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# GeoCapabilities, *Didaktical* analysis and curriculum thinking – furthering the dialogue between *Didaktik* and curriculum

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## ABSTRACT

One of the ideas of the GeoCapabilities project(s) is to open up an international debate on the purposes and values of geography education. In line with this, the aim of this article is to examine some central perspectives used in GeoCapabilities, such as curriculum thinking, the teacher as ‘curriculum maker’ and the perspective of powerful knowledge, and explore them in relation to the continental and Nordic traditions of *Didaktik* and subject matter didactics. This is especially done through a reading of the German educationalist Klafki and his theory of categorial *Bildung* and an application of his framework of *Didaktical* analysis. This highlights how the perspectives of powerful knowledge and capabilities in GeoCapabilities mirror the perspectives on material and formal *Bildung* by Klafki. Drawing on his idea of educational potential and exemplary relevance, an example of knowledge-led curriculum thinking in geography is presented using a case based on the time-geographical perspective for a brief *Didaktical* analysis. Such exemplary cases can function as subject didactical models for curriculum thinking. The article concludes with some remarks on the knowledge turn and indicates some future challenges for geography education.

## KEYWORDS

Curriculum making;  
curriculum thinking;  
*Didaktik*; GeoCapabilities;  
geography education;  
powerful knowledge

## Introduction

The framework of GeoCapabilities is part of an international research and development agenda that focuses on central questions regarding teaching and learning in geography education and on geography teachers’ professional development (Lambert, Solem, & Tani, 2015). This agenda has been connected to engagement with recent theoretical discussions in geography education (e.g., curriculum making) and the sociology of knowledge (e.g., powerful knowledge; Future 3 curriculum). The GeoCapabilities approach is mainly developed from an Anglo-American background, strongly influenced by the traditions of curriculum studies. As an associated member of the GeoCapabilities project, the work has provided me with inspiring new

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perspectives, but also given rise to some questions regarding the recontextualisation of those perspectives in my own national context.

The aim of this paper is to examine central perspectives used in the GeoCapabilities project and explore them in relation to the continental and Nordic traditions of *Didaktik* and subject matter didactics. Thus, a comparison of central concepts and perspectives in GeoCapabilities, such as ‘curriculum making’, the Capability Approach and ‘powerful knowledge’, in relation to central perspectives in *Didaktik*, follows. In particular, this examination will draw on the work of the German educationalist Wolfgang Klafki and his theory on categorial *Bildung*, understood as the relational perspective between material and formal *Bildung*, and his application of a framework for *Didaktical* analysis as a form for curriculum thinking. It shows that the basic framework of GeoCapabilities grounded in powerful knowledge and capabilities in geography mirrors Klafki’s perspectives on material and formal *Bildung*.

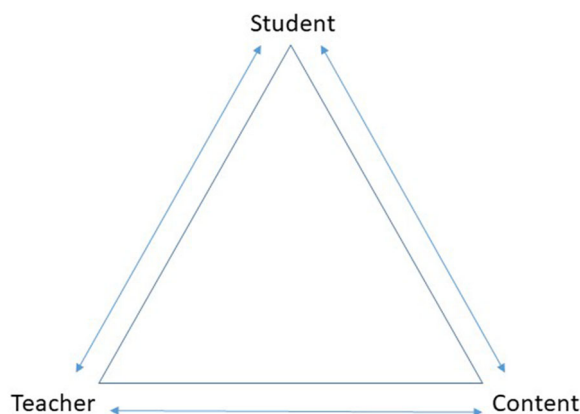
Drawing on Klafki’s use of the idea of education potential and exemplary significance of content, an example of knowledge-led curriculum thinking in geography is presented through a case based on the ‘time-geographical’ perspective, which is used for a brief *Didaktical* analysis, also discussing the framework of GeoCapabilities. I argue that exemplary cases can function as subject *Didaktical* models for teaching and learning as well as tools for curriculum thinking. In the last section, I discuss some further questions and perspectives going beyond the current discussion on powerful knowledge.

