Wittgenstein's Relevance to Philosophy of Education: personal reflections on meaningful uses of post-foundationalism

Jeff Stickneyᴵ

ᴵUniversity of Toronto, Toronto – Canada

ABSTRACT – Wittgenstein's Relevance to Philosophy of Education: personal reflections on meaningful uses of post-foundationalism. Invited to survey my work in Philosophy of Education related to the later philosophy of Ludwig Wittgenstein, I first investigate how Wittgenstein became a significant thinker in this field. Affirming this connection after some deflationary remarks, clarifying the philosophical as opposed to pedagogical intent of Wittgenstein's frequent remarks on learning, I then revisit my contest with Michael Luntley over interpreting Wittgenstein's remarks on training. Eliding the *Abrichtung*, 'animal-training' reading, I side with José Medina's social-normative view of gradually attaining (through training), autonomy within and mastery of the rules. Following the widely shared social-normative reading then opens a vista onto several meaningful applications in education of Wittgenstein's post-foundational philosophy. One case is rule-deviation within curriculum reforms, where instead of standardization and consensus we find multiple interpretations of curricular rules. Another vexing question is how we judge with some degree of certainty the efficacy or sanity of various pedagogical practices, as in weighing the merits of discovery versus fundamentals approaches in math training. Recognizing how people become potentially blinded by long-held, second-nature reactions and 'bedrock' assumptions, and drawing also on Foucault, I consider applications to social justice issues in terms of how we commonly regard others: diagnosing students as ADHD or Gifted, calling out abusive language in schools, recognizing Indigenous claims for sovereignty in a process of decolonizing education, and seeing trees and other non-human beings as something more than standing resources.
Keywords: **Wittgenstein. Education. Training. Expert Judgment. Learning.**

RESUMO – A Relevância de Wittgenstein para a Filosofia da Educação: reflexões pessoais sobre usos significativos do pós-fundacionalismo. Convidado a examinar meu trabalho em filosofia da educação relacionada à filosofia do último Ludwig Wittgenstein, primeiro investiguei como se tornou um pensador significativo neste campo. Ao afirmar esta conexão após algumas observações parciais, e ao esclarecer o propósito das frequentes observações de Wittgenstein sobre aprendizagem como filosóficas ao invés de pedagógicas, a seguir revisito minha discussão com Michael Luntley a respeito da interpretação de observações de Wittgenstein sobre treino. Ao evitar *Abrichtung*, leitura de 'treinamento animal', alinho-me com a perspectiva social-normativa de José Medina de gradativamente alcançar (por meio da formação), autonomia e domínio das regras. Seguir a leitura social-normativa amplamente compartilhada abre, então, uma perspectiva para diversas aplicações relevantes da filosofia pós-fundacional de Wittgenstein na educação. Uma questão

é o desvio da regra nas reformas curriculares em que, ao invés de padronização e consenso, encontramos múltiplas interpretações de normas curriculares. Outra pergunta incômoda é como julgamos com algum grau de certeza a eficácia ou a lucidez de práticas pedagógicas variadas, como ao pesar os méritos da descoberta versus abordagens fundamentais no treino em matemática. Ao reconhecer como as pessoas podem ser potencialmente cegadas por reações antigas habituais e pressupostos 'consolidados', e também com base em Foucault, considero aplicações a questões de justiça social em termos de como, em geral, consideramos os outros: diagnosticar estudantes com TDAH ou superdotados, usar linguagem abusiva nas escolas, reconhecer reivindicações de indígenas pela soberania em um processo de decolonização da educação, e considerar árvores e outros seres não-humanos como algo mais do que recursos imóveis.

Palavras-chave: **Wittgenstein. Educação. Formação. Juízo Especializado. Aprendizagem.**

> I should not like my writing to spare other people the trouble of thinking. But, if possible, to stimulate someone to thoughts of his own. (PI, p. x)[1].

