



Navigating between Scylla and Charybdis: SoTL as its Own Kind of Inquiry

ABSTRACT

Although there is ample literature that explores what SoTL is and offers guidelines on how to do SoTL, we have not paid enough attention to the fundamental assumptions that underpin systematic scholarly inquiry itself, regardless of the context or the object of study. Instead, we seem to have a narrative that relates SoTL to the disciplines and/or educational research. In this paper, I challenge this narrative with the help of philosophy of science. Specifically, I argue that SoTL is at risk of being appropriated by disciplinary paradigms. This means we would do well to adjust how we conceptualize SoTL. To find a better way, I use Habermas' concept of *knowledge-constitutive interests* to argue that we should start by recognizing the fundamental interests at play when we do SoTL, regardless of disciplinary context. I connect Habermas' three interests (instrumental, interpretive, and emancipatory) to Hutchings' taxonomy of SoTL questions (*what works? what is? and what could be?*) and to three basic paradigms of inquiry (normative, interpretive, and critical realist). These connections show how philosophy of science in the form of Habermas' critical theory can combine with existing conceptual literature on SoTL and established paradigms of inquiry that exist independently of the disciplines. I aim to show that we can use philosophy of science to conceptualize SoTL in a way that allows it to stand fully on its own merits, as its own form of inquiry, with disciplinary perspectives only influencing it in appropriate and useful ways.

KEYWORDS

paradigms, disciplines, knowledge-constitutive interests, philosophy of science, Habermas

INTRODUCTION

The translation of scientific material into the educational processes of students requires the very form of reflection that once was associated with philosophical consciousness. The developers of new pedagogical methods for curricula in college-oriented schools should go back to the philosophical presuppositions of the different fields of study themselves.

– Jürgen Habermas, *Toward a Rational Society* ([1969] 1987)

It is not trivial to apply any scientific knowledge to the practical work of teaching and learning in higher education. And yet, this is precisely what the scholarship of teaching and learning (SoTL) attempts to do. SoTL has changed over time (Gurung and Schwartz 2010), perhaps due in part to slippage in interpretation of what SoTL is and how to do it (Tight 2017), but its foundational intention, to improve student learning, persists.

The trouble with such an expansive intention as “to improve student learning” is that it can mean all sorts of things, which in turn means that any number of influences can exert

themselves in all sorts of ways. The inherent intention of applying SoTL to real teaching practice means that we cannot think of it only as descriptive inquiry; its purpose to improve student learning necessarily has not only epistemic (relating to knowledge) but also ontic (relating to being) consequences. In teaching and learning in higher education, where students' knowledge and learning will have real consequences for their lives, we must be concerned with both.

In her introduction chapter in *Opening Lines*, Pat Hutchings (2000) sets out a taxonomy of SoTL questions. The first two are straightforward questions: *What works? What is?* The last two do not appear in her text as questions, but rather perspectives: "visions of the possible" (after Lee Shulman), and "formulating a new conceptual framework for shaping thought about practice" (4–5). Both perspectives seek to uncover something new, either about practice itself or the way we conceptualize it. Many authors who cite Hutchings' work group these two final perspectives into a third question: *What could be?* I will do the same.

In this paper, I challenge the idea that it is a straightforward thing to answer any of Hutchings' questions. I claim that answering these questions well is not simply a matter of picking one you like, applying a method you already know, and sharing your findings. Instead, my argument is that each of these questions aligns with assumptions about ontology (the nature of being) and epistemology (the nature of knowledge) that are often or even usually overlooked or tacit in SoTL. This is a problem because ontology and epistemology are the foundation for methodology, and without articulating our assumptions about them, we risk unwittingly projecting inappropriate assumptions onto our work. As SoTL continues to develop as a field of inquiry, we should make sure our foundations are solid.

The intention of this article is to propose a solid foundation for SoTL as it is today. I start by problematizing a common approach of situating SoTL in relation to the disciplines and/or educational research, arguing that this way of conceptualizing SoTL risks allowing disciplinary ideas of research to exert problematic influence on SoTL. Metaphorically, I represent this risk as SoTL navigating between the mythological monster Scylla (disciplinary research) and the deadly whirlpool Charybdis (educational research) from Homer's *Odyssey*. I suggest that a fundamental paradigm view of inquiry, deliberately decoupled from the disciplines, would be a more suitable foundation for SoTL. To access this paradigm view of SoTL, I use the early work of German critical theorist Jürgen Habermas. I outline a more fundamental starting point for conceptualizing SoTL as its own form of inquiry, rather than a twisted offshoot of disciplinary research, some sort of interdisciplinary mutt, or the poor cousin of educational research. Finally, I use this new way of conceptualizing SoTL to propose an approach that has the potential to eliminate many of the conflicts that seem to pervade the conceptual literature on SoTL.

In this article, I have made a number of key assumptions: 1) that it is possible and desirable to conceptualize SoTL as its own form of inquiry; 2) that philosophical critique is a useful way of examining conceptions of SoTL; 3) that SoTL does not belong to any established discipline, but it does have a sociocultural foundation; and 4) that it is appropriate to draw upon a broad range of literature from various fields, including philosophy, education, sociology, and SoTL. I hope you will read this text with these in mind.

WHY CAN'T WE AGREE ON WHAT SOTL IS?

We have been writing definitions of SoTL since Boyer, and it does not seem like we are any closer to a definition that satisfies everyone. A lack of consensus on a definition of SoTL is not necessarily a problem, given the diversity of SoTL work and its nature as an applied form of research (Booth and Woollacott 2015). At the same time, a lack of consensus creates challenges for newcomers to SoTL and opens SoTL up to critique from outsiders. But even these issues are not necessarily problems for SoTL. Learning a new form of inquiry should be challenging, and engaging earnestly with critique from outsiders is helpful for better establishing our own position. Perhaps the issue is less about finding a definition that everyone likes, and more about looking at the things a definition cannot offer.

There is an inherent problem with definitions in general: they contain terms that themselves require definition. Take, for example, Potter and Kustra's (2011) definition of SoTL:

the systematic study of teaching and learning, using established or validated criteria of scholarship, to understand how teaching (beliefs, behaviours, attitudes, and values) can maximize learning, and/or develop a more accurate understanding of learning, resulting in products that are publicly shared for critique and use by an appropriate community (2, italics added).

This definition will mean different things to different people. In their conceptual analysis of SoTL, Booth and Woollacott (2018) have assigned most of the italicized terms above to various domains of SoTL (epistemic, didactic, moral/ethical, interpersonal). This supports the idea that from, say, various perspectives within the epistemic domain (the domain concerned with knowledge), something like "systematic study," which produces knowledge, will likely mean different things, depending on the epistemological assumptions (related to theory of knowledge) you hold.