### ***GeoCapabilities – a platform for professional development in school geography***

GeoCapabilities is based on the idea that people can grow through education, and especially by developing the capability to think and reason in specialized ways, in this case through the subject of geography (Lambert et al., 2015). Three perspectives are particularly prominent in the framework of GeoCapabilities. The first perspective basically argues for the contemporary value of geography as a school subject for educating young people in a dynamic and complex world and focuses on the geography teacher as a possible curriculum maker and curriculum leader. Secondly, GeoCapabilities is based on Amartya Sen and

Martha Nussbaum’s theoretical perspectives linked to the research field of welfare economics and Sens’ Capability Approach (Nussbaum, 2011; Sen, 1999). When these perspectives are applied to education, they emphasize human potential in terms of different functional freedoms, expressed in terms of capabilities, which focus on what people are capable of being and doing. Thirdly, GeoCapabilities links to ongoing sociological and theoretical discussion about the role of knowledge in school and teaching. In the context of social realism, Michael Young has developed the concept of powerful knowledge as a curriculum principle, and he has distinguished three different future curriculum models in terms of the approach they take to knowledge (Young & Lambert, 2014; Young & Muller, 2016).

Central elements of GeoCapabilities were developed within an Anglo-Saxon tradition of ‘curriculum studies’ and therefore uses language and concepts from this



**Figure 1.** The didactic triad.

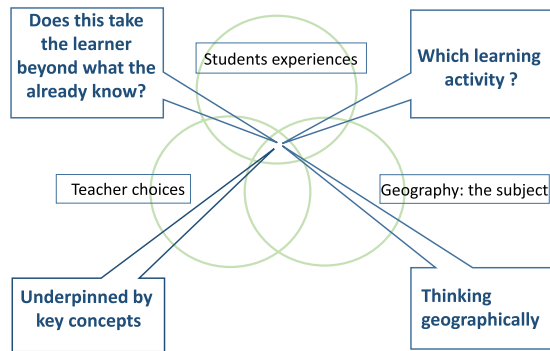
tradition. In the following, I mirror these perspectives in relation to the Nordic-continental context of *Didaktik* and subject didactics.

### **The traditions of curriculum and Didaktik**

Early on in the GeoCapabilities project, it became clear that central concepts used in the project were hard to translate to an international context (Uhlenwinkel, Béneker, Bladh, Tani, & Lambert, 2017). In my experience, the meaning of concepts such as ‘curriculum making’ and ‘curriculum leadership’ did not translate easily when interviewing Swedish teachers using a common GeoCapabilities project framework (Bladh & Örbring, 2016). It was necessary to acknowledge that concepts like ‘curriculum’ and ‘*Didaktik*’ are strongly culture-bound (Hudson, 2016). Several writers have drawn attention to this fact and have tried to open up a dialogue between the traditions of curriculum and *Didaktik* (Deng, 2018a; Gudem & Hopmann, 1998; Hudson, 2016; Westbury, 2000).

While representing distinct historical traditions, these different perspectives are also in the process of blurring today. The dominant tradition of curriculum theory in the English-speaking world has primarily been concerned with curriculum studies at an institutional (the public policy nexus of schooling, learners, culture and society) and programmatic level (the syllabus construction of school subjects or courses of study for classroom use) (cf. Deng & Luke, 2008). On the other hand, the *Didaktik* tradition focuses on curriculum making at the classroom level.

The didactic tradition has a relational perspective on teaching and learning, while the curriculum tradition is based on a system perspective, which often forms an organizational dualistic approach between curriculum and pedagogy (Westbury, 2000). The didactic triad (Figure 1), that is, the relationship of teacher-student-subject matter, can be understood as the core of the processes of teaching and learning (Hudson, 2016). Framed by an institutional curriculum, professional teachers interpret and bring life to subject matter and are the key to realizing the content’s meaning and educational potential. Reflecting on the *Didaktik*/curriculum dialogues initiated at the end of the 1980s, Doyle (2017) points to some important



**Figure 2.** The curriculum making model (After Lambert & Morgan, 2010).

contributions of *Didaktik* to the Anglo-American curriculum tradition. These include a more explicit consideration of content as process endowed with educative significance, the transformation of content into pedagogical process, and the enactment of content in the classroom. Those contributions also resonate with research perspectives related to the aftermath of Schwabs' paradigm of the practical (Craig & Ross, 2008).

