into focus a wide

variety of artifacts and objects of border processing that can (de)stabilize borders. Going beyond “human-actor-oriented methodologies” (Teunissen 2020, 389), it becomes clear that neither border infrastructures nor vehicles of border crossing are neutral objects, but elements or resources of border processing. A sensitivity to material affordances, which testify to borders forming specific material logics of their own, then leads to a better understanding of how the shape of borders emerges through “entanglements” (Schindel 2016, 220) with border actors. Empirically, this multidimensionality of the border manifests itself as polycontextuality, which in turn calls for a research stance that demonstrates sensitivity to the specific contextual configurations of borders. In this regard, a research strategy that combines a genealogical perspective on unfolding border spaces, categorial differences, marked border times, and material resources with a multi-site approach could be used to trace the interconnections of scattered, real-world phenomena. In doing so, dislocalization, polysemy, boundary temporalities, and material affordances offer conceptual reference points that can be problematized in their relationship to arrive at an understanding of their complex relations.

Third, there is an emphasis on the fundamental relationality of borders, marking a double shift in perspective compared to the classical notion that borders put at least two elements, e.g., nation-states, into a linear, separated relationship. On the one hand, complexity-oriented approaches point out that under current societal conditions there is a complexification of relational conditions and effects, such as borders performing multiscalar relational work beyond typical neighborhood relations (also Laine 2016; Bürkner 2019). On the other hand, the internal relationality of borders comes more into focus. Here, relations are seen as the cement that holds the individual elements of a border architecture together and stabilizes their complex structure. Turning to this relational internal structure (also Gerst et al. 2018) of the border builds on the recognition already described of the multidimensionality of the border, which cannot be understood as a simple collection of different border elements in the form of practices, discourses, objects, bodies of knowledge, and other institutionalizations that condition the meaning of borders and their relevance, but as an internal logic of relations that condenses space, time, and socio-materiality in the sense of a “space of difference” (DeChaine 2012, 1).

Methodologically, both perspectives are absorbed by a research-practical decentering of the border, through which the manifold internal and external relational performances of the border can be problematized. The border

thus appears “not as a taken-for-granted entity, but a site of investigation” (Parker/Vaughan-Williams 2012, 728). The adequate heuristic maxim is to consider those sites and situations of linking—from microphysical interfacing (Karafillidis 2018) to forms of borderscaping (Brambilla 2015) and bordertexturing (Weier et al. 2018), to situational border struggles (Mezadra/Neilson 2013; Hess 2018), coagulated forms of border infrastructures (Nail 2016) and institutions (Cooper/Perkins 2012), or border aggregates such as assemblages (Sohn 2016) and dispositifs (Nieswand 2018)—to trace the multiperspectival as well as multiple-resource-based internal shaping and external formability of the border. In doing so, it proves particularly instructive to take advantage of the decided problematizations of these relationalities, that is, to exploit the fact that borders are “inherently problematical” (Agnew 2008, 176). From a complexity perspective, the problematicalities of the border occur when different relational logics clash, allowing insights into the orderedness and ordering performance of the border. This sometimes manifests as articulations of dissent or experiences of opacity, uncertainty, and contradiction that can serve as a starting point for complexity-oriented reconstructions.

Fourthly and finally, the vanishing points discussed so far converge in a differentiated consideration of border activity. On the one hand, following the so-called processual as well as discursive turn in border research, the complexity orientation builds upon an understanding of borders as practical accomplishments, an anti-essentialist stance that focuses on the practical production of borders in the form of borderings, borderwork, bordering practices and doings of the border (also Wille/Connor 2019; Connor 2021). On the other hand, the processuality is brought to the fore as both the contingent mode of border (de)stabilization as well as enactments of border-related actions, which makes it possible to describe their incompleteness as well as their conflictuality and changeability. Based on these two determinants that have defined the mainstream of border research in recent years (Wille 2021), complexity-oriented approaches shift the focus to the practical interaction of dynamic border agency. Border-related agency appears distributed; borderwork requires collaborations and distributed resources to produce situational border unity as a conglomeration of borderwork. As Cooper (2015) summarizes, methodologically speaking it is a matter of “[questioning] the often taken-for-granted relationships between borders, borderers and the bordered and asking whether these component processes, and the relationships between them, are so clearly and uncritically identifiable and explainable” (2015, 449). Sensitivity is thus achieved



to conflicts, frictions, and contradictions, as well as the unfinished nature of borderwork. In this sense, borders achieve their complexity through the respective inherent logics that singular doings follow, and which are responsible for the fact that borders in the process of becoming must be understood as more than the sum of their interacting parts.