Potter and Kustra's definition is good because it helps us identify the key characteristics we would expect to see in all credible SoTL contributions. It is especially useful together with their definition of scholarly teaching in their overall argument that SoTL is an adjacent activity to scholarly teaching and not the highest level of development for an academic teacher. But this definition of SoTL does not fully enable us to understand how to do it, to say nothing of doing it well. For that, we need to consider what it means to do scholarly inquiry. We also need to recognize that most SoTL practitioners are probably first and foremost academic teachers in the disciplines, rather than academics who consider SoTL to be their main academic field (like some academic developers, for instance, though even their credentials are likely to include at least a first degree in a discipline).

I use the term *academic teacher* to refer to people who teach in higher education, be they traditionally appointed professors or other instructors with different job titles and no matter if they teach undergraduate or graduate students, or even other academic teachers. I have chosen this term because I feel it most accurately describes the role that is active when we do SoTL: we are teachers in an academic setting. I use the term *discipline* to refer to the fields of study in higher education where academic research occurs and that make up the content that students

learn in their programs of study. There are many fields and/or programs that may not be strictly considered disciplines, but for simplicity and to save space, I will just refer to disciplines. I hope no one will feel excluded by this choice.

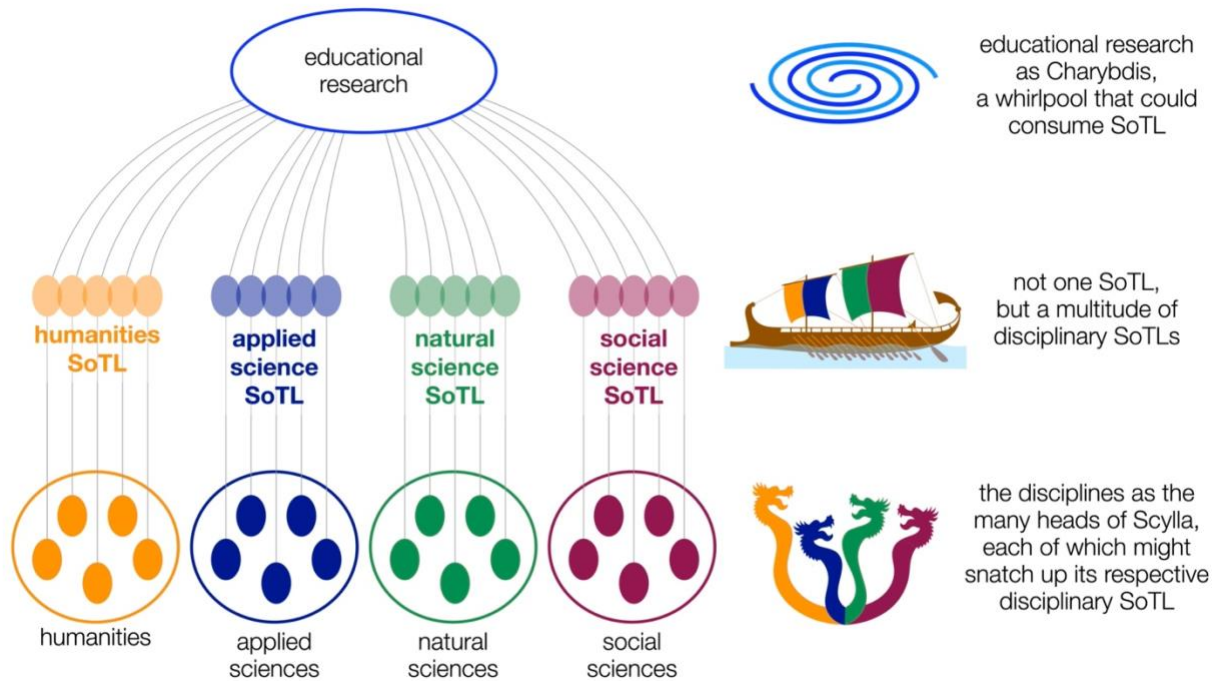
There is a risk with conceptualizing SoTL in relation to the disciplines

In SoTL's early days, authors like Huber and Morreale (2002b) pointed out the strength SoTL drew from being situated within disciplinary contexts. This certainly helped SoTL grow. However, as SoTL has become more established, it seems to me that there is value in (re-)examining the influence that disciplinary perspectives exert on SoTL. In this section, I problematize the idea of situating SoTL within or in relation to the disciplines. This is not to demonize the disciplines, but to illustrate a risk to SoTL's potential if we uncritically, tacitly, or (worst of all) unknowingly accept unfettered disciplinary influence.

The baseline for an academic teacher's view of scholarly inquiry is likely to be the conventions of their own discipline. As students, academic teachers learned to think in their disciplines (Donald 2002). Disciplines themselves delineate different tribes and territories with particular values, cultures, and practices (Becher and Trowler 2001). They also have their own teaching and learning regimes, "constellation[s] of rules, assumptions, practices, and relationships related to teaching and learning issues in higher education" (Trowler and Cooper 2002, 223). Disciplinary context certainly shapes academic teachers' thinking about approach and method when doing SoTL (Booth and Woollacott 2018; Healey 2000; Huber and Hutchings 2005; Huber and Morreale 2002a; Hutchings 2000; McKinney 2013; Taylor 2010). However, it can also be the source of confusion and frustration for academic teachers engaging with SoTL, if they find themselves grappling with perspectives and/or methods that conflict with how they do things in their own discipline (e.g., Borrego 2007; Kim et al. 2021; Miller-Young, Yeo, and Manarin 2018). This suggests that individual academic teachers, especially when they are SoTL novices, might conceptualize SoTL in comparison to their own disciplinary ideas of scholarly inquiry (Huber and Hutchings 2005).

If we look for a collective reference point for SoTL as a field, one obvious candidate is educational research: both are concerned with teaching and learning. It is common to see SoTL compared to educational research in the literature, often to determine what sets SoTL apart (e.g., Case 2015; Geertsema 2016; Larsson et al. 2020; Potter and Kustra 2011). Educational research, as an established discipline concerned with creating new knowledge about teaching and learning, offers a useful repository of research expertise, methodologies, and theories. Because of this, it can seem logical (at least sometimes) to think of SoTL in terms of how it compares to educational research, as a sort of scaled-back, less ambitious, or less rigorous version of educational research. Some authors even go as far as arguing against SoTL as a distinct practice, instead claiming it should be absorbed by educational research (e.g., Canning and Masika 2020). The problem with this argument is that unlike educational research, where the indirect object of inquiry is to produce new knowledge about teaching and learning, SoTL's indirect object of inquiry is to improve student learning (Larsson et al. 2020). Even if educational research in broad terms could be seen as a valid reference point for SoTL, we need to be careful about how we relate the two.

Figure 1: A schematic of the risk with conceptualizing SoTL in relation the disciplines.



