Introduction—Space-and time-making in education: Towards a topological lens

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Abstract
Over the last decades, the way we think about space and time in relation to the field of education has changed substantially. New societal evolutions have urged scholars to come to grips with the increasing difficulty of approaching educational practices in terms of existing “static” (e.g. topographical) representations of space and “linear” (e.g. chronological) models of time. As a result, different lines of research have been developed that seek to extend our spatiotemporal understanding not only conceptually and theoretically, but also through novel methodologies and new kinds of empirical analyses. This Special Issue extensively discusses and further elaborates on one approach informing these lines of research: (social) topology. In this editorial, we outline the topological lens and discuss its origins in the field of mathematics. After discussing how topology was adopted in the broad field of the social sciences, we show how it has gradually come to inform educational research as well. We argue that the topological lens is particularly fruitful to investigate the (mutual) construction of space and time. Briefly discussing each contribution in the Special Issue, we show how the Special Issue contributes to the further development, and making accessible, of topology as an educational research approach.

Keywords
Topology, space, time, relations, topological methodologies

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Over the last decades, the way we think about space and time in relation to the field of education has changed substantially. New societal evolutions have urged scholars to come to grips with the increasing difficulty of approaching educational practices in terms of existing “static” (e.g. topographical) representations of space and “linear” (e.g. chronological) models of time. As a result, different lines of research have been developed that seek to extend our spatiotemporal understanding not only conceptually and theoretically, but also through novel methodologies and new kinds of empirical analyses of educational practices (Barbousas and Seddon, 2018; Decuypere, 2021; Gulson et al., 2017; Hartong and Piattoeva, 2021; Landri and Neumann, 2014; Lewis, 2020; Lingard and Rawolle, 2010). This Special Issue extensively discusses and further elaborates on one approach informing these lines of research: (social) topology. Originating from the mathematical analysis of forms, social topology explains times and spaces as relational, dynamic, and continuously unfolding yet, at the same time, as manifesting in powerful agential forms. As a mode of thinking, social topology thus aims to move away from the idea that time and space are something “out there” or the objective backdrop against which educational activities take place. Rather, space and time are understood as heterogeneous and differentially enacted compositions—spaces and times—that are made, produced, and (de-)stabilized in and through relationships, exchanges, and interactions.

In this vein, social topology allows us to theoretically, conceptually, and methodologically unpack complex processes and transformations of Europeanization which involve, for instance, mobilization enacted through migration and ongoing flows of people, goods, and practices more broadly. These processes of mobilization have made it increasingly difficult to think of Europe as (only) a topographical entity that is contained and describable by its bordered lines (Landri and Neumann, 2014; Lawn and Grek, 2012; Opitz and Tellmann, 2015). In this respect, social topology urges researchers to move beyond a consideration of people, things, and even social practices like education moving “through” Europe, for such an approach of spatiality conveys the message that “Europe” is an a priori container that can only be grasped by projecting Euclidean coordinates on that space. Instead, social topology enables us to see how mobilization creates and (de-)borders various forms of (European) spaces, such as network forms that stretch over national borders and thereby bring geographically distant actors closer together, or fluid forms that continuously change by the kinds of people or things they interact with (Allen, 2016; Landri, 2015; M’charek et al., 2014; van de Oudeweetering and Decuypere, 2021a). Social topology thus seeks to account for relational dynamics of mobility, which by no means implies that the relevance of territories and nation-states is eliminated. Rather, social topology allows pursuing more nuanced understandings of what both national and transnational space-times are, how they come into being, and how they at once take and create educational forms (Lewis, 2021).

Next to this growing attention for processes of mobilization, social topology allows us to deal with the ongoing digitization of the educational sector, entangled processes of platformization and datafication, as well as of new digital (infra)structures, tools, and artifacts that come along with it. That is, these phenomena clearly show to play a role in the (re)formation and (re)composition of spatiotemporal educational arrangements. For instance, online educational platforms such as Massive Open Online Courses (MOOCs) allow people from all over the world and across different time zones to be simultaneously present in a class or lecture. This exemplifies how digitization can generate completely different connotations of what it means to be present in the “here and now”, but equally to what it means to be “near” or “far,” or what it means to be positioned “inside” or “outside” a specific educational practice (e.g., Decuypere et al., 2021; Hartong, 2018; Sheail, 2018; Williamson, 2016). Social topology thereby allows us to analyze spatiotemporal transformations engendered through these digital technologies, at once mobile and stabilizing, as they produce new forms of “mobile learning”; new forms of accelerated, networked, and fragmented time (Decuypere
and Vanden Broeck, 2020; Enriquez, 2013; Hassan, 2017); as well as new forms of educational governance (Hartong, 2021; Lewis et al., 2016).