The core concerns and procedures of complexity-oriented border research spelled out so far can be broken down—as a simplified summary might read—to a few central principles (Gerst/Krämer 2020). Following the perspective of *seeing like a complex border* then means analyzing borders from the border, that is, as Mezzadra/Neilson (2013, 13) put it pointedly, understanding them not only as a “research object” but as an “epistemological viewpoint.” In practical research terms, this means problematizing borders as an aggregated site of investigation and looking for the complex conditions, modes of production, or effects of the borderness of practices, discourses, objects, etc. Furthermore, it would have to be about following border trajectories, i.e., to perspectivize the accomplishment of border practice and to stay on the track of the complex, trans-situational linkages of borderwork. Finally, it is important to focus on the relationship between borders and the formation of relational orders to determine the dynamic relationship between the mobilized inherent orderliness of the border itself and the multidimensional order-creating power of the border. Methodologically, a diverse set of qualitative as well as quantitative social research methods can be applied. In the sense of adequacy in the choice of methods, preferences can be observed above all for methods that are sensitive to the dynamics of borders (mobile methods), that help to navigate between the spatial, social, temporal, and material dispersion of the border (multi-sited ethnography) or that can capture the multiplicity of border meanings between official ‘big stories’ and local ‘small stories’ (discourse and narrative analysis).

### 3.2 Methodological Challenges

In addition to these new insights and condensed procedures, some challenges arise from dealing with border complexities which, upon reflection, can contribute to increasing the productivity of complexity-oriented border research. They can be derived from the previous considerations in the form of specific tensions and sorted according to questions that relate to the

research practice, the guiding epistemological interest, and the observation standpoint.

The practical challenges of research include, first, the de/centering of the border and thus the question of where, who, what, when, and for how long the focus of border analysis is. Scott (2020, 8; emphasis in the original) states: “borders have become *complex socio-political arenas* where issues related to identity, security and mobility, among others, are enacted and represented. There are, in other words, a multitude of contexts and spaces that *count* as borders.” So, what counts as a border phenomenon and how does its analysis take shape? Whether this begins at the border fence, for example, or with border-diffusing practices of the health care system, it is crucial here to keep the borderness in focus (Green 2012; Gerst 2020) without, on the one hand, lapsing into a borderism that, in Rumford’s words (2014, 13), packs “everything in terms of borders” or, on the other hand, proclaiming borderlessness while being blind to the sometimes hidden microphysics of modern border regimes. What makes given phenomena *border phenomena*? From which observational standpoint can we decide what needs to be included in the analysis? Second, it is important to address questions of in/visibility (also Brambilla/Pötzsch 2017; Sohn/Scott 2020) and thus to address in the analysis tensions between the observable and abstract qualities of the border, between obvious border design and hidden border structures, and between collective experienceability and asymmetrically distributed possibilities of visibility and participation. Third, the multidimensionality inherent in complex borders leads to questions of trans/disciplinary research designs. While disciplinary perspectives and methods can provide in-depth and differentiated analyses of individual border dimensions, the advantage of transdisciplinary research teams is that they can compile multi-perspective broad analyses. Thus, analyses oscillate between a particular understanding of complexity as depth and complexity as completeness; in particular, translation requirements must come into view in teamwork, method triangulation, and scientific communication, as made clear by debates about the possibility and usefulness of a general theory of borders (Newman 2011; Paasi 2011). Fourth, and finally, questions of power/lessness emerge, especially in the form of trade-offs between descriptive-discovering and critical-emancipatory scholarship, but also in the question of which actor’s perspective border research makes its subject and thus gives voice to. At the same time, however, its own inadequacies and limitations can come to light in the form of inaccessible border locations and data, language barriers in the research process, or in

sheer powerlessness in the face of the possible brutality of contemporary border regimes.