SoTL navigates a strait of scholarly inquiry, with disciplinary research influencing SoTL in a bottom-up manner and educational research influencing it in a top-down manner. Educational research is intended explicitly to produce new knowledge in the field, and consequently could be considered a common node of comparison for all forms and contexts of SoTL. Four main categories of academic disciplines in higher education (I have used just these four for simplicity) are similarly focused on producing new knowledge in their respective fields, and are a likely reference point for individual academic teachers doing SoTL in their own context. The solid circles represent individual academic disciplines within each category. Between educational research and the disciplines are clusters of SoTLs (pale solid circles) that relate directly to individual disciplines and thus can be grouped under the four academic categories. The grey lines in the figure represent relationships, where each individual SoTL is related to and influenced by both a particular discipline and educational research; it is pulled in both directions. Charybdis becomes a metaphor for educational research that is a whirlpool that could consume SoTL. The heads of Scylla are a metaphor for individual disciplines that could snatch up their corresponding disciplinary SoTL. Straying too close to either disciplinary research or educational research puts SoTL at risk of appropriation by the disciplines.

Specifically, there is a risk with (unconsciously) allowing unfettered disciplinary influence on SoTL, be it from the disciplines overall or educational research in particular. If we combine these two perspectives, we might produce a schematic diagram like the left part of Figure 1. From the disciplinary side, each individual discipline exerts a sort of bottom-up influence on how an academic teacher in that discipline might conceptualize SoTL. From this perspective, we find as many SoTLs as there are disciplines, or perhaps as many as there are academic teachers doing SoTL, since even individual academics within a discipline may conceptualize scholarly inquiry differently than their colleagues. This can fragment SoTL. At the same time, educational research as an established discipline concerned with researching teaching and learning can exert a sort of top-down influence on SoTL, which may conflict with other disciplinary perspectives and/or privilege certain ways of doing SoTL over others. This can constrain SoTL. The combined result is that we find SoTL existing in tension between

various disciplinary ideas of research on the one hand, and educational research as a discipline of its own on the other. If we draw on Greek mythology for a metaphor, this way of conceptualizing SoTL makes it a ship navigating the Strait of Messina (a strait of scholarly inquiry, perhaps), squeezed between the many-headed beast, Scylla (the disciplines) and the deadly whirlpool, Charybdis (educational research).

A disciplinary perspective helps us understand the context of SoTL and identify key kinds of knowledge at play. But disciplinary influence on SoTL also warrants critical reflection. If left unchecked, the disciplinary influences illustrated in Figure 1 could fragment SoTL (Scylla) or consume it altogether (Charybdis). As I see it, this is at least part of the reason we are having such a hard time defining SoTL in a way that satisfies everyone. Forces from within the disciplines seem to pull SoTL toward them, fragmenting it, while forces from educational research seem to want to absorb or even do away with SoTL. This way of conceptualizing SoTL reveals how the disciplines and educational research might try to appropriate SoTL for their own interests.

The consequence is that disciplinary paradigms appropriate SoTL

I contend that this sort of appropriation occurs because of the influence of disciplinary research paradigms. A paradigm, in Thomas Kuhn's ([1962] 2012) terms, is a system that defines what counts as legitimate inquiry and what is necessary to make a meaningful contribution to knowledge through inquiry. Kuhn developed the concept of paradigms by looking at how scientific disciplines evolved over time. Within disciplines, paradigms establish what is considered *normal science*: "rules and standards for scientific practice" (11) and knowledge production. Increased consensus around and commitment to these rules and standards gives rise to research traditions. Indeed, one way of grouping the disciplines is to look at the level of consensus within those disciplines, i.e., the existence and strength of a single paradigm (Biglan 1973), and the way contributions to disciplinary knowledge are judged (Storer 1967).

Paradigms within disciplines are powerful. Academic teachers' paradigms of scholarly inquiry in their own disciplines are deeply ingrained through education and experience. They influence how academic teachers think about reality and knowledge (ontology and epistemology), which can in turn influence their work in SoTL. Unfortunately, as Haigh and Withell (2020) observe in their excellent recent analysis of SoTL publications, "the concept of research paradigms has a relatively low profile within general SoTL literature, which reduces the likelihood that SoTL practitioners will give attention to it" (24). Consequently, disciplinary ideas of inquiry can creep into SoTL.

This can have varying effects. For academic teachers in empirically minded disciplines like STEM and some branches of social science, stepping into SoTL may feel like an unproblematic pivot to a different experimental and/or empirical context. But not all disciplines align easily with what seems to be a mainly empirical, data-driven understanding of SoTL. For example, Chick's (2013) argument for the value of humanities-based SoTL is an indication that at least some academic teachers in the humanities feel marginalized by the dominant SoTL discourse. Potter and Wuetherick (2015) and Little, Donelli-Sallee, and Michael (2021) echo this sentiment. These are important arguments that show that our big tent (Huber and Hutchings 2005) isn't as inclusive as we want to believe.

I agree completely that close reading from literary studies (Chick 2013) and historical and philosophical inquiry (Potter and Wuetherick 2015) have important and underappreciated roles to play in SoTL. However, I firmly disagree with the idea that these forms of inquiry belong to literary studies, history, or philosophy (or the humanities in general), and that literary scholars, historians, philosophers, or humanities scholars in general can preferentially engage in SoTL using these approaches, to the exclusion of other approaches. To be sure, challenges are to be expected where SoTL practitioners must learn new methods to address certain kinds of SoTL questions, which can be difficult or uncomfortable (e.g. Borrego 2007; Kim et al. 2021; Miller-Young, Yeo, and Manarin 2018). But this is a necessary part of doing SoTL, since it takes us into unfamiliar territory. SoTL is a choice, after all. The problem is not with the methods. It is with the assumption that we can uncritically apply our usual disciplinary methods to SoTL.

My aim for the remainder of this paper is to look beyond narratives about SoTL conflicting with an academic teacher's disciplinary identity (e.g., Miller-Young, Yeo, and Manarin 2018), about specific disciplinary approaches to SoTL (e.g., humanities approaches discussed in Chick 2013; Little, Donelli-Sallee, and Michael 2021, but also STEM or other disciplinary perspectives) or about who is represented in forms of SoTL (e.g., Potter and Wuetherick 2015). These narratives use the disciplines as a baseline. Instead, I seek a narrative of SoTL as a distinct form of inquiry that does not need to be at odds with an academic teacher's disciplinary researcher identity, nor with educational research as a discipline. This narrative could offer a new path to seeing SoTL as something that feels welcoming to all academic teachers, regardless of discipline. To achieve this, the narrative needs to start somewhere other than in the disciplines.

A better approach starts with fundamental paradigms

SoTL is fundamentally different from disciplinary inquiry, even though it is conducted in the context of a discipline, because it looks at teaching and learning in a discipline, not knowledge production by experts in that discipline. Methodologies of inquiry that are preferred in a *discipline* are not necessarily the best choice for academic teachers from that discipline doing SoTL about *teaching and learning in their discipline*. Kirschner (2009) points out that “the epistemology of practicing in a domain is not good pedagogy for learning that domain” (145). By the same logic, scholarly inquiry into a domain is not the same as scholarly inquiry into teaching and learning in that domain. SoTL is also different from the specific discipline of educational research, because it has a different indirect object, or purpose, of inquiry: educational research aims primarily to add general knowledge that is relevant to the field as a whole (the canon), whereas SoTL aims to improve student learning primarily in a local context (Larsson et al. 2020). SoTL is decidedly not just inquiry for the purpose of producing new knowledge; it is intended to be applied to help us move closer to our chosen horizon of improving student learning in higher education.