Introduction

Compared to some of your other contributors, like Michael A. Peters and Richard Smith, I am relatively new on the scene. I gave my first Wittgenstein paper, "Teaching and Learning in Wittgenstein's Philosophic Method," at the Philosophy of Education Society annual meeting in San Francisco (March, 2005)[2]. I was very pleased to have James Marshall and Paul Smeyers in the audience, as well as Nicholas Burbules as the respondent to my paper. Burbules (2005) gave me a very favourable response, and ended by inviting me to join this circle of philosophers of education, including of course Michael Peters, who collectively were reintroducing Wittgenstein to the field from a more continental, post-analytic reading of his work[3]. This group of scholars had met in New Zealand back in the 1990s to form a reading group on Wittgenstein that I later referred to in an interview with Peters and Burbules as "The Fellowship of the Ring" (Stickney, 2014a).

The jest, of course, speaks to how 'Precious" Wittgenstein had become for us, and recognizes the burden of carrying this load, shared by notable colleagues in the UK like Richard Smith (2011; Smith and Burbules, 2005) and Paul Standish (1995, 2012, 2017). I was very pleased when Paul invited me to speak at the *Gregynog* conference in Wales (Philosophy of Education Society of Great Britain, July, 2015), and later for the joint British Wittgenstein Society/PESGB [Philosophy of Education Society of Great Britain] conference on Wittgenstein and Education at University College London (July, 2018). Richard Smith was also a BWS keynote speaker; I very much enjoyed appearing with him then, as he had been the session chair at my first paper presentation at PESGB (2009).

Why Wittgenstein?

In teaching Philosophy of Education (as I did a decade ago before so many humanities departments went into decline) it would be reasonable to include on the syllabus works such as Plato's *Republic*, Rousseau's *Emile,* Locke's essay on education, Kant's *Pedagogy,* and Freire's *Pedagogy of the Oppressed*, as well as critical theory, moral education, and early and post-structuralist feminism, etc. It would not make much sense to list a single text from Wittgenstein's corpus,[4] but one would be remiss not to talk about Analytic Philosophy of Education from the 1960s-1990s (if it ever ended) and its attempt to use the ordinary language philosophies of Ludwig Wittgenstein, John Austin, and Gilbert Ryle to examine the meaning of terms like teaching and learning (Archambault, 1965). Thomas Green (1968) was among the more Wittgensteinian analytic thinkers in seeing blurry boundaries around such words rather than enucleating artificially narrow interpretations. In the United Kingdom there was the "London School" under R. S. Peters, with Paul Hirst, Robert Dearden, and others. In the United States, Israel Scheffler at Harvard worked from a more pragmatist approach. Similar questions appeared on both shores of the Atlantic, worth entertaining if one has a good escape plan: "Is teaching parasitic on learning?" (Komisar, 1968); "Is teaching like selling, in which case if nobody is buying are you really teaching?" (Scheffler, 1960); "How is teaching different from telling?" (Bakhurst, 2020). Wittgenstein did invite inspection of language-in-use, on the 'rough ground' as opposed to theoretical heights (PI §108), but this literature rarely attended to actual policy documents in education (an exception is Hirst, 1974) nor provided ethnographic descriptions (after Clifford Geertz or Pierre Bourdieu) of the turns of speech in everyday usage within educational settings. Michael Peters has been the most notable critic of this liberal-analytic movement in philosophy of education, seeing it as a reduction of Wittgenstein's philosophy to a technique for ensuring (policing) conceptual hygiene (Peters; Marshall, 1999; Peters; Stickney 2018, 2019a).

"Why no Wittgenstein texts on a Philosophy of Education course syllabus," you wonder? Most of Wittgenstein's later work was published posthumously, comprised of numerous aphorisms, notebooks and sometimes scraps he left behind to his executors. Throughout these compilations, there is frequent use of educational terms like teaching, training, learning, instruct, etc., but almost always in the service of illustrating a philosophical point. Cavell (1979) aptly refers to these as 'scenes of instruction,' but there is general agreement among philosophers that these do not comprise a genetic theory of learning (Glock, 1996) nor a guide to pedagogy as Kant (1904) bequeathed to us. In fact, Wittgenstein said very little about the conduct of education. In my 2005 paper I set out to show this, referring to the opening of the *Investigations* where Wittgenstein explains that these 'intermediate cases' (PI §122), simplified instances of teaching and training along with anthropological thought-experiments (e.g., people who show no emotion, measure wood piles by labour involved rather than volume, or lack arms with

which to gesticulate), help 'dispense the fog' (PI §5) surrounding our use of and potential bewitchment by language (PI §109).