### ***The teacher as a curriculum maker***

A central component of the GeoCapabilities project has been the idea of 'curriculum making', initially set forth by the Geographical Association in 2009 under the leadership of David Lambert. The model of curriculum making (Figure 2) specifies a number of key components as being central to the work of geography teachers. The concept focuses on the many choices that a teacher makes when they interpret and shape teaching and learning practices from the curriculum. The perspective behind 'curriculum making' thus assumes that the teacher is an active professional actor who makes conscious, considered choices in his or her professional practice and does not simply "deliver" a curriculum or central content. This should therefore build a curriculum of engagement with students and with the subject. It is interesting to see that the basis of the curriculum-making model is the didactic triad – teacher, student and content. This is at the heart of educational practice, according the *Didaktik* tradition. The dialogic space offered by the curriculum-making model (Lambert & Biddulph, 2015) can thus be interpreted as a relational model based in the *Didaktik* tradition.

### ***Curriculum thinking and Didaktical analysis***

We find the concept of curriculum making mainly at the classroom level, but it also includes clear elements of curriculum thinking relating to the programmatic level. This means that the teacher can be seen as being actively involved in a reflective process of transformation and/or recontextualization of knowledge. The Swedish educationalist Ingrid Carlgren (1999) argued in the late 1990s that teachers' work had often been narrowed to the classroom, while teachers' planning *outside* the classroom had not been perceived as a practice involving actions. Instead, it was seen as something that occurred *before* action. She argues that teachers' work in designing the curriculum also needs consideration as part of a more focused professional role. Teachers'

planning can be seen as analogous to the architect's sketching; both are reflective designers. But teachers' planning is often stuck in "activity" language connected to specific forms of classroom practices instead of a simulated practice. She argues that "To develop a designing practice into a reflective practice requires that the purposes and meanings of school activities be separated from the contexts in which they are embedded" (Carlgren, 1999, p. 53). A central part of such practices is to develop a common conceptual language for collegial discussions. This links to the central notion of curriculum thinking in the GeoCapabilities project, principally implemented in practice through tools such as vignettes and curriculum artefacts (Bustin, Butler, & Hawley, 2017). This kind of curriculum thinking is characterized by goals and purposes, thus focusing on the didactical questions of why and what to teach before coming to the more specific questions of "how".

Such perspectives on content and educational goals have been in focus in the German *Didaktik* tradition for some time, where the work of the educationalist Klafki is central. This tradition is geared toward a vision of teaching, that construes the central purpose of teaching as the cultivation of human powers through interactions with content, that is, as *Bildung* (Deng, 2018b). The difference between matter and meaning is essential in *Didaktik*, which means the distinction between content as such and its "educational substance" (Hopmann, 2007). The essence of *Bildung*, the connection between knowledge and learning in the formation of young people, is for Klafki a dialectical unity (categorical *Bildung*) between the objective content side (material *Bildung*) and the subject side of the learner (formal *Bildung*) (Klafki, 1985/2001; Meyer & Meyer, 2007). The main point of the theory of categorical *Bildung* is found in the concept of the teaching content's "educational potential" (*bildungsgeshalt*), according to which teachers think and reflect on what value and importance different subject themes and tasks that the teacher brings into the teaching situation could have for the pupils. Categorical *Bildung* can be understood as a double unlocking process, wherein the world is opened for the student and the student for the world. To put it in another way, the educational potential in content is unlocked through constructing teaching situations where the matter is turned into meaning for the students. Thus, analysis of the content is central for Klafki's *Didaktical* analysis (Klafki, 2000), which consists of five basic questions unpacking the didactical situation from a teacher perspective:

1. What general sense, basic phenomena or fundamental principal does this content exemplify and open up to the learner? (Exemplary Significance)
2. What significance does the content in question already possess in the minds of the children in my class? (Contemporary Significance)
3. What constitutes the topic's significance for the children's future? (Future Significance)
4. How is the content structured (which has been placed in a specifically pedagogical perspective by questions 1–3)? (The Structure of the Content)
5. What are the special cases, phenomena, situations and so forth in terms of which the structure of the content in question can become interesting, stimulating and approachable for children? (Accessibility)

Klafki's *Didaktical* analysis can be understood as a framework for curriculum thinking. Klafki identified his ideal categorial *Bildung* by dialectically relating material *Bildung*-theories (objective knowledge-focused content; *Bildungsinhalt*) with formal *Bildung*-theories (student-focused content; *Bildungsgehalt*). This perspective is used in the following sections to position the perspectives of capabilities and powerful knowledge in relation to GeoCapabilities.