Like a magnifying glass, the ongoing Covid-19 pandemic has powerfully invigorated and accelerated both evolutions of mobilization and digitization, and even more clearly illuminated their differential effects on the educational field. As living rooms transformed into do-it-yourself classrooms, as computer screens served as both blackboards and lecturing halls, and as after-school programs have spread over the day, the pandemic has concretely shown how processes of digitization and mobilization increasingly intertwine. More so, it has demonstrated how new forms of space-times are generated beyond the taken-for-granted spaces and times enacted in, by, and through traditional educational institutions (Williamson et al., 2020). In this way, the pandemic has vividly turned the self-evident and previously somehow “tacit” character of space- and time-making in education into a topic of crucial concern.

Yet, even before the pandemic, one could already discern a growing interest in topology as a productive framework to analyze processes of educational space- and time-making (see e.g. Decuypere and Simons, 2016; Gulson and Sellar, 2019; Hartong and Piattoeva, 2021; Lewis, 2020; Ratner, 2020). So far, however, topology has mainly served as a heuristic to draw theoretical or conceptual attention to the multiplicities, mutability, and complexities of educational space-times, while it has proven to be much more challenging to make use of social topology to do empirical educational research (see Decuypere and Simons, 2016). Moreover, it has not yet been made sufficiently explicit what one exactly sees differently when adopting a topological lens—for instance, as compared to more traditional frameworks to analyze educational spacetimes (e.g. Alhadeff-Jones, 2017; Larsen and Beech, 2014; Paechter, 2004). This Special Issue addresses these gaps, bringing together contributions that use social topology in different empirical case studies of educational space- and time-making in an increasingly mobile and digital world. In doing so, the collection contributes to the further shaping and making accessible of topology as an educational research approach.

**Origins of the topological lens**

The origins of topological thinking can be traced back to the 18th century when Leonhard Euler solved the mathematical problem of the Seven Bridges of Königsberg. Königsberg (nowadays Kaliningrad) was a city in East Prussia with an island in its center, which was connected to fragmented outer city parts by seven different bridges. The mathematical problem concerned whether pedestrians could stroll the city—both the island and the various outer parts—by crossing each of the seven bridges only once. In approaching this problem, Euler recognized that connectivity was at issue—that is, how the different objects (bridges) were related to each other, as well as how these objects spatially separated the “inside” and “outside” of the different city parts—rather than the absolute size of the bridges, or the physical distance between one bridge and the other, within the topographical shape of the city (Shields, 2012: 45). Solving the problem, Euler laid the foundation for the mathematical discipline of topology, which has a main interest in tracing relational connections within figures and forms (e.g. circles, cubes, networks).

As it developed over time, the field of mathematical topology became equally concerned with the question of how these figures and forms remain continuous through de- and transformations; that is, how they change in time without breaking (for instance, how a circle can be “squeezed” to take up the form of a triangle or square). Topology thus aims to identify the defining properties of forms and figures; for instance, how the bounded character of a circle remains intact when morphing into a triangle or square, or how a two-dimensional pane can fold into a voluminous cube, while simultaneously dealing with the temporalities (e.g. velocities, tipping points) during these
Topology can thus be thought of as “geometry plus time, geometry given body by motion” (Connor, 2004—our emphasis). In order to identify such spatiotemporal properties, mathematical topology draws on formulae and equivalences, rather than on (geo)metric indicators (e.g. distances, angles) alone (Martin and Secor, 2014; Mezzadra and Neilson, 2012).