Most of Wittgenstein's philosophical work in the *Investigations* is directed toward undoing his earlier philosophy of language in the *Tractatus* (Peters; Stickney 2018, Ch 1), with the realization that a logical positivist, correspondence theory of truth was ingrained in how we think: "A picture held us captive" (PI §115). Here is an example of what I mean, where Wittgenstein's reference to learning the use of words points us toward not a single definition of a concept (as in Socrates's search for an essence) or a verifiable connection between words and states-of-affairs in the external world, but instead myriad uses (language-games) that give context, nuance and plurality to meaning.

> How did we learn the meaning of this word ("good" for instance)? From what sort of examples? in what language games? Then it will be easier for you to see that the word must have a family of meanings (PI §77).

In fact, Wittgenstein is often quick to note that he is working philosophically with ontological questions of meaning, where "essence is expressed by grammar" (PI §371), and not addressing topics of education *per se* (Stickney 2017a, and most fully in 2020a).

> Am I doing child psychology? – I am making a connection between the concept of teaching and the concept of meaning (Z §412)[5].
> How does one teach a child (say in arithmetic) "Now take *these* things together!" or "Now *these* go together"?
> Clearly "taking together" and "going together" must originally have had another meaning for him than that of *seeing* in this way or that. – *And this is a remark about concepts, not about teaching methods* (PI, p. 208, *stress added*; cf. RFM VII.4).
> "We all learn the same multiplication table." This might, no doubt, be a remark about the teaching of arithmetic in our schools, – but also an observation about the concept of the multiplication table. (PI, p. 227)

Aside from a couple autobiographical remarks where he laments that suffering in education was going out of style, and that his own pupils' ability may have slipped after leaving his instruction (CV, p. 38 and 71e), there are just a few directly relevant paragraphs to which I can point in his non-philosophical *Preface to a Dictionary for Elementary Schools*: on promoting student's ability to self-correct (PO: DES, p. 15), and learning-enhancement from breaking conventional alphabetic order (Stickney 2017a; Savicky, 1999, 2017). That he trained and then taught elementary school in rural Austria helps to explain where his many references to learning come from but offers little in terms of comprehending his philosophical purpose. So, what is all the fuss over Wittgenstein and education?

On Training: Avoiding the Negative, *Abrichtung* reading of Wittgenstein

> I cannot describe how (in general) to employ rules, except by teaching you, training you to employ rules. (Z§318)

Thinking I had set things straight in my 2005 paper, I then read Michael Luntley's (2007) paper on training, prompting me to write a lengthy and polemical response. As a curtesy I shared with Luntley my paper, "Training and Mastery of Techniques in Wittgenstein's Later Philosophy: A response to Michael Luntley", and he quickly wrote a response (Luntley, 2008). Both were published in a Special Edition on Wittgenstein, edited by Nicholas Burbules and Paul Smeyers for Michael Peter's journal, *Educational Philosophy and Theory* (Stickney, 2008a). It is probably my most 'searched' paper, as reported by Academia.edu. I also had in the same issue a more whimsical but obscure paper that has drawn little attention: on Wittgenstein's references to relativity theory (Stickney, 2008b), using the form of a round or cannon to look at the question on three different levels: animalistic reactions, training children, and Wittgenstein's references to Einstein. In retrospect, I now realize that this multilevel inquiry set the pattern for my investigation of Wittgenstein's use of the word 'learning' in *On Certainty* (Stickney, 2020a, my BWS talk from 2018), as well as a recent paper (2020b) on "Seeing trees" discussed in the final section below.

How do authors measure our success, and justify to our family time spent writing for relatively small audiences? The Stickney-Luntley debate made it into a footnote in Andrea Kern's book, *Sources of Knowledge* (2017, p. 666)[6], and even came up in her keynote at Queens University in Kingston, Ontario, where David Bakhurst was hosting a series of talks on philosophy of education in his Philosophy Department – a topic that rarely comes up in academic Philosophy, to which this journal is now also an exception. Bakhurst (2017) kindly wrote the foreword for our edited volume *A Companion to Wittgenstein on Education* (Peters; Stickney, 2017), fortunately affirming our claim to Wittgenstein's relevance in our field. Hard to launch that collection of 50 chapters by 45 authors from fourteen countries, had he given a negative report.