### **Klafki and GeoCapabilities**

Starting with questions of why and what to teach is central for GeoCapabilities. Lambert (2009) argues that a capability perspective provides a framework for clarifying education goals and purposes. GeoCapabilities wants to highlight and develop the role that geographical knowledge and geographical thinking can play in young people's education. Lambert and

Morgan (2011) discussed "Geo-capability" in terms of how geography lessons might contribute to young people's intellectual functioning using a threefold framework. This includes capabilities concerned with: a) enhancing individual freedoms (understanding autonomy and rights), b) choices about how to live (understanding citizenship and responsibilities), and c) being creative and productive in the "knowledge economy" (understanding economy and culture). In his critical communicative *Didaktik*, Klafki (1985/2001) highlights three main elements of contemporary *Bildung*: self-determination, co-determination and solidarity. There are obviously interesting possibilities to further develop the links between the capability approach and Klafki's *Didaktik* (Störtländer, 2019).

Lambert and Morgan (2010) argue that a capability perspective on geography in education can contribute to young people's: a) deep descriptive 'world knowledge,' b) theoretically informed relational understanding of people and places in the world, and c) propensity and disposition to think about alternative social, economic and environmental futures. Thus, capabilities can be understood as specific geographical knowings and as a perspective of formal *Bildung*. The Capability Approach then connects a context of broad educational aims to a progressive form of discipline-oriented teaching through the concept of powerful knowledge.

### **'Powerful knowledge' and the 'knowledge turn' in curriculum theory**

The discussion in the sociology of knowledge about 'powerful knowledge' as a curriculum principle framed in a social realist position has been an important contribution to an ongoing debate about knowledge, curriculum and the future school (e.g., Deng, 2018a and b; Nordgren, 2017; Young & Lambert, 2014; Young & Muller, 2016). Young emphasizes the importance of considering pupils' access to "the best possible" specialized, disciplinary knowledge in education as a matter of social justice (Young & Lambert, 2014). The understanding of disciplinary knowledge and the "whatness" of geography in the GeoCapabilities project has been broadly inspired by the perspective of social realism and discussions about "powerful knowledge" and the implications of a 'Future 3' curriculum (Lambert et al., 2015). The specialization and differentiation of knowledge are central elements in this discussion. Central to the



idea of powerful knowledge are the specific concepts or “big” ideas, perspectives and knowledge structures that exist within a specialised, systematic field of knowledge. The GeoCapabilities project has been exploring ways in which geographical knowledge in the curriculum can be considered as powerful disciplinary knowledge. However, while we can think of a list of “core content” derived from the discipline(s) of geography, as is often done in curriculums and standards around the world, it often becomes stripped down to a checklist. While powerful knowledge can be seen as an important curriculum principle on the programmatic level, disciplinary knowledge has to be understood as a resource for teaching. In line with Klafki (2000), it can be argued that it is the educational potential of the knowledge that is a key aspect of selection, which puts teachers’ curriculum thinking in focus. However, to grasp a systematic geographical perspective, to think geographically, is also to grasp the inferential conceptual relations of this specific disciplinary gaze. As the social realist argues, and in line with Klafki’s fourth point in his *Didaktical* analysis, the structure and concepts of disciplinary knowledge should affect how curriculum content will be selected, sequenced, paced and evaluated.

An important principle for Young (2008), based on the differentiation of knowledge, is that scientific knowledge is separate from everyday knowledge as a curriculum principle. For a curriculum theory, this becomes analytically important, but due to the dualism between pedagogy and curriculum in the Anglo-Saxon tradition, this becomes problematic in relation to teaching and learning. In the classroom, curriculum and pedagogy merge, and viewed from the perspective of *Didaktik*, the different relations between content, teacher and student are always central. As a critic of Young and powerful knowledge, the geographer Margaret Roberts (2014) argued for the importance of “naïve” knowledge and “everyday experiences” that help students connect abstract knowledge of the subject with their own real-world experiences and meaning-making.

This is also an argument for active learning strategies drawing on Bruner and Vygotsky. The role of students in a curriculum of engagement is important in many ways. Here, we have to better understand and differentiate between different meanings of constructivism, where the framing of the teaching and learning situation is central. As McPhail (2016) discusses, while warning for unreflective progressive ideals that makes constructivism a theory for everything, constructivism in pedagogy can be combined with a realist approach to knowledge.