Before being “discovered” by educational scholars, topology’s mathematical interest in figures, forms, and relations as they are being shaped over time was primarily picked up by the disciplines of political sciences as well as critical and social geography (see e.g. Allen, 2016). In social geography, topology has mainly served as a complement to more traditional topographical ideas about space and time (Hinchliffe et al., 2013; Martin and Secor, 2014). That is to say, topology does not take topography “for granted” as the sole representation of space, but dissects and analyzes how topographies (e.g. territorially bound nation-states) are made, and how they are established through topological relations (Allen, 2016; Martin and Secor, 2014). This has allowed for new relational ways of approaching traditional geographical phenomena and tropes such as “scale” and “level” (and associated qualifiers such as the “global,” “national,” or “local”), and has equally led to new ways of thinking about geopolitical concepts such as territory, networks, distance, connectivity, or power (Amin, 2002; Prince, 2017). One example is thinking about space and time in terms of networked relations: through such a lens, what is of primary importance is the question of how actors are connected, rather than if those actors are regionally near or distant (Allen, 2016). In topology, the global and the local, the near and the far, what is central and what is peripheral, are all approached in terms of their relational connectedness, rather than in terms of geographical closeness or distance (Allen, 2016; Prince, 2017). This implies that spaces and times are explicitly considered as a posteriori rather than a priori: both are conceived as concrete results of specific relational constellations (Lash, 2012).

In addition to being an analytical device that is fruitfully deployed by scholars in the broad field of social sciences, in a seminal introduction to the topological approach, Lury et al. (2012) argue that culture itself is becoming topological. Topology, they argue, is not only to be considered as an analytic approach but, at the same time, constitutes an argument about our present-day culture and society more broadly, which is that our culture and society are more and more behaving topologically. With this argument, Lury et al. mean that topology not only allows one to make epistemological arguments but that it equally denotes an ontological position with respect to how economic, political, and cultural life are “identified and made legible in terms of their capacities for continuous change” (p. 3). Very much in line with our argumentation regarding increasing processes of mobilization and digitization as outlined above, a becoming topological of culture implies the enactment of new orders of continuity and discontinuity which, in turn, establish new orders of relations between people and things (e.g. new spatiotemporalities) and new kinds of acting in and upon the world (e.g. new practices and modes of power) (Gulson et al., 2017: 232; Lury, 2021).

**Topology in education research: Past, present, and future**

Taking up inspiration and conceptual tools from developments in topological thinking in both mathematics and the social sciences, the topological lens has been gradually adopted by educational researchers over the past years, most of whom are searching for ways to analytically come to grips with the broad complexities and dynamics of (intersecting) processes of mobilization and digitization. By and large, scholars in the field of education have used topology to emphasize three analytical points:

First, in line with what has been argued above, social topology has been deployed to approach educational spaces and times as being made. For instance, global relations forged by international policy programs do not merely connect distinct parts of the world, they equally perform new ways
of seeing and looking at education, and, in doing so, construct specific spatial and temporal regimes of understanding and governing education. One recent example is Lewis (2020) study on PISA for Schools; a platform that, through establishing powerful relations of governance (framed by Lewis as topologies of power), has deeply affected our spatiotemporal understanding in which global forms of governing schooling can only be locally understood and practiced (see also Ratner, 2020; Saari, 2012). Furthermore, topological studies have not only focused on how educational space-times are brought into being and are stabilized as relational constellations that constitute what “normal,” “good,” or “appropriate” education is these days, they also seek, in turn, to qualify and address these relationally constituted spaces and times (Gulson et al., 2017). This combined interest in space- and time-making on the one hand, and the analysis of concrete educational practices on the other hand, is shared among a variety of other relational approaches, such as assemblage studies (e.g. Hartong, 2018; Savage, 2020), sociomaterial approaches (e.g. Fenwick et al., 2011), as well as research from the field of Science and Technology Studies (STS) more broadly (e.g. Gorur et al., 2019).

Second, topological contributions in education have emphasized that space and time always evolve and change conjointly and that it is an analytical mistake to stringently separate temporal and spatial dimensions of practices (Decuypere and Simons, 2016). Even though space and time are thus conceived as each other’s project, a large body of educational research has emphasized the spatial over the temporal character of educational practices (see, for instance, the “spatial turn” in education: Larsen and Beech, 2014—but cf. Paechter, 2004). However, recent years have seen a growing amount of research that, in some sort of countermove, seeks to place explicit emphasis on the temporal features of educational practices (e.g. Decuypere and Vanden Broeck, 2020; Lingard and Thompson, 2017). In many ways, social topology aims to suspend those analytical distinctions or preferential emphases. Over and above other relational approaches that posit the general relational construction of both space and time (e.g. McLeod et al., 2019), topology empirically studies space-time-making as two sides of the same coin, without seeking to privilege one over the other.