#### 4. Conclusion

In sum, the insight that borders form complex objects, which is fed by empirical studies as well as developments in social and cultural theory, has already produced several empirical studies and conceptual reflections in the interdisciplinary field of border studies. The tentatively systematic synopsis presented here has shown that the level of methodology lends itself to bundling the analytical potential of these scattered approaches. Even though these approaches aim at different border-related phenomena, one basic benefit from complexity-oriented approaches seems to be that the notion of complexity facilitates connections between previously unrelated perspectives and phenomena. Thus, some features and characteristics of border research that are related to complexity could be elaborated upon and related to a research attitude I have outlined as *seeing like a complex border*. In addition to the observation that such a border methodology would do well to be as extensively aware of its challenges as possible and to make productive use of them, the realization that border research does not operate with one understanding of complexity, but rather locates complexity in multiple places is a likely consequence. Is complexity a property of borders? Is it a condition of borders or does it emerge from the accomplishment of borders? This is where future methodological reflections would have to start. As I would state that complexity-oriented thinking has just entered border studies and by no means designates the field's common sense, it might help to refine complexity perspectives in further empirical studies and to enter a further dialogue with subject areas and disciplines that have been dealing with questions of complexity for a long time, such as sociological systems theory or the field of science and technology studies. In this way, much can be learned about possible merits of this line of thinking.

Indissociable from this is the further self-assurance of research standpoints towards border complexities. This point derives above all from the research practice of critical approaches, which explicitly do not speak of a methodology of complex borders, but of complex methods with which borders can be thought more complexly. Whose complexity, then, is it that complexity-oriented approaches refer to? A complexity that is recognized

and dealt with as such by border figures? Or a complexity that can only be recognized or worked out by border scholars if they have the appropriate methods to do so? For the actual research process, it makes a difference whether an attitude is adopted that makes it possible to discover complexity in the object, or whether the object is approached with a certain understanding of complexity. While in the first case a complexity-related learning process must be possible to achieve sensitivity to actual border complexities, in the second case the possibility for irritation must be allowed. While these connections, which point to the relationship between scientific and everyday border knowledge, cannot be discussed further here, a basic methodological orientation towards the perspectives and relevancies of the actors seems appropriate, i.e., towards “how each individual makes his or her way through this complexity” (Amilhat Szary/Giraut 2015, 10). In this way, overanalyzing border phenomena can be avoided. (Theoretical) enrichments of complexity, which consist in problematizing supposedly simple border demarcations with a complex border model, for example, are only insight-enhancing if they are not decoupled from the local perspectives of the actors. Conversely, naïve, actor-centered approaches are only suitable for complexity if they learn to interpret the signs of complexity. The previously opened challenges for research practice—de/centering, in/visibility, trans/disciplinarity and powerless/ness—can be understood in this sense as sensitizations that can accompany the research process. They thus form the foundation of a “border-analytical indifference” (Gerst/Krämer 2020, 69–70), which expresses itself in a principled openness on the part of researchers to suppress rash analytical decisions vis-à-vis the empirical border reality—an attitude that is particularly appropriate in the case of complex borders and a perspective of *seeing like a complex border*.

However, border research must not close its mind to the question whether the complexity of the border represents empirically reconstructable reality in every case. According to Niklas Luhmann (1981, 96; translated by DG), in differentiated modern societies “the complex does not simply take the place of the simple, the development only leads to the fact that besides simple forms there are also more complex ones to choose from.” If this also applies to borders, then we should learn to distinguish clearly between supposedly simple and supposedly complex borders, which in turn arise from clearly ordered or opaque conditions and can produce clearly traceable or complex effects. While one of border studies’ main challenges is still the diffusivity of the notion of the border itself, not much would have gained if it would get further complicated through diffuse

understandings of complexity. In any case, a ‘methodological complexitism’ should be avoided, which in case of doubt is conducive to a mystification of borders and thereby says more about the complex inventiveness of border research than about its phenomena of interest.