Wittgenstein is sometimes criticized for not paying his debts, as he did not provide references to his predecessor's work. Much of my writing on training drew from José Medina (2002, 2004, 2006), who built upon the work of Meredith Williams (1989, 1991, 2010). Medina (2002) most clearly addressed the question of training by showing that for Wittgenstein it is an avenue toward mastery of the rules, in which the novice gradually comes through the teacher's guidance to have autonomy within the rules: a facility or fluency only other adept performers can recognize. Wittgenstein offers the example of how we know when someone is playing the piano with expression, as opposed to mechanically, and concludes that to explain this quality of performance one would have to explain an entire culture (Z §164; cf. CV, p. 7, 69). I also pulled

heavily upon Stephen Mulhall (1990, 2001) and Charles Taylor (1995). What unites these Wittgenstein scholars is the social reading of rule-following, as opposed to Luntley's more rationalistic and individual approach (a creative mix of Wittgenstein and Descartes's *res cogitans*). Paul Smeyer's work on initiation into a common *form of life* through enculturation and training was profoundly influential on my own thinking (Smeyers, 1995). In our panel and symposium (2016), Luntley was the lone voice behind the individual reading: a contrast that was again manifest at the British Wittgenstein Society (University College London, 2018), where Luntley opened with a talk in which he criticized the social-normative view of rule-following, and on the last day I closed by saying it is social and normative 'all the way down.' As Wittgenstein notes, even mathematics is normative,

> Our children are not only given practice in calculation but are also trained to adopt a particular attitude towards a mistake in calculating.
> What I am saying is that mathematics is normative. But "norm: does not mean the same thing as "ideal." (RFM, VII.61)

Despite these differences of interpretation, I respect Luntley's originality and tenacity, as seen by my inclusion of him in panel discussions in both Toronto and Oxford conferences,[7] as well as in our co-edited volume and encyclopaedia section on Wittgenstein (Peters; Stickney, 2017; Stickney; Burbules, 2017). I am perhaps beholden to this maverick in the field for giving me occasion to articulate a version of the more common social view.

The *Abrichtung* reading of Wittgenstein's references to training, focused primarily on his preliminary notebooks (1958), as harsh forms of 'animal training' and stimulus-response conditioning, has been the most troublesome aspect of this story.

> The child learns this language … by being trained to its use. I am using the word 'trained' in a way strictly analogous to that in which we talk of an animal being trained to do certain things. It is done by means of example, reward, punishment, and such like. (BB, p. 77)

In the *Investigations*, this is muted as:

> A child uses such primitive forms of language when it learns to talk. Here the teaching of language is not explanation, but training. (PI §5)

"Like a weed, *Abrichtung* keeps coming back up after we think we have uprooted it" (Freisen, 2016; contra *Abrichtung* and Freisen, Bakhurst, 2015; Peters and Stickney, 2018, Ch 2; Winch, 2019). The 'animal trainer' narrative feeds on accounts of Wittgenstein striking students while working as an elementary teacher in the remote villages of Austria (Bartley, 1985): a job from which he was fired (Peters and Stickney, 2018, Ch 3), and it plays upon encoded diary accounts of his liaisons with

young men at a well-known rendezvous spot in the local park[8]. In the absence of any real evidence that would connect these events in his life, such tabloid news approaches are not very helpful in understanding thinkers like Wittgenstein or Nietzsche. These insinuations and innuendo lead us away from a more sensitive appreciation of Wittgenstein's struggles with a condition of high-performing autism (possibly Tourette syndrome), a hetero-normative environment that forced him to mask his orientation (Rejali, 2017), and his battle against suicidal tendencies that claimed his brothers' lives. Wittgenstein's disregard for women is admittedly an embarrassment (e.g., calling Elizabeth Anscombe an 'honorary man'), but as Alessandra Tanesini (2004) reminds us, even feminists can make good use of misogynist philosophers like Wittgenstein and Nietzsche (cf. Zerilli, 2005). Rejection likely goes two ways: If alive today, Wittgenstein would certainly disapprove of most of what is written about his work and his connections to education. In general, we do well to avoid hagiographic accounts of our favourite philosophers (Sluga, 1996). Philosophical biography such as Ray Monk's (1990; 2001) and Beth Savickey's (1999; 2017; Gasking; Jackson, 1967), can be very illuminating, but we do best to find Wittgenstein's philosophy in his 'texts', even though these are reconstructions from his notes. In a sincere effort to understand Wittgenstein's philosophy, one has to sift through many hundreds of often non-sequential passages, until "Light dawns gradually over the whole" (OC §141). What we see more commonly in Wittgenstein's later remarks are more benign reflections on learning through examples:

> One of the things we always do when discussing a word is ask how we were taught it.…Cf. How did we learn 'I dreamt so and so'? The interesting point is that we didn't learn it by being shown a dream. If you ask yourself how a child learns 'beautiful', 'fine', etc., you find he learns them roughly as interjections. (LC 1–2)
> Consider that you have to teach the child the concept. Thus you have to teach it evidence (the law of evidence, so to speak). …Remarkable the concept to which this game of evidence belongs. (LW I, p. 55e)

Constructive uses of Wittgenstein's later philosophy in education

The social reading of Wittgenstein, I argue, makes his later work significant in efforts to bring about political change and do social justice work, what we see most strongly in philosophical feminism with Naomi Scheman, Linda Zerilli, Loraine Code, Susan Hekman and others, as well as in ethical philosophy with Iris Marion Young, Alice Crary, Raimond Gaita, etc., and political philosophy with Charles Taylor, James Tully, David Owens, Michael Temelini, Chantal Mouffe, Hannah Pitkin, and others. Philosophy of science as well, if you consider Ian Hacking, and Stephen Toulmin. In writing the epistemology chapter

for a high school textbook (Stickney *et al.*, 2011), it was Hekman (1995) I drew on to help introduce Wittgenstein to Grade 12 adolescents about to go into university: looking at how stereotypes and derogatory speech has sedimented into the bedrock of our culture, contributing to systemic racism in terms of how see and regard people who are different. In the philosophy of science chapter, I included Hacking's (2002) work on 'making up people', looking at concepts of giftedness and ADHD as social constructs belonging to our educational taxonomies, with feedback loops in the way we diagnose cases and then seek to provide programs or remedies for these exceptionalities. These are the kinds of conversations we need to have in education, and of course in both cases these thinkers are blending Wittgenstein with Foucault to address questions of nominalism and realism, considering the arbitrariness of some of our educational constructs in order to think how they could be governed otherwise (Foucault, 1985, 1994a, 1994b).

Let me pause before returning to the importance of Foucault. After the textbook had been published and in the school system for a number of years, I received considerable feedback from colleagues teaching high school philosophy: through the Ontario Philosophy Teachers Association, at which I was and am a frequent speaker, and as I taught courses for both practicing high school Philosophy teachers and teacher candidates (and still do; see Stickney, 2019). I was also a co-investigator in the High School Philosophy Project (a SSHRC grant under Trevor Norris, Principal Investigator). Two of my publications came out of this experience. The first was a paper on teaching Wittgenstein with adolescents, which had been turned down by reviewers for PESGB because it was too descriptive and lacked a clear argument. Thankfully, Richard Smith and Paul Smeyers picked it up quickly as editors of *Ethics and Education* (Stickney, 2014c), seeing merit in philosophy of education for discussing the topic of how one approaches such an insurmountable task: the answer to which is discussing our relation to primates, talking about art and aesthetic judgment, considering why abusive language often comes as an almost natural response, and whether math and music notations helps us to reach articulations of what would otherwise be ineffable. These are engaging conversations for teenagers, but the evidence is largely anecdotal and qualitative at best. Heeding Wittgenstein, it seemed a good thing to offer an apt description of this pedagogy, rather than proffer an explanation (causal or otherwise) or advance a pedagogical theory. Wasn't this Wittgenstein's admonition? Philosophy 'leaves everything as it is' (PI §124); it 'simply puts everything before us, and neither explains nor deduces anything. Since everything lies open to view there is nothing to explain', and therefore anything hidden 'is of no interest to us' (PI §126). As I have noted (Stickney, 2017a), we often miss the intervening passage that speaks to so many problems in all levels of education and governance: "The civil status of a contradiction, or its status in civil life: there is the philosophical problem." (PI §12I). I tried this descriptive approach again in my talk for the *Gregynog* PESGB conference (2015), in discussing opposing regimes of math training be-

ing heavily contested in Ontario's curriculum (Stickney, 2017b). I was illustrating the point Wittgenstein made, that justifications give out, and in the end, we act (PI §§211, 217). Upon concluding my talk, one of the professors asked me what my argument was, and I realized how deeply engrained this *form* has become within philosophical circles (especially in the UK). There is a reason why Monty Python's satirical skit, "The Argument Clinic,"[9] is so instantly recognizable as caricature of real tendencies. As Frank Cioffi (1998) notes in discussing pretentious forms of evidence-gathering in the social sciences (e.g., field notes) such as in Irving Goffman's research on persona, we often don't need an explanation; as in watching a play, we recognize the moral of the story without program notes.