Rather than positioning SoTL as something in between, as Figure 1 does, and as many authors have done (intentionally or not), I would like to consider the possibility that SoTL can and does have its *own* nature. It is not simply a free-for-all in an interdisciplinary big tent (Huber and Hutchings 2005) where academic teachers are free to bring to bear their own disciplinary perspectives and practices, what Huber and Hutchings (2005) call “disciplinary

styles,” as long as they are methodologically sound (Felten 2013). Indeed, as Chick (2014) observes, it is tricky to establish what “methodologically sound” means. She explores this issue by examining methodology as being the sum of project design, evidence of learning, and analysis of this evidence. The *project design* part of the equation is where a philosophical foundation should appear, but Chick does not address this. Neither do Miller-Young and Yeo (2015) in their otherwise excellent framework for SoTL: they explicitly mention “research question/philosophical stance/epistemology (either explicitly or implicitly)” (40) as step one of a three-step research process, but never address it, instead jumping to step two in their discussion of their framework. I think this is a mistake. To fill this gap, I will look more closely at the foundation of SoTL project design, the “research question/philosophical stance/epistemology” part, using the lens of basic paradigms.

KNOWLEDGE-CONSTITUTIVE INTERESTS, INQUIRY, AND PARADIGMS

In this section I present an overview of some key concepts from the philosophy of science that I will apply to SoTL in the next section. As I have already indicated, my purpose in this paper is to build an independent philosophical foundation for SoTL that avoids relying inappropriately on assumptions from the disciplines and/or educational research. I believe philosophy of science is a suitable perspective for this task, as it is concerned with the nature, origins, and methods of scientific inquiry. I use precise terminology that may be unfamiliar. I have deliberately retained this terminology, because it is more precise, and have done my best to explain key terms.

The research traditions and methodologies that we find in the disciplines can be understood in terms of paradigms. Kuhn’s theory of paradigms arose from an examination of patterns of inquiry and understanding within disciplines, specifically by looking at fundamental differences in understanding of a given topic before and after a paradigm shift. However, these patterns of inquiry, once articulated as paradigms (systems for producing new knowledge), can be decoupled from specific disciplines if we focus on fundamental ontic (being) and epistemic (knowing) conditions and associated ontological and epistemological assumptions (theories of being and knowing) that give rise to these patterns of inquiry. These would become disciplinary paradigms when focused on a particular topic, but are independent of them. More simply, we can decouple paradigms from disciplines if we remember that all formalized systems of inquiry are human creations.

Fundamental human interests in achieving particular outcomes drive us to do inquiry in particular ways and lay the foundation for science as a system of knowledge production. Habermas ([1968] 1971) calls these *knowledge-constitutive interests*: interests with the power to establish knowledge. They are the fundamental interests to which science (all systematic processes of inquiry) “owes not only its impetus but the *conditions of possible objectivity themselves*” (311, italics in original). They determine the logical-methodological rules that govern that science and are intended to protect it against the uncontrolled influence of inappropriate interests. These rules represent choices that are “neither arbitrary nor compelling. They [simply] prove appropriate or inappropriate” (312).

Habermas identifies three knowledge-constitutive interests that each inform a process of inquiry in which we can find a clear connection between the knowledge-constitutive interests and the logical-methodological rules they yield:

Instrumental: The *technical interest* in predicting and controlling objectified processes (exploitability); gives rise to empirical-analytical inquiry.

Interpretive: The *practical interest* in preserving and expanding the intersubjectivity of possible action-orienting mutual understanding (collective self-understanding); gives rise to historical-hermeneutic inquiry.

Emancipatory: The *emancipatory interest* in achieving freedom from dogma through self-reflection; gives rise to critically reflective inquiry.

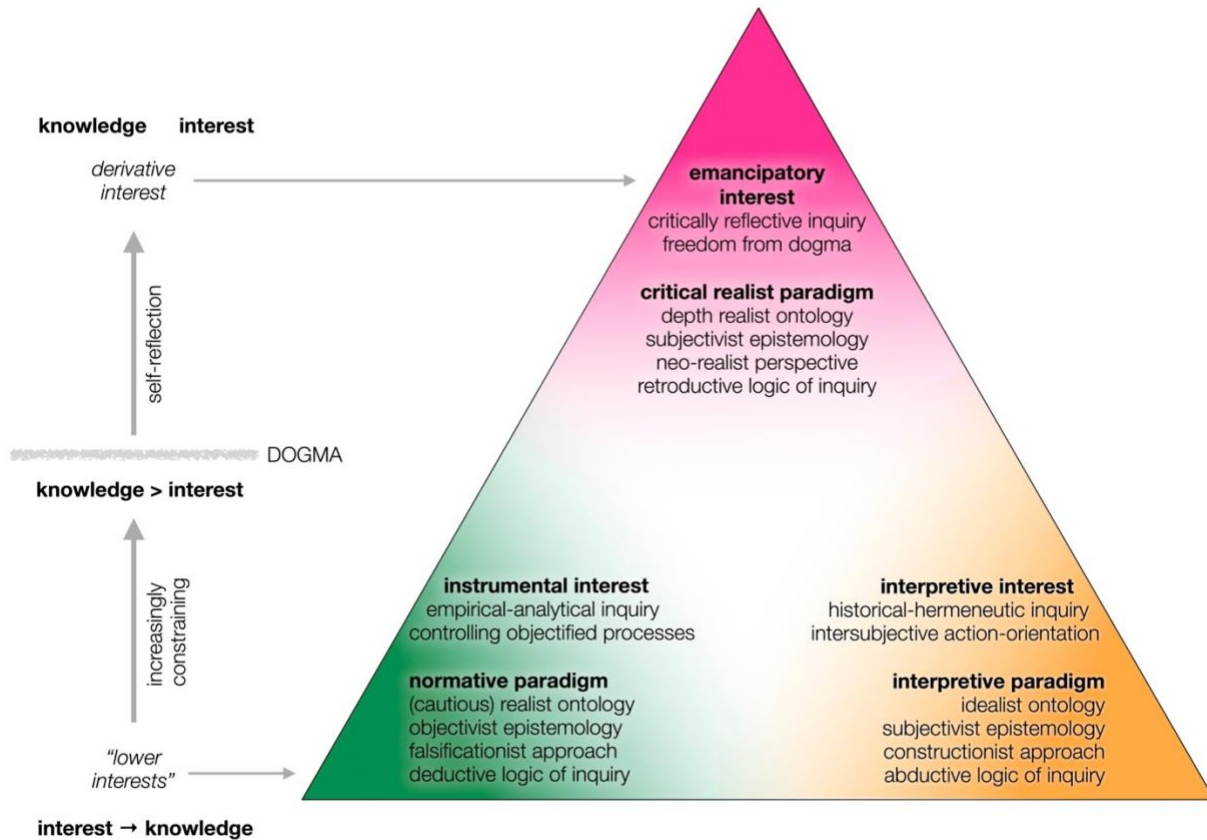
Because Habermas' own names for the first two interests (technical and practical) may be misleading, I have prefaced each with the name I will use (instrumental and interpretive). I will also refer to *inquiry* instead of *science* (as Habermas does, in translation from the German *Wissenschaft*) from now on, since *science* may seem to some to refer only to natural science. The distinction between the three categories results from the interest that drives the design of methodology in each type of inquiry, which in turn determines the type of knowledge produced and how that knowledge can be used. Importantly, these kinds of inquiry have characteristics that are independent of disciplines or topics.