## 5. References

- Agnew, John (2008): *Borders on the Mind: Re-Framing Border Thinking*. In: *Ethics & Global Politics* 1, no. 4, 175–191.
- Amilhat Szary, Anne-Laure/Giraut, Frédéric (2015): *Borderities: The Politics of Contemporary Mobile Borders*. In: Amilhat Szary, Anne-Laure/Giraut, Frédéric (eds.): *Borderities and the Politics of Contemporary Mobile Borders*. Basingstoke: Palgrave Macmillan, 1–19.
- Balibar, Etienne (2002): *Politics and the Other Scene*. London/New York: Verso.
- Banse, Christian (2018): *Komplexe Grenzziehungen und ungewisse Grenzdynamiken. Zur Palliativversorgung von Menschen mit Migrationshintergrund und Geflüchteten*. In: *Berliner Debatte* Initial 29, no. 1, 84–94.
- Brambilla, Chiara (2015): *Exploring the Critical Potential of the Borderscapes Concept*. In: *Geopolitics* 20, no. 1, 14–34.
- Brambilla, Chiara/Pöttsch, Holger (2017): *In/visibility*. In: Schimanski, Johan/Wolfe, Stephen F. (eds.): *Border Aesthetics: Concepts and Intersections*. New York/Oxford: Berghahn, 68–89.
- Bürkner, Hans-Joachim (2019): *Scaling and Bordering: An Elusive Relationship?* In: *Journal of Borderlands Studies* 34, no. 1, 71–87.
- Burridge, Andrew/Gill, Nick/Kocher, Austin/Martin, Lauren (2017): *Polymorphic Borders*. In: *Territory, Politics, Governance* 5, no. 3, 239–251.
- Connor, Ulla (2021): *Border or Bordering Practice? Changing Perspectives on Borders and Challenges of Praxeological Approaches*. In: *Borders in Perspective* 6, 27–38.
- Cooper, Anthony (2015): *Where Are Europe’s New Borders? Ontology, Methodology and Framing*. In: *Journal of Contemporary European Studies* 23, no. 4, 447–458.
- Cooper, Anthony/Perkins, Chris (2012): *Borders and Status-Functions: An Institutional Approach to the Study of Borders*. In: *European Journal of Social Theory* 15, no. 1, 55–71.
- Cooper, Anthony/Rumford, Chris (2013): *Monumentalising the Border: Bordering Through Connectivity*. In: *Mobilities* 8, no. 1, 107–124.
- Côté-Boucher, Karine/Infantino, Federica/Salter, Mark B. (2014): *Border Security as Practice: An Agenda for Research*. In: *Security Dialogue* 45, no. 3, 195–208.
- DeChaine, D. Robert (2012): *Introduction: For Rhetorical Border Studies*. In: DeChaine, D. Robert (ed.): *Border Rhetorics: Citizenship and Identity on the US-Mexico Frontier. Rhetoric, Culture, and Social Critique*. Tuscaloosa: University of Alabama Press, 1–18.