With that rant now out of the way, let us look at the second publication. Norris invited me to join him in presenting the High School Philosophy Project in a PESGB symposium (2018). I decided to share my experience of living through curriculum reforms, where documents roll out of the Ministry or District School Board with the intention of bringing about a coordinated, uniform system change – almost always packaged in Thomas Kuhn's language around 'paradigm shifts' (Stickney, 2006). What almost invariably happens, is that rather than a consensus there are myriad interpretations of the new rules (Stickney, 2015), something which happened in the case of secondary teachers interpreting the new (2013) Philosophy curriculum. Without going into Saul Kripke's under-determination reading of Wittgenstein's rule-following argument, you see where this is going: Wittgenstein's scene of an educator reacting with shock when a pupil deviates from the rule, and the infinite regress this sets up when you then try to shore up the reasons for the rule leading us one way as opposed to another (Temelini, 2015).

> This was our paradox: no course of action could be determined by a rule because every course of action can be made out to accord with the rule. … if everything can be made out to accord with the rule, then it can also be made out to conflict with it. (PI §201)

I included this on our monograph (Peters; Stickney, 2018, p. 100-102) as an example of where instead of standardization in education, what we often see are archipelagos of diversity (viz., Galapagos): myriad deviations in the rules even within schools and departments, as educators improvise and respond iteratively to their students.

This brings me back to combining Foucault with Wittgenstein, which in philosophy of education has been most developed by Michael Peters (1995; cf. Olssen, 1995; Stickney 2009a). Another influence on me, however, was James Tully (my dissertation advisor) who also used both Wittgenstein and Foucault in political philosophy, referring to 'reciprocal illumination' of these thinkers (Tully, 2003). In his landmark book, *Strange Multiplicity,* Tully (1995) investigated the many forms of political constitution that can exist if only we allow for diversity. This is a very important issue in Canada, as it is in Brazil, because of the need to come

to terms with our colonial legacy and in our field participate in a long-term process of decolonizing education. Recognition of Indigenous land claims is a major issue in our country, coming up in our history and geography curriculum. Last February (2020), prior to the coronavirus and subsequent economic shutdown, controversy over a natural gas pipeline crossing Wet'suwe'tan First Nation's traditional land in British Columbia led to a national protest that stopped trains from crossing Mohawk territory in Quebec and even commuter trains from leaving Union Station in Toronto. What Tully's work showed is how a 'social imaginary' (Taylor, 2004), in the form of Locke's concept of property in his *Two Treatises on Government*, is another 'picture holding us captive' (PI §115): preventing recognition of the pre-existing forms of political constitution and land development among Indigenous peoples, and therefore preventing legal resolution of their claims to sovereignty. Developing the land is seen by default as its optimal and rightful use, justifying exclusion of Indigenous inhabitants from its governance: as though living on a lower plane, outside the social contract. As educators living up to the recommendations of our Truth and Reconciliation Commission (Tully advised on the Royal Commission on Aboriginal Affairs after the armed confrontation at Oka in 1989), we have a duty to decolonize education. In order to perform this kind of work on ourselves, we need to examine cases of our actual teaching, and also entertain how things are or could be done differently: working genealogically, as both Wittgenstein and Foucault would, in comparing many examples. We need to look carefully at how we have come to form customs, institutions, reactions, and even wishes on the basis of deeply embedded but nevertheless erodible bedrock such as the Lockean imaginary around property.

> If we look at things from an ethnological point of view, does that mean that we are saying that philosophy is ethnology? No, it only means that we are taking up a position right outside so as to be able to see things more objectively. (CV, p. 37e)[10]

In doing this work, we gradually change our 'natural history' by altering our language and *form of life*. I see philosophers of education as having a role in this change-process, taking the analytic movement further by doing genealogical and dialogical work needed to better understand and respect different people. Here I am possibly caught in a contradiction, as my use of Wittgenstein's philosophy does not 'leave everything as it is', but sides more with Marx in seeking to not only describe but to change the world. This work is very anthropological, but in a non-invasive way: giving voice and agency to those excluded from governance processes, such as teachers and students in schools.