Three interests, each partial and incomplete

These three interests “establish the specific viewpoints from which we can apprehend reality as such in any way whatsoever” (311). Therefore, either separately or in some combination, they suffice to fundamentally characterize any ambition we might have when engaging in scholarly inquiry. Schematically, we can think of these three interests as forming a triangle that delineates the field of knowledge-constitutive interest, with a category at each vertex (Figure 2). Our position in the field of interest may vary, depending on how we value and prioritize each interest, and it might change depending on what we are doing. We may need to mix interests in different ratios for different purposes and to achieve different goals.

Habermas calls instrumental and interpretive interests the “lower interests” because they arise first, not because they are lesser in any way. They are rooted in our immediate interaction with the outside world and with each other, and they can exist without self-reflection. The emancipatory interest, on the other hand, is a “derivative interest” because it arises from “distorted communication and thinly legitimated repression” (Habermas 1973, 176) that we can only recognize through critical self-reflection. That is, while the instrumental and interpretive interests can exist without the experience of domination, the emancipatory interest cannot; it only appears if we recognize and confront inappropriate domination. The emancipatory interest is derivative because it would not arise in everyday life if ideologically frozen oppressive structures did not appear *and* if we did not notice them.

Figure 2: Habermas' three knowledge-constitutive interests, showing the type of inquiry and general research paradigm associated with each interest.



At left is a schematic depicting how the “lower interests” give rise to knowledge that may become ideologically frozen and thus dogmatic, with knowledge seeming to supersede interest. This is what gives rise to the emancipatory interest, which is considered derivative. Emancipation through self-reflection allows knowledge and interest to come into synergy with one another. Each interest can be associated with a fundamental research paradigm, as shown in the triangle: the instrumental interest with a normative paradigm, the interpretive interest with an interpretive paradigm, and the emancipatory interest with a critical realist paradigm. Each interest therefore aligns with particular ontological, epistemological, and logical-methodological assumptions.

This may give it special importance because it seeks to remove inappropriate elements from our social systems.

We can think of the three knowledge-constitutive interests in terms of how we interact with the world around us and the people in it. We fulfill our instrumental interest in what we do *to* our surroundings (prediction and control) to make them behave as we want. We fulfill our interpretive interest in what we do *together with* the people around us (mutual understanding) to better understand our shared experience. We fulfill our emancipatory interest in what we do *for* ourselves and others (emancipation) when we confront dogma.

Three interests, three paradigms

We can match each of the three knowledge-constitutive interests to a fundamental research paradigm: normative, interpretive, and critical realist (Figure 2). As I indicated earlier, these paradigms can be independent of discipline, and instead depend on what we are trying to

achieve with our work. I have used the three paradigms outlined in Blaikie and Priest (2017), but chosen to use the term *normative* after Wilson (1970) rather than *neo-positivist*, as Blaikie and Priest do, because I feel that *positivism* is too loaded a term: in the eyes of some, no prefix (aside perhaps from *anti-*) can redeem it. Both of these texts are rooted in sociology, but that does not mean I believe SoTL is a subset of sociology. Rather, I see a common foundation: both are concerned with things that happen when individuals and groups interact within social systems. In the following three sections, I briefly outline key features of each paradigm by paraphrasing/patchwriting Blaikie and Priest. I use precise terminology because I believe that translating these terms into plain English could result in misunderstanding. Blaikie and Priest offer excellent explanations of all terms included here.

Instrumental interest: Normative paradigm

Arising from the instrumental interest in predicting and controlling the world around us, a normative paradigm focuses on observed regularities and patterns and aims to explain and/or manipulate them. It adopts a cautiously realist ontology, because it holds that there is a reality that exists independently of human minds, but this reality is not directly accessible through observation. The researcher is considered a neutral external observer. This paradigm adopts an objectivist epistemology, seeking knowledge independent of individual subjective bias, but through a falsificationist approach because reality can only be imperfectly observed and therefore theories can only be falsified, not confirmed. It adopts a mainly deductive logic of inquiry, often uses a hypothetico-deductive experimental methodology, favours quantitative data, and seeks to produce generalizable conclusions that can be used to make predictions.

Interpretive interest: Interpretive paradigm

Arising from the interpretive interest in increasing mutual understanding, an interpretive paradigm seeks to understand social phenomena using description and interpretation of everyday concepts and meanings. It adopts an idealist ontology where social reality does not exist independently of social actors and researchers. The researcher cannot be fully detached from the social phenomenon under study. This paradigm adopts a subjectivist epistemology because knowledge comes from subjective experience and uses a constructionist approach, because social reality is constructed and interpreted by social actors. It adopts a mainly abductive logic of inquiry, starting in lay concepts and using iterative processes of typification and abstraction of mainly qualitative data to produce descriptions and explanations that increase mutual understanding.

Emancipatory interest: Critical realist paradigm

Arising from the emancipatory interest in achieving liberation from dogma, a critical realist paradigm seeks causal mechanisms that explain observed regularities in context and uses these mechanisms to discover possibilities and/or opportunities. It adopts a depth realist ontology that recognizes that a social reality's structures are social constructions that social actors can influence, but they also exert real influence on social actors and to a degree exist independently of social actors. The researcher can be an external observer and/or an insider. This paradigm adopts a mainly subjectivist epistemology because knowledge comes from

subjective experience, albeit from a neo-realist perspective because our subjective knowledge of regularities comes from interaction with existing structures and/or mechanisms. It adopts a mainly retroductive logic of inquiry, which combines inductive and deductive logics, using any combination of qualitative and quantitative data to document and model a particular regularity and ultimately construct an explanatory mechanism that works within a given context. Discovering the mechanism of a (constraining) social structure is the first step to achieving emancipation from it.