- Deleuze, Gilles/Guattari, Félix (1987): *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.
- Donnan, Hastings/Hurd, Madeleine/Leutloff-Grandits, Carolin (eds.) (2017): *Migrating Borders and Moving Times: Temporality and the Crossing of Borders in Europe*. Manchester: Manchester University Press.
- Fassin, Didier (ed.) (2020): *Deepening Divides: How Territorial Borders and Social Boundaries Delineate Our World*. London: Pluto Press.
- Francis, David/Hester, Stephen (2004): *An Invitation to Ethnomethodology. Language, Society and Social Interaction*. London: Sage.
- Gelbman, Alon/Timothy, Dallen J. (2011): *Border Complexity, Tourism and International Exclaves*. In: *Annals of Tourism Research* 38, no. 1, 110–131.
- Gerst, Dominik (2020): *Epistemic Border Struggles: Exposing, Legitimizing, and Diversifying Border Knowledge at a Security Conference*. In: Wille, Christian/Nienaber, Birte (eds.): *Border Experiences in Europe. Everyday Life – Working Life – Communication – Languages*. Baden-Baden: Nomos, 143–166.
- Gerst, Dominik/Klessmann, Maria/Krämer, Hannes/Sienknecht, Mitja/Ulrich, Peter (2018): *Komplexe Grenzen. Perspektiven aktueller Grenzforschung*. In: *Berliner Debatte Initial* 29, no. 1, 3–11.
- Gerst, Dominik/Krämer, Hannes (2020): *Die methodologische Fundierung kulturwissenschaftlicher Grenzforschung*. In: Kleinmann, Sarah/Peselmann, Arnika/Spieker, Ira (eds.): *Kontaktzonen und Grenzregionen. Kulturwissenschaftliche Perspektiven*. Leipzig: Universitätsverlag Leipzig, 47–70.
- Gerst, Dominik/Krämer, Hannes (2021): *Methodologie der Grenzforschung*. In: Gerst, Dominik/Klessmann, Maria/Krämer, Hannes (eds.): *Grenzforschung. Handbuch für Wissenschaft und Studium*. Baden-Baden: Nomos, 121–140.
- Gobo, Giampietro (2008): *Doing Ethnography*. 2nd edition. Thousand Oaks: Sage.
- Green, Sarah (2012): *A Sense of Border*. In: Wilson, Thomas M./Donnan, Hastings (eds.): *A Companion to Border Studies*. Malden: Wiley-Blackwell, 573–592.
- Haselsberger, Beatrix (2014): *Decoding Borders. Appreciating Border Impacts on Space and People*. In: *Planning Theory & Practice* 15, no. 4, 505–526.
- Hess, Sabine (2018): *Border as Conflict Zone. Critical Approaches on the Border and Migration Nexus*. In: Bachmann-Medick, Doris/Kugele, Jens (eds.): *Migration. Changing Concepts, Critical Approaches*. Berlin/Boston: De Gruyter, 83–100.
- Houtum, Henk van (2021): *Beyond 'Borderism': Overcoming Discriminative B/Ordering and Othering*. In: *Tijdschrift voor Economische en Sociale Geografie* 112, no. 1, 34–43.
- Houtum, Henk van/Naerssen, Ton van (2002): *Bordering, Ordering and Othering*. In: *Tijdschrift voor Economische en Sociale Geografie* 93, no. 2, 125–136.
- Karafillidis, Athanasios (2018): *Die Komplexität von Interfaces. Touchscreens, nationale Identitäten und eine Analytik der Grenzziehung*. In: *Berliner Debatte Initial* 29, no. 1, 130–146.
- Karakasidou, Anastasia N. (1997): *Fields of Wheat, Hills of Blood. Passages to Nationhood in Greek Macedonia 1870-1990*. Chicago: University of Chicago Press.

- Laine, Jussi P. (2016): The Multiscalar Production of Borders. In: *Geopolitics* 21, no. 3, 465–482.
- Little, Adrian (2015): The Complex Temporality of Borders: Contingency and Normativity. In: *European Journal of Political Theory* 14, no. 4, 429–447.
- Luhmann, Niklas (1981): Schematismen der Interaktion. In: Luhmann, Niklas: *Soziologische Aufklärung 3. Soziales System, Gesellschaft, Organisation*. Opladen: Westdeutscher Verlag, 81–100.
- Lynnebakke, Brit (2020): Dealing with Borderland Complexity. The Multisided Views of Local Individuals in the Norwegian–Russian Borderland. In: *Journal of Borderlands Studies* 35, no. 3, 351–368.
- Mezzadra, Sandro/Neilson, Brett (2013): *Border as Method, or, the Multiplication of Labor*. Durham: Duke University Press.
- Mol, Annemarie/Law, John (2005): Boundary Variations: An Introduction. In: *Environment and Planning D: Society and Space* 23, no. 5, 637–642.
- Nail, Thomas (2016): *Theory of the Border*. New York: Oxford University Press.
- Nelles, Jen/Walther, Olivier J. (2011): Changing European Borders: From Separation to Interface? An Introduction. In: *Articulo* 6, 1–17.
- Newman, David (2006): Borders and Bordering. Towards an Interdisciplinary Dialogue. In: *European Journal of Social Theory* 9, no. 2, 171–186.
- Newman, David (2011): Contemporary Research Agendas in Border Studies: An Overview. In: Wastl-Walter, Doris (ed.): *The Ashgate Research Companion to Border Studies*. Farnham: Ashgate, 33–47.
- Nieswand, Boris (2018): Border Dispositifs and Border Effects. Exploring the Nexus Between Transnationalism and Border Studies. In: *Identities* 25, no. 5, 592–609.
- Paasi, Anssi (2011): A Border Theory: An Unattainable Dream or a Realistic Aim for Border Scholars? In: Wastl-Walter, Doris (ed.): *The Ashgate Research Companion to Border Studies*. Farnham: Ashgate, 11–32.
- Parker, Noel/Vaughan-Williams, Nick (2012): Critical Border Studies: Broadening and Deepening the ‘Lines in the Sand’ Agenda. In: *Geopolitics* 17, no. 4, 727–733.
- Pfoser, Alena (2022): Memory and Everyday Borderwork: Understanding Border Temporalities. In: *Geopolitics* 27, no. 2, 566–583.
- Rumford, Chris (2014): *Cosmopolitan Borders*. London: Palgrave Macmillan.
- Saltsman, Adam (2018): A Proliferation of Border Interfaces. Ordering Insecurity for Migrants in the Thai–Burmese Borderlands. In: Horstmann, Alexander/Saxer, Martin/Rippa, Alessandro (eds.): *Routledge Handbook of Asian Borderlands*. London/New York: Routledge, 242–254.
- Schiffauer, Werner/Koch, Jochen/Reckwitz, Andreas/Schoor, Kerstin/Krämer, Hannes (2018): Borders in Motion: Durabilität, Permeabilität, Liminalität. In: *Working Paper Series B/ORDERS IN MOTION* 1, 1–28.
- Schindel, Estela (2016): Bare Life at the European Borders. Entanglements of Technology, Society and Nature. In: *Journal of Borderlands Studies* 31, no. 2, 219–234.