### **Geographical knowledge as “powerful knowledge”**

Lambert (2016, p. 404) summarises powerful knowledge in geography as consisting of:

- The acquisition and development of deep descriptive and explanatory ‘world knowledge’; this may include (for example) countries, capitals, rivers and mountains; also world wind patterns, distribution of population and energy sources.
- The development of the relational thinking that underpins geographical thought (Jackson 2006); this includes place and space (for example, the local and the



global), the human and the physical and notions of environmental interdependence and interaction.

- A propensity to apply the analysis of alternative social, economic and environmental futures to particular place contexts; this draws on a range of skills developed through appropriate pedagogic approaches such as decision-making exercises; in addition to intellectual skills such as analysis and evaluation this also encourages speculation, imagination and argument.

Here, the capability perspective from Lambert and Morgan (2010) is clearly more linked to the material side of geographical matter. We can also see how different types of geographical knowledge (substantive, conceptual and applied) are understood as powerful.

Alaric Maude (2018) has developed a further useful typology of powerful knowledge in geography. In comparison with Lambert's points above, he brings procedural knowledge in more systematically in his typology. In line with Klafki's perspective on material and formal *Bildung*, he also differentiates between what could be seen as objective powerful knowledge and subjective powerful knowings. This resonates with Muller and Young (2019) recent revisiting of two senses of powers identified in the concept of powerful knowledge. What makes knowledge powerful in education is how it gives new perspectives, understandings and new capabilities to young people. Maude's typology has been useful in analysing different aspects of geographical knowledge (cf. Beneker & Palings, 2017). However, I would suggest that an important next step would be to look more deeply at the *relations* between different kinds of geographical knowledge and their uses in geography education.

### **Different kinds of knowledge**

Concepts like 'powerful knowledge' could be interpreted in a reductionist way, where knowledge is just seen as static propositional knowledge. The old discussion by Gilbert Ryle (1949) on knowing what and knowing how has often been interpreted as too dualistic (Winch, 2013). The differentiation of knowledge here means that expert views of professional knowledge clearly unite forms of propositional knowledge with practical knowledge, including procedural knowledge. Based on Carlgren (2015), we can understand teaching as an activity consisting of performing or orchestrating different knowledge practices. This reflects an understanding of knowledge that is relational and practice-based, and which problematizes the act of just reducing knowledge to theoretical statements of knowledge. Starting in subject-specific ways of knowing, this will also be an enculturation into subject-specific epistemic practices. What kinds of knowings or capabilities are central for geographical thinking? Teaching as a didactic practice indicates that the teacher must design and establish a knowledge practice and make it function as a learning practice for the pupils, who should perceive the situation as functional and motivational. If we look back at the curriculum-making model, this includes thinking geographically, using geographical concepts in geographical analysis and "doing" geography through designed learning activities. Klafki stresses exemplary significance when choosing content in developing

*Kategorial Bildung*. Here I will introduce Torsten Hägerstrand's time-geography as an example of powerful geographical knowledge, which I will use for a further discussion on exemplary geographical thinking.

### ***Torsten Hägerstrand's time-geography – a landscape of flow and processes***

Time-geography can be seen as a worldview, a description-model or a research program (Bladh, 1995). Its base is a time-spatial worldview with a world of people, things and places that form a weave of patterns and contexts – “the web of existence” (Hägerstrand, 2009). The perspective focuses on processes, building on a material ontology and morphological methodology. Hägerstrand's time-geography emphasizes corporeality, connectedness and continuity of actions and events in the time-space that links society, technology and environment. The time-geography perspective unites a graphical and concept-based description in a constructive way. The graphic design language and the notation system can be seen as a visual Esperanto (Thrift, 2005), which can be linked to elementary building blocks and concepts (e.g., path/trajectory, project, prism, pockets of local order) to capture actions and events in its primary context (Hägerstrand, 1985; Lenntorp, 2004). The perspective and models of time-geography are used in many types of research areas and applications, such as social geography, physical planning, landscape research, transport geography, life-cycle analysis and biographical work (see for example Sui, 2012, for an overview). While Hägerstrand primarily linked time-geography to a kind of ‘situation ecology’, Pred (1990) also more explicitly connected time-geography to social ontologies (e.g., actor-structure relations in time and space) using Gidden's theory of structuration. The time-geography perspective can be used to contextualize geographical events and actions that could be conceptualized more systematically and thus can make complex relations visible. In this way, it introduces a basic epistemology and ontology to provide perspectives and skills regarding geographical thinking.