From interest to paradigm, not from discipline to paradigm

Rather than letting our home discipline determine the paradigm we use in SoTL, I propose that we let knowledge-constitutive interest guide our choice of paradigm. This is possible because, once established through the study of disciplines, Kuhn's theory of paradigms can be decoupled from them using, for example, Habermas' concept of knowledge-constitutive interests. Habermas himself does not refer to Kuhn. They were writing their respective texts at about the same time (Kuhn's was published in 1962, Habermas' initial thesis in 1965), and they aligned at the time with rival philosophical schools (Kuhn's work was first published by the logical positivist Vienna Circle, while Habermas belongs to the critical Frankfurt School). However, to a present-day reader, there is a clear connection to be made. We can base our choice of paradigm on the outcome we wish to achieve with our work (driven by knowledge-constitutive interest), rather than on a research tradition in our home discipline (driven by the subject we are studying). This way, I believe it is possible to conceptualize SoTL as an independent form of inquiry.

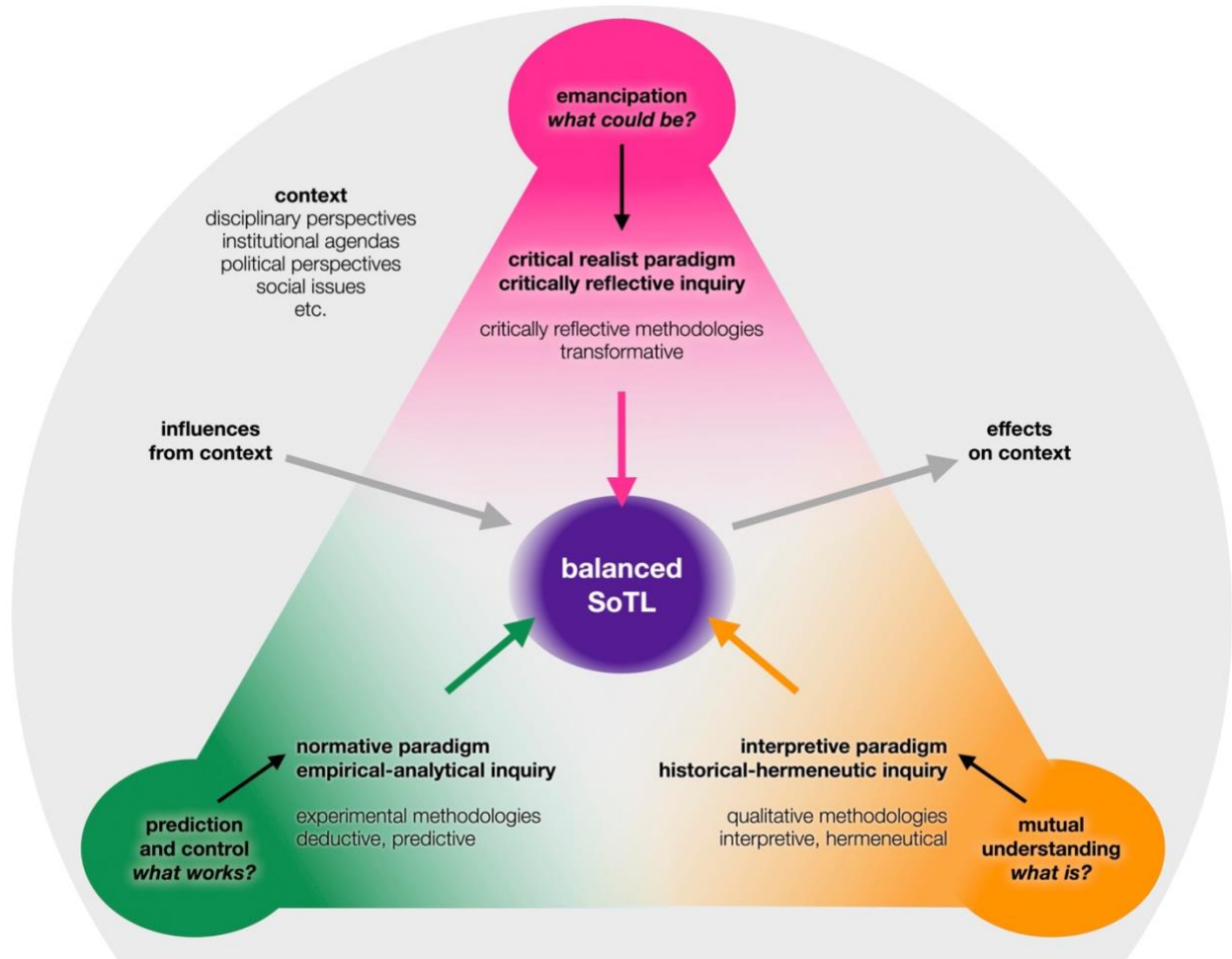
CONCEPTUALIZING SOTL AS ITS OWN KIND OF INQUIRY

In this section, I will apply Habermas' concept of knowledge-constitutive interests to SoTL. I aim to position disciplinary perspectives, the knowledge-constitutive interests, and research paradigms in a way that allows them to work in synergy, rather than in conflict. SoTL conceptualized this way strikes a balance across all three interests, even if one of them is dominant in a given study, since it recognizes the limitations of each. Figure 3 is a conceptual sketch of SoTL that shows the relationships between these different aspects. I will discuss the different parts of the figure in the sequence I think we should follow.

A sociocultural starting point

First, we must acknowledge that regardless of the disciplinary context of SoTL (be it teaching and learning in chemistry, history, social work, or anything else), SoTL concerns itself with teaching and learning (social phenomena) in higher education (a formalized system with a variety of cultural norms). This means it is a form of sociocultural inquiry, but this does *not* make it social science! Its primary purpose is not to add to disciplinary knowledge, but rather to yield practically relevant and applicable insights that *improve* teaching and learning in a given context. A sociocultural starting point simply recognizes that teaching and learning in higher education involves individuals and groups interacting within social systems and institutions where individual and collective perspectives are at play.

Figure 3: SoTL that starts with interests



A conceptual schematic of how the three knowledge-constitutive interests can serve as a starting point for SoTL. The instrumental interest in prediction and control is associated with the question, *what works?* and leads to a normative paradigm; the interpretive interest in mutual understanding is associated with the question, *what is?* and leads to an interpretive paradigm; and the emancipatory interest is associated with the question, *what could be?* and leads to a critical realist paradigm. The schematic is drawn to indicate that these three interests should all be considered, at least to some extent (not necessarily equally), to achieve a balanced form of SoTL that recognizes the role each interest must play. The fundamental paradigm of inquiry associated with each interest informs choices about perspectives and methodologies, and the interests continue to influence choices throughout the process of inquiry. The context of SoTL includes a variety of factors, some of which are listed here, that can influence SoTL. The results of SoTL can in turn affect teaching practices and learning outcomes, primarily in SoTL's context but also more broadly.