Finally, next to deploying topology to explain the changing spatiotemporal patterning of relations, educational researchers make use of topology to understand what endures and remains stable over and beyond ongoing flux and processual changes. For instance, despite the growing importance and emergence of networked spaces in a variety of educational practices, territorial topographical boundaries—and the geographical form of the “nation state” more broadly—retain a central, contextual role in the construction of space-times (Hartong and Piattoeva, 2021; van de Oudeweetering and Decuypere, 2021a). Similarly, even though relationality implies the continuous construction of various sorts of topological times (such as accelerating and networked forms of time, cf. Decuypere & Vanden Broeck, 2020), chronological time remains of central importance in giving shape to educational practices, performances, and rituals (e.g. Lingard and Thompson, 2017).

In sum, and putting the three analytical points together, educational scholars have found the topological lens helpful to consider the complex relational fabrication of spaces and times, whilst at the same time acknowledging that more classical notions of space (e.g. as topographical) and time (e.g. as chronological) are part of topologies and, thus, remain crucial in understanding how educational practices are always highly dedicated interplays of flux and stability, motion and immobility, as well as variation and sedentarism (Decuypere and Lewis, 2021). In a topological vein, it is exactly the empirical task of research to trace, explain and make visible how topologies, topographies, and chronologies interrelate with one another in concrete educational practices.

As this short overview shows, after a relatively slow uptake, topology is increasingly used in the field of education. More so, next to the usage of the topological lens as an analytical device, researchers argue that the educational field itself is, in line with Lury et al.’s (2012) general claim
about culture, becoming topological (e.g., Lewis, 2020; Thompson and Cook, 2015). Yet, despite its usefulness in understanding complex spatiotemporal transformations of an increasingly globalized, mobilized, and digitized education field, the topological approach has not yet made it to the stage of wide acknowledgment and adoption. We see at least two reasons for this. First, the approach critically scrutinizes what many scholars, for well-grounded reasons, use as foundations of their research—spatial or temporal configurations such as “the classroom,” the chronology of a reform process, or the emergence of “global arenas” of policymaking, to name just a few. It is not easy to “let go” of traditional foundational categories of time and space. As noted above, however, letting go of the seeming objectivity of such categories does not mean that they can not be used; it rather means that their topological embeddedness urges a systematic account too. A second reason that we see for the slow uptake of topology in educational research is that, up until now, topology has been mainly used to draw conceptual attention to the making of multiple spaces and times. Much less attention, in contrast, has been put on explicating how to “do” topologically-informed analyses, and what one sees differently when empirically employing the topological lens (see equally Decuypere, 2021; Gulson and Sellar, 2019; Hartong, 2021). Put differently, for many scholars, topology might still foremost appear as an abstract, theoretical argument and not as a tool for doing empirical research. This also means, however, that there is an enormous analytical potential of topology that has not yet been fully tapped into in the field of education. What we intend to show with this Special Issue is that topology offers a variety of entry points and, related to that, a variety of innovative methodological contributions, to embark on empirical analyses. Hence, with this Special Issue, we aim to contribute to a stronger awareness and appreciation of topology in education research and to the development, accessibility, and consolidation of the topological approach itself.

**How to do topology? An overview of the contributions to the Special Issue**

How to embark on topological analysis, then? How to do topology? The various contributions in this Special Issue all show a deep engagement with, and substantial reflection on, the theoretical premises behind (their adoption of) the topological lens, and how these premises inform the methodologies employed in their specific study. All studies in this Special Issue thus make explicit the theoretical and reflexive methodological assumptions that guide the usage of actual methods. Such assumptions imply, amongst others, a central focus on interchanges between (dis)continuities and/or (im)mobilities in the empirical setting at hand; an active position(ing) of the research(er) as being inextricably and constitutively part of the dynamic, evolving research problem; and conscious use of (re)presentations like language, pictures, indexes, sketches and images as topological devices (see also Gulson et al., 2017; van de Oudeweetering and Decuypere, 2021b). These methodological assumptions, in turn, transpire into the repurposing and re-attunement of research methods, which brings new tools for data collection and analysis into being (Marres, 2012).