Here, I argue that time-geography can provide an example of a geographical perspective – specialised “powerful” knowledge – that can function as a catalyst to the development of *Didaktical* practices. Results from an ongoing research project on teaching migration (Bladh, Stolare, & Kristiansson, 2018) show that the time-geography perspective has the potential to be developed into fruitful learning and knowledge practices for pupils studying in upper primary school. We see in connection to these studies that the multimodal expression – the combination of graphics and linguistic expressions in the form of notations, concepts, stories and images – has a particular educational potential (see also Tani, 2006).

### ***The food path – an exemplary case***

As shown in the GeoCapabilities project, tools such as vignettes and curriculum artefacts have important value for teachers' reflective curriculum thinking (Bustin et al., 2017). They can present important perspectives of powerful geographical knowledge in a concentrated form. This aligns with the first point in Klafki's *Didaktical* analysis, the exemplary significance of the chosen content: “What general sense, basic

phenomena or fundamental principle does this content exemplify and open up to the learner?”

We can take as an example a “food path” drawing on the time-geographical perspective inspired by the writings of Hägerstrand on the landscape of material flows and processes (1993) (and which I have used in my teaching with student teachers since the early 1990s). So, imagine a simple world map showing the transfer of coffee from where it is grown in Costa Rica or Brazil to a restaurant table in Stockholm or my own kitchen in central southern Sweden. This, together with some basic factual information, can be understood and developed as a type of powerful knowledge ‘vignette’ with exemplary significance, and can be used (as suggested in the GeoCapabilities framework) to make explicit some principled curriculum thinking. For example, student teachers may be presented such a task:

Select two sorts of food from your household – one from Sweden and one from outside of Europe. Describe the food’s journey “from cradle to grave” as accurately as you can. Draw its trajectory and give an overall view of the food’s production/consumption/destruction flow. What impacts (direct and indirect) do the different stages in the food’s life cycle have on the landscape, environment, people and society?

I will use Klafki’s *Didaktical* analysis scheme to discuss this example. Applied in this way, the world-view and notation-system of time-geography brings this “foodstory” into different aspects of relational and geographical thinking, where central concepts like landscape, place, space, environment and scale can be used. Zooming in and out through the food-path could also form different case-studies where deep descriptive and explanatory “world knowledge” is needed. The comparative dimension makes questions dealing with political ecology, like resource conflicts, indirect land use changes, ecological footprints and environmental justice, important as well as, for example, issues dealing with geographical divisions of labour, consumption patterns, fair trade and moral economies. This task raises questions about food, climate change and possible sustainable futures in a changing Anthropocene world. The exercise also involves procedural knowledge, which is important for geographical analysis and involves practical tracings of the food path, concretizing geographical literacies as interaction and interrelations through, for example, map-reading as well as comparison and critique of sources.

Food geographies (e.g., Cook, 2004; Jackson, 2010; Morgan, 2011) are an interesting theme for expanding enquiries dealing with nature-society relations and environmental geography, which certainly have a present and future relevance for students (Klafki, 2000, points 2–3). In the context of the UK, Cook et al. (2007) have suggested that this type of enquiry could be a starting point for “geographical detective work” in the classroom. My own example is a rather open and explorative exercise but could have a more specific focus when a more framed and sequenced handling of content is needed (Klafki, point 4). My point here is that this type of task can be seen as having exemplary significance (Klafki, point 1) as a model for thinking geographically and extending geographical capabilities. This exemplary model should then be recontextualised and specified in the specific teaching situation. Drawing on Bernstein (2000), we can see that in the case of the student teachers, this task, as a knowledge practice, will probably be part of their private repertoire of thinking

geography, but also part of a broader reservoir. While repertoires are private, reservoirs are collegial and can be codified by experts and teachers as a means for collegial conversation and as such are of obvious interest for geography education research. The exemplary case also gives important hints for how to develop visual and descriptive knowledge practices, which here means combining time-geographical narratives with pictures, maps and stories. In particular, different map applications could give an important visualization of relational thinking.