Disciplinary perspectives in their proper place

Second, we need to establish our unique context, in part by consciously incorporating disciplinary perspectives. Disciplinary ways of knowing matter for disciplinary ways of teaching and learning. Theories of teaching and learning in higher education work differently in different disciplines. However, it is in the best interest of SoTL to consciously limit the influence of disciplinary ideas. They are appropriate when establishing the context of the work, reflecting on what perspectives and forces might exert influence on the direction the work might take, and

identifying the types of disciplinary content involved in the work. They are inappropriate when they prematurely narrow conceptions of what SoTL looks like and/or impose disciplinary assumptions about inquiry onto SoTL. Disciplinary perspectives would be grouped together with other outside influences, like institutional agendas, political and social issues, and other important factors that determine context, as indicated at left in Figure 3. These outside influences play an important role in SoTL but, as Booth and Woollacott (2018) point out, they are the external horizon of SoTL work, its context. They also constitute the arenas where SoTL outcomes can ultimately exert influence of their own.

Let the question and interest determine the paradigm

Third, we need to articulate what we want to know so we can choose the right approach. An intuitive starting point could be the modified version I have already presented of Pat Hutchings' (2000) taxonomy of SoTL questions: *What works? What is? What could be?* However, we need to be careful to not let disciplinary paradigms tacitly determine what sort of question we favour and/or how we approach answering it. We need to recognize that "loyalty to one paradigm is both unnecessary and undesirable" (Blaikie and Priest 2017, 9). Conveniently, each of the three questions aligns with one knowledge-constitutive interest: *what works?* with the instrumental interest; *what is?* with the interpretive interest; and *what could be?* with the emancipatory interest. It follows that *what works?* matches a normative paradigm, because accepting the idea of something working necessarily involves taking a normative stance. Answering *what is?* is inherently interpretive because it recognizes that we need to look at what is actually there. Finally, answering *what could be?* matches a critical realist paradigm with an emancipatory orientation because it assumes that there is something better than what we have right now.

Hutchings' questions help articulate the objective of a given SoTL study. The corresponding knowledge-constitutive interests reveal the fundamental nature of the objective and lead to a suitable fundamental paradigm of inquiry. In other words, as Husén (1988) argues (which is to say that this idea is nothing new), this approach lets the objective of research determine the paradigm for that work, rather than letting a disciplinary paradigm tacitly steer things. Berenson (2018) offers an excellent discussion of a positivist–constructivist continuum of traditions of inquiry, but this framing only accounts for the instrumental and interpretive interests. Similarly, Chick (2014) only considers *what works* and *what is*, which correspond to these same two interests. As illustrated in the left part of Figure 2, these interests are the source of dogma. It is necessary to add an emancipatory interest that uses self-reflection to avoid being trapped by dogmatic views of positivism and/or constructivism (and there certainly is dogma to be found in these views). Also, even if Berenson is clear about not wanting to set up a false dichotomy, she does set up a dualism (so does Chick, indirectly). As Macfarlane (2014) convincingly argues, this is a risky move because dualisms can lead to over-simplifications and narrowed perspectives.

Figure 3 shows how the question/interest pair leads to a given paradigm. For each paradigm, there are corresponding ontological and epistemological stances (see Figure 2) that are suitable for answering each question in the service of each interest and that determine our methodological choices. These stances and choices may align with our own disciplinary ones, or

they may differ. Difference here should not be considered a conflict. After all, SoTL looks at something different than disciplinary research. If nothing else, I think we need to be deliberate about that. In the following three sections, I briefly outline what SoTL would look like when it is focused on each of Hutchings' questions and uses the corresponding paradigm.

What works? Instrumental interest, normative paradigm

Instrumental SoTL that asks *what works* and uses a normative paradigm would favour teaching experiments and interventions that test hypotheses or look to determine the effect(s) of something, usually on student learning. It may be concerned with establishing causal relationships and/or gathering mainly quantitative data, so that academic teachers can better achieve their aims as teachers and better support their students' learning in predictable and reliable ways. This kind of SoTL involves identifying the bounds of an experiment or intervention so that internal validity (coherence within the study itself) can be robustly shown, even if external validity (generalizability to other contexts) is limited. It also involves articulating reasonable ways of "measuring" outcomes (in quotation marks to stress the fact that these will always be indirect measures), and acknowledging ways in which this kind of SoTL can and cannot be generalized. Instrumental SoTL can offer a useful starting point for further studies that explore *what could be*.

What is? Interpretive interest, interpretive paradigm

Interpretive SoTL that asks *what is* and uses an interpretive paradigm would favour qualitative studies involving deeper interrogations through methods like ethnography, interviews, focus groups, and discourse analysis. It may be concerned with identifying opportunities for shared meaning-making between teachers and students, and likely involves differentiating between teachers' understanding of concepts as experts in their discipline or field, and students' developing understanding as novices, at least relative to their teachers. This kind of SoTL involves recognizing ways in which subjective perspectives, especially among students, interact with established ideas of content, practice, and curriculum (i.e., individual versus collective understanding). Interpretive SoTL can lay the foundation for larger-scale or more quantitatively focused studies that try to discover *what works*, like the way qualitative pilot studies are often used to develop quantitative tools like questionnaires.

What could be? Emancipatory interest, critical realist paradigm

Emancipatory SoTL that asks *what could be* and uses a critical realist paradigm would favour critical examinations of current systems and practices in order to reveal ways in which these systems and practices may have become inappropriately rigid or might have ceased to be as useful or suitable as they once were. Methodologically speaking, SoTL that prioritizes the emancipatory interest could involve any established methods already mentioned, but would also include elements of philosophical inquiry and critical reflection, especially in terms of questioning fundamental assumptions about systems and practices. An important consideration in emancipatory SoTL is that it aligns with an interest in discovering *what could be*, which involves critiquing *what is*, but should not stop there. Discovering *what could be* may also

involve exploring *what works* (and does not), but looking beyond to discover ways of solving problems in things that do not work or improving things that already do.

For SoTL, we can't just pick one

Finally, we need to recognize that in answering one question, we always need pieces of the other two. The phrase “balanced SoTL” is at the centre of Figure 3 because teaching and learning in higher education involves all three interests. The very fact that we have formalized systems of education illustrates how teaching and learning in higher education acts as an objectified process that we attempt to predict and control. Yet we also recognize that it is a sociocultural system in which language and mutual understanding are crucial, especially if we align with student-centred views of teaching. Finally, academic ideals of student intellectual development (Hofer and Pintrich 1997; Kuhn and Park 2005; Perry 1998), especially related to critical thinking (Mulnix 2013; Niu, Behar-Horenstein, and Garvan 2013), clearly match the emancipatory interest. Just as teaching and learning in higher education serves all three interests, so too must SoTL, both overall as a field and, I argue, within each distinct SoTL project.