As the various contributions show, this does not mean that more conventional methods like interviews, ethnographies, and content and discourse analyses, are banned from the research portfolio. Instead, the contributions show how such methods can (and need to) be redressed to account for the complexities, multiplicities, and transformations that are at the heart of social topological research, and that they can take the stage next to other innovative tools and frameworks—all this without using any of these methods as a straightforward, “out of the box” methodical approach. This “inventive” way of working with methods and methodologies demonstrates how social topological thinking encourages bricolages of research practices, where researchers act as operators
within the practice under investigation, rather than as spectators or observers of that practice (Lury et al., 2020—see also Serres, 2007). Moreover, as operators themselves, the contributors in this Special Issue do not only formulate claims about the enactment of space-times; they dissect, deconstruct, and reconstruct space-times, too. In doing so, they attest to the fact that the specificity of social topological studies is that they consciously engage in generating new realities by methodologically intervening in the research problems they address.

This interweaving of inventing (methods) and intervening (in research problems) is rendered visible in Saari’s study on Finnish policy texts on new learning environments, Topologies of desire: Fantasies and their symptoms in educational policy futures. Saari’s analysis enacts a dialog between the topological reflexivity performed through policy texts and the topological thought that informs the method(ology). By making use of the Lacanian notion of desire, the methodology guides an analytical focus on topological paradoxes, for instance concerning the inseparability of an “inside” self and an interdependent “outside,” as well as the paradoxical, simultaneous, and continuous enactment of “proximity” and “distance.” In this way, the results of the analysis show how discourses present in, and produced by, education policy texts perform topological space-times, as they sketch future visions, spatial imaginaries and shape teacher subjectivities through “othering strategies.” At the same time, the results show how the inside-outsides of these texts are difficult to disentangle; that is, how school architectures and learning environments are constructed through concrete recommendations, how historical evolvements in Finnish national curricula run through these constellations, and how these texts extend Finnish “spatiotemporal fantasies.” In this regard, the study not only adopts topological reflexivity as an empirical and methodological device, it shows how these method(ologie)s necessarily bring about different sorts of topological results.

The study of Cole and Moustakim, The flash of a van: A cartography of a mobile educational initiative in the Claymore district of Sydney, is interested in how a mobile youth van, by “moving through” a suburban neighborhood and making temporary stops, generates topological “flash” effects. The methodology combines social cartography with a social topological line of thinking, thereby rendering a mapping exercise into a thinking practice that is not purposed to fix or pinpoint the presence of the van in the district. In this vein, while the fieldwork yielded photographic images and interviews with youth (workers) as “snapshots” of the neighborhood, the analysis was informed by a conceptual architecture that brings together spatio-temporal concepts like (micro) assemblages, planes of immanence, and the “time-image,” and that display the fleeting nature of the environment. The conceptual architecture further moves through the analysis, linking up local momentary observations with global developments. As the authors attest, these methods do more than the mere act of answering research questions and obtaining results, as they inaugurate new topologies in between the researchers, Claymore, the van, and the global context of education in which these movements are situated.

Next, van de Oudeweetering and Decuypere present a study on European online learning initiatives that aims to understand how different times, including those related to European projects and the refugee crisis, convolute spatial arrangements. In their article Navigating European education in times of crisis? An analysis of socio-technological architectures and user interfaces of online learning initiatives, the methodology integrates the social topological argument that digital technologies of these initiatives materialize bordering practices that result in various forms of space-times. The methodological design, named active navigation, includes various tools that might conventionally be affiliated to a “content analysis.” That is, the data collection consisted of capturing of screenshots of, and memos on, the user interfaces of these online learning initiatives, while the analysis itself intends to highlight, describe, and interpret what is going on “on” the interface. The topological lens explicitly comes forward as data are not approached and made as discrete units; rather, they are actively composed and brought together into
assemblages that take account of various temporal and spatial orders. Moreover, the findings are positioned as reconstructions that imply an active involvement of the researchers in making borders, spaces, and times. Hence, for this study as well, this implies that through methodological design and the distinct methods that the research draws on, the study is rendered into a topological intervention itself.