- Scott, James W. (2020): Introduction to a Research Agenda for Border Studies. In: Scott, James (ed.): *A Research Agenda for Border Studies*. Northampton: Edward Elgar Publishing, 3–24.
- Sohn, Christophe (2016): Navigating Borders' Multiplicity: The Critical Potential of Assemblage. In: *Area* 48, no. 2, 183–189.
- Sohn, Christophe/Scott, James W. (2020): Ghost in the Genevan Borderscape! On the Symbolic Significance of an "Invisible" Border. In: *Transactions of the Institute of British Geographers* 45, no. 1, 18–32.
- Teunissen, Peter (2020): Border Crossing Assemblages: Differentiated Travelers and the Viapolitics of FlixBus. In: *Journal of Borderlands Studies* 35, no. 3, 385–401.
- Ulrich, Peter (2021): *Participatory Governance in the Europe of Cross-Border Regions. Cooperation – Boundaries – Civil Society*. Baden-Baden: Nomos.
- Vobruba, Georg (2016): Grenzsoziologie als Beobachtung zweiter Ordnung. In: Eig-müller, Monika/Vobruba, Georg (eds.): *Grenzsoziologie. Die politische Strukturierung des Raumes*. Wiesbaden: Springer VS, 215–223.
- Weidenhaus, Gunter (2015): *Soziale Raumzeit*. Berlin: Suhrkamp.
- Weier, Sebastian/Fellner, Astrid M./Frenk, Joachim/Kazmaier, Daniel/Michely, Eva/Vatter, Christoph/Weiershausen, Romana/Wille, Christian (2018): Bordertexturen als transdisziplinärer Ansatz zur Untersuchung von Grenzen. Ein Werkstattbericht. In: *Berliner Debatte* Initial 29, no. 1, 73–83.
- Wille, Christian (2021): Vom processual shift zum complexity shift: Aktuelle analytische Trends der Grenzforschung. In: Gerst, Dominik/Klessmann, Maria/Krämer, Hannes (eds.): *Grenzforschung. Handbuch für Wissenschaft und Studium*. Baden-Baden: Nomos, 106–120.
- Wille, Christian (forthcoming): Borderscapes. In: Fellner, Astrid M./Nossem, Eva (eds.): *Online Glossary Border Studies*, <https://hdl.handle.net/10993/47205>.
- Wille, Christian/Connor, Ulla (2019): Cross-Border Cooperation as Practice Formation: Perspectives for an Alternative Research Approach. In: Beck, Joachim (ed.): *Transdisciplinary Discourses on Cross-Border Cooperation in Europe*. Brussels: Peter Lang, 255–278.
- Wille, Christian/Gerst, Dominik/Krämer, Hannes (eds.) (2021): *Identities and Methodologies of Border Studies: Recent Empirical and Conceptual Approaches*. *Borders in Perspective* 6, DOI: 10.25353/ubtr-xxxx-e930-87fc.
- Wonders, Nancy A./Jones, Lynn C. (2019): Doing and Undoing Borders: The Multiplication of Citizenship, Citizenship Performances, and Migration as Social Movement. In: *Theoretical Criminology* 23, no. 2, 136–155.

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