An approach that only recognizes one knowledge-constitutive interest would undermine SoTL. Serving only the instrumental interest, SoTL would be limited to a view where anything that cannot be experimentally tested and evaluated would be discounted from the field. Serving only the interpretive interest, SoTL would become myopic, so tightly interwoven with the distinct nature of its context that any attempt to build common ground across the SoTL landscape would fail. Finally, serving only the emancipatory interest, SoTL would work against the very structures and institutions where academic teaching and learning take place, misinterpreting useful structures and systems, including SoTL itself, as oppressive. Therefore, it is a mistake to believe that SoTL can be done in service of only one knowledge-constitutive interest. Instead, each SoTL project needs to strike a balance across all three. One can certainly be dominant, but it is important to take the others into account.

This is consistent with recognizing the “need for multi-method approaches to understand the phenomena under study” (Poole 2013, 137), which is perhaps a more familiar way of saying that we are serving more than one knowledge-constitutive interest. We should use mixed-methods approaches coupled with critical perspectives. Although one of Hutchings’ questions may shine brightest in a given SoTL study, the other questions still matter. Looking for *what works* will necessarily involve seeing *what is*, and may lead to discovering *what could be*. Seeing *what is* has the greatest value if it works toward an understanding of *what works*, or *what could be*, or both. And envisioning *what could be* must involve a sense of *what is*, right now, and *what works*, or does not, in the current situation.

It is also important to remember the knowledge-constitutive interests *during* the process of SoTL. These interests are linked to value judgments we make when choosing how to do inquiry, since we decide at the outset that a given interest is the right one to prioritize. However, we do not only make value-based choices before we begin the process of inquiry. We also make them throughout the process, especially when we run into unforeseen challenges or things turn out differently than anticipated (Douglas 2007). I would not be surprised if the greatest source of frustration for academic teachers who feel they lack the research skills to do

SoTL (see, for example, Borrego 2007; Kim et al. 2021) is not in starting, but in making choices once they are underway. It is important to acknowledge the challenge that academic teachers doing SoTL face. However, stepping into this unfamiliar territory is a choice, and retreating to what is familiar, because it's easier, should not be the preferred way to handle challenges.

FINAL THOUGHTS: WHAT SOTL COULD BE

In this paper, I have critiqued the common approach of conceptualizing SoTL in relation to the disciplines and educational research, arguing that this puts it in tension between two forces that each want to appropriate it, like a ship navigating between Scylla and Charybdis. Odysseus' crew needed to work together to avoid sailing too close to either danger. The big tent metaphor of SoTL represents inclusivity, but a tent is a static meeting place. Perhaps a ship offers a better metaphor for SoTL as a *practice*. To successfully navigate the strait of scholarly inquiry, those of us who crew the SoTL ship need to work together and keep a sharp lookout for inappropriate disciplinary influence. I have used Habermas' concept of knowledge-constitutive interests to argue that there is a way to approach the practice of SoTL from the perspective of fundamental paradigms of inquiry, decoupled from the disciplines, thereby avoiding the inappropriate influence of disciplinary ideas of inquiry, and allowing SoTL to navigate safely between them. I have also linked these knowledge-constitutive interests and paradigms to Hutchings' taxonomy of SoTL questions to show that this way of looking at SoTL is compatible with existing ideas in the SoTL literature. Finally, I have argued that since teaching and learning in higher education involves all three interests, SoTL should aim to strike a balance across them, rather than serving only one at a time.

This analysis offers a different way of interpreting the arguments from humanities-based SoTL scholars like Chick (2013), Potter and Wuetherick (2015), and Little, Donelli-Sallee, and Michael (2021). It helps show that perhaps the issue is that we are favouring the instrumental interest and thus empirical and data-driven approaches to SoTL, and paying too little attention to the interpretive and emancipatory interests. Habermas himself has expressed concern that the instrumental interest has colonized our lifeworld. This is consistent with contemporary concerns in higher education about neoliberalism, new public management, and audit cultures in which, for example, a heuristic course design framework like constructive alignment can be mutated into a tool for quality assessment (Loughlin, Lygo-Baker, and Lindberg-Sand 2020). The fact that education has appropriated the idea of evidence-based medicine to talk about evidence-based educational practice speaks to this as well. Medicine has access to direct, standardized measures of physical conditions, and thus can more accurately claim to be evidence based. Education, on the other hand, has no direct measures, which means that we can only claim to be evidence informed, as Kreber (2015) rightly argues. Habermas' knowledge-constitutive interests offer a way of improving our conception of SoTL by reminding us that SoTL as a system of inquiry has not freed itself from interest; we do not have value-free inquiry (Douglas 2007).

My argument takes a normative stance: we should conceptualize and systematize SoTL in a way that *works*, since the current way does not work as well as it should. At the same time, I am arguing that we should find a better way to talk about SoTL, to achieve better mutual understanding. This is an interpretive goal: I have used a selection of *what is* in the SoTL

literature and built my argument from there. Finally, my argument is critically reflective, driven by an emancipatory interest in discovering *what could be*. I have used the idea of knowledge-constitutive interests, part of Habermas' critical theory, to offer a new way to conceptualize SoTL. I do this in order to free SoTL from inappropriate constraints by recognizing where particular perspectives have become dogmatic. Overall, my principal interest is emancipatory, but I need to incorporate instrumental and interpretive interests to achieve my goal.

But are Habermas' three interests enough? Although his way of conceptualizing the knowledge-constitutive interests lays a valuable foundation, it still describes them as three distinct perspectives, in a way setting them up as either/or choices. Does this risk trifurcating SoTL along these three interests? Since SoTL looks at a complex system that involves all three of Habermas' interests, it might be good to have an overarching interest that aligns with an overarching goal for SoTL. Barnett (2018) proposes a fourth interest, an *ecological interest*, that takes *active concern* as its fundamental stance (as opposed to control, empathy, and critique for the instrumental, interpretive, and emancipatory interests, respectively). This ecological interest could offer common ground for SoTL as a whole, serving as a sort of meta-interest under which the other three can reside.

An ecological interest informs what Barnett (2018) calls ecological inquiry, which "seeks to widen what might count as knowledge" (92). Barnett's conceptualization of an ecological university, which we might broaden to ecological higher education, depicts a place that is consciously enmeshed with the world and its inhabitants, is democratic and inclusive, and is concerned with the betterment of the whole Earth. Perhaps this points to a candidate for an overarching paradigm for SoTL, within which normative, interpretive, and critical realist sub-paradigms could reside. An ecological paradigm as an umbrella structure might steer our use of the sub-paradigms in a way that promotes balance among them, helping us see where each of them is useful, where each has limitations, and how they complement, rather than conflict with, one another.

In his 1967 lecture entitled *The University in a Democracy—Democratization of the University* (later published in the book *Toward a Rational Society*), Habermas ([1969] 1987) says that it is philosophical enlightenment when academics in one field or discipline learn from academics in another and thereby better appreciate their own. But this, he says, "[is] not [an] example of interdisciplinary research. Rather, [it] illustrate[s] a self-reflection of the sciences in which the latter become critically aware of their own presuppositions" (8). This is what SoTL *could be*, for us, for our students, and indeed for higher education and its place in the world as a whole, if we could only let it.

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