In their article *New shadow professionals and infrastructures around the datafied school: Topological thinking as an analytical device*, Lewis and Hartong closely investigate EDFacts—a centralized schooling monitoring system established by the U.S. Federal Department of Education—as an empirical case to understand how digital data infrastructures permeate and change educational (monitoring) practices. The topological lens informed the methodological framework to give primacy to the flow-ability of data engendered through these infrastructures. With this concept, the authors denote the ability of data to move “smoothly” from one point or location to another, and how this relies on ongoing re/de/bordering processes; that is, evolutions that generate topological (dis)connections. While building on a qualitative content analysis of policy documents of EDFacts, the study shows how such documents can be seen differently when adopting a topological lens. Rather than serving as suppliers of information (as in “classical” document analysis), these documents appear as part of the topological work of the infrastructure; that is, as active actors generating topological space-times. For example, the documents set out detailed assignments for “data stewards,” and thereby normalize and stabilize their work and their relations to other institutions across different (state) jurisdictions. Moreover, the documents establish particular “(time) regimes,” determining what data needs to be submitted, when, and where. The analysis thus re-establishes the topological operations of EDFacts especially by positioning the documents as part of the infrastructure, and by tracing and articulating who (e.g. data professionals, organizations) and what (e.g. mechanisms, rules) these documents “join up with” and “disconnect from.” Accordingly, the study re-enacts how infrastructures interweave flows and bordering processes, and thereby constitute dedicated forms of spaces and times.

In dealing with the manifestations and implications of lecture capture in the UK since the outbreak of the Covid-19 pandemic, Ross and Lamb’s article *Lecture capture, social topology, and the spatial and temporal arrangements of UK universities* focuses on Twitter debates. The topological interest guides a focus on continuities and disruptions heralded through these Twitter debates, especially related to the spatial and temporal arrangement of university lectures. Combined with a socio-material lens, the methodology reflexively centralizes Twitter as a site of research and as a relational actor that assembles users, their posts, and their engagement with the “issue” of lecture capture. The methods, in turn, involve a structured gathering of Twitter posts as a mode of data collection, and a thematic analysis that integrates the socio-material and topological interest of the study. The topological lens especially resurges in the use of a speculative method, a way of dealing with the issue at stake as an evolving, “not-as-yet” phenomenon, trying to formulate assertions that remain as specifically tied to the research context as possible. This allows the study to not only analyze voices on Twitter and how these (re)present opinions on lecture capture; more importantly, the article shows how the lecture is (re)assembled as a central pedagogical constellation that transforms through the Twitter debate while, at the same time, producing a “topological stability.” Moreover, topology allows the researchers to take up an active position in the process of turning lecture capture into, and at the same time charging it with, “issues”—a process of “issuefication.”

In an afterword to the Special Issue, “Relations and locations: New topological spatio-temporalities in education,” Bob Lingard discusses the Special Issue in its entirety. As a seminal expert in the field of education policy research, often employing a topological lens himself, Lingard integratively discusses the aforementioned papers. At the same time, the afterword equally provides an own statement on the various potentials of using topology in educational research; that is, the afterword outlines next steps to construct a promising future for topological studies in education.
Conclusion: Topology and the positive disruption of educational practices

We started this introduction by arguing that processes of mobilization and digitization have engendered new ways of thinking about space and time in the composition of education; ways of thinking that exceed conventional spatiotemporal notions such as topography and chronology. A topological lens allows us to address the mutually constitutive processes of space and time making. Next to affording an analytical focus, a topological lens equally allows us to render intelligible, observable, and put to the empirical test, the thesis that the field of education is increasingly becoming topological. In sum, then, this Special Issue contributes to the further illumination, elaboration, and coherent systematization of topology as an analytical device.

Moreover, as we have described in this introduction, topology urges and necessitates the (re)inventing of methods where-and-as needed, as much as it urges and necessitates the intervening in research problems (cf. Lury, 2021). To that end, the emphasis of topology on the notion of “form” allows us to empirically and carefully investigate educational relations, and inquire into the typicality and specificity of various educational forms. In that sense, we could denote topology as a process of empirical morphology, in so far as the lens allows us to discern, characterize and conceptualize what is crucial to educational practices, but equally those things/processes/evolutions that are perhaps threatening educational forms in their autonomy and/or specificity (cf. Masschelein and Simons, 2013). This also means that the topological lens makes it possible to move from an empirical to a theoretical understanding of the typicality, specificity, frailty, or precisely continuity of (different aspects of) educational figures and forms. Moreover, in emerging through situated practices, topological studies cannot stand outside of that what they study (cf. Piattoeva and Saari, 2020). This makes that topological studies have the affirmative possibility and task of positively intervening in and, ultimately, of positively disrupting, the (spacetimes of) the practices in which they are situated (Decuypere, 2021; Sellar, 2015). As both an epistemological device and an ontological argument, the lens of topology allows us to trace, (re)compose, and actively engage with relational space and time making in education.

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