### ***“Powerful knowledge” and some further challenges for geography education***

The perspectives of ‘powerful knowledge’ as a curriculum principle have given an important direction to reflect on the goals and aims of a geography curriculum and to specify principles for GeoCapabilities. However, as Moore (2013, p. 348) states: “The (social) realist principles do not specify the content of a curriculum, but rather the kind of knowledge it should include.” Making more specific lists of ‘powerful knowledge’ seems to be a dead-end. *The educational potential of geographical knowledge* is a more fruitful way to interpret what powerful knowledge could mean (cf. Lambert & Biddulph, 2015; Maude, 2018; Roberts, 2014). The GeoCapabilities approach thus starts with educational aims (“Why geography?”) in relation to content, as does Klafki’s *Didaktik*, as presented above.

Further, powerful disciplinary knowledge is certainly a *resource for curriculum and teachers*, but stronger forms of recontextualisation principles (Bernstein, 2000) through its verticality or grammaticality are hard to find for a school subject like geography. The structural dimension of Young’s powerful knowledge argument does not work easily for geography. Geographical knowledge seems to be a composite kind, where the gaze (geographical thinking), syntax vocabulary (world knowledge) and grammar (central metaconcepts and thematic concepts/knowledge) used in practical geographical analysis combine different kinds of knowledge and possible knowings. Drawing on the time-geographical perspective, I would suggest that the dimension of contextuality and contextual knowledge as a specific kind of knowledge is central for subjects such as geography and history. (Hägerstrand, 1974) addresses the need for syntheses, and especially contextual syntheses. Hägerstrand’s project of developing time-geography had such a clear ambition to establish a general framework for contextual thinking and geographical synthesis (Bladh, 1995; Sui, 2012). This kind of knowledge is obviously central for a subject like geography.

Further, ontology is central in time-geography. The world-view of Hägerstrand’s time-geography is grounded in a physical ontology, while Pred (1990) also partly transformed time-geography into a social ontology and thus made the differentiation of possible ontologies visible. Hägerstrand (1985) uses Popper’s three-world application to discuss ontological perspectives. When we cross the border between those “worlds,” we cannot avoid what the Swedish geographer Gunnar Olsson (1991) has called ontological transformations.

A look at the definitions and research perspectives on nature in the disciplines of physical and human geography today (Castree, 2005) shows the radical disciplinary divergence regarding philosophical positioning around ontology. Environmental

geography, a central resource for school geography, ends up somewhere in between. It seems difficult to avoid taking up ontological questions in a geography subject tackling the Anthropocene, even if this presents a challenge in conducting recontextualisations of those issues in school geography. Rob Moore (2013), as with John Huckle (2019), clearly argues for a philosophic grounding in critical realism for the (sociological) social realist project, even though the social realist “coalitions of mind” seem to hesitate or disagree. Huckle (2019) also argues for linking GeoCapabilities to critical geography underpinned by critical realism and critical pedagogy. However, in line with Uljens and Ylimäki (2017), I would look for a non-affirmative position of education. According to such a view, both the socialization/reproduction models, as well as transformative curriculum models, are educationally problematic, regardless of whether they are ideologically conservative, radical or counter-hegemonic. Strongly normative-prescriptive models run the risk of manipulation, indoctrination and the transformation of education into a technological-instrumental profession. A non-affirmative educational theory is critical for recognizing and questioning existing knowledge, values or ideals without affirming them.

A further point where a more developed philosophical position in relation to the “powerful knowledge” discussion is desirable is questions of judgement rationality (Moore, 2013). A geography curriculum for the Anthropocene will have many “wicked problems” to handle, which need a more grounded position on ethics as well as an expanded deliberative repertoire for teachers’ work in the classroom.

## Concluding remarks

The challenges discussed in this paper are part of big and difficult issues that certainly can involve a discussion that could seem detached from “what works” in the geography classroom. The GeoCapabilities platform has been a fruitful arena for such theoretical discussions put in an international context. In this paper, I have focused on the meeting between the traditions of *Didaktik* and curriculum. The curriculum making model used in GeoCapabilities can be interpreted as a relational model in the didactic tradition. The ideal model of categorical *Bildung* developed by Klafki builds on the dialectical linking between material and formal *Bildung*. In GeoCapabilities, this is reflected by the application of the perspectives of powerful geographical knowledge and capabilities as specific geographic knowings. As shown by my exemplary case using the time-geographical perspective, reflective curriculum thinking or *Didaktical* analysis is an important issue for geography education research as well as a central tool for teachers’ professional development.

## Disclosure statement

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