> I want to say: an education quite different from ours might also be the foundation of quite different concepts. For here life would run on differently.
> -- What interests us would no longer interest them (i.e., the other people involved). Here different concepts would no longer be unimaginable. In fact, this is the only way

in which *essentially* different concepts are imaginable. (Z §§387-88; cf. PI, p. 230)

Much of my recent work focuses on place-based education within the broader area of Environmental Sustainability Education. I am currently co-editing a Special Issue of the *Journal of Philosophy of Education* (Wiley, Vol. 54, No. 4), an arm of PESGB, to involve researchers and philosophers of education to *problematize* the concept of 'transformational' environmental education. I drew on Tully's work in my own paper, but also have a longer paper now on-line in JOPE Vol. 54, No. 5 (Stickney, 2020b) on "Seeing trees," that builds upon Stephen Muhall's work in combining Heidegger and Wittgenstein around the topic *seeing-as* (PI, pp. 194-5). Using a notable tree as my axis of investigation, this paper grew out of my PESGB 2019 walk-and-talk where I took a group of professors out of the lecture room to visit the evergreen oak tree in the medieval cloister of New College, Oxford. True to Wittgenstein, I hope, I did not want to talk about place-based education but actually do or show it (see Peters, Burbules and Smeyers, 2008). Wittgenstein admonishes us: "Don't imagine a description which you have never heard, …an imaginary description of which you really have no idea" (CV, p. 35e; cf. PI §66, "don't think, but look!"). Now a grandfather of three boys, I want to see meaningful change that will help us to avert the climate crisis that threatens the very existence of our global civilization. Saving trees in Canada and Brazil is essential to our collective survival. We need to regard trees with more reverence (RFGB, in PO, p. 139). The last section of my talk for the British Wittgenstein Society (Stickney 2020a) focused on climate science deniers, drawing on Wittgenstein's discussion in *On Certainty* of people who consult an oracle or rainmaker instead of a physicist. The question here is why people don't all react with the same sense of urgency in seeing the same irrefutable scientific evidence for the climate crisis, to which I answer with Wittgenstein that some engrained hinge-propositions and learner-reactions may vary across populations (and especially among some world leaders). But I also want to warn my colleagues contributing to the environmental sustainability education literature that telling our students to see nature differently, whether through Indigenous perspectives or Zen Buddhist ones, etc., is unlikely to actually change the way people see and regard things. Change has to become embodied, and embedded in daily practices and rituals, to significantly alter people's second-nature ways of reacting and going-on.

A philosopher says "Look at things like this!" – but in the first place doesn't ensure that people will look at things like that, and in the second place his admonitions may come altogether too late; it's possible, moreover, that such an admonition can achieve nothing in any case and that the impetus for such a change in the way things are perceived has to originate somewhere else entirely. …I ought never to hope for more than indirect influence. (Wittgenstein, CV, p. 61-62)

Not giving up on our future, I take some ground for hope in transformative environmental education in seeing, as Wittgenstein did clearly, that "In what we call the Arts a person who has judgment develops" (LC, §17, p. 6; Peters; Stickney, 2018a, p. 53-55; Stickney, 2002c). The analogy reminds us that acculturation (a rich milieu), training (scales), and education (musical theory and history) can bring about remarkable developments, especially when everyone is working in concert.

> If we teach a human being such-and-such a technique by means of examples – that he then proceeds like this and not that in a particular new case, or that in this case he gets stuck, and thus that this and not that is the 'natural' continuation for him: this of itself is an extremely important fact of nature. (Z §355)

But as to whether these eco-pedagogies will be effective, that has been a central question in my work with Wittgenstein. I was struck by Paul Hirst's question (1971), "How upon entering the classroom does an inspector know that teaching is going on, and not crazy and fuzzy things in its name?" Writing a paper for an "Agency After Foucault" conference that was much too long to publish (but happy to have shared my session with James Marshall), I split the paper into two: one addressing the question of how we use explicit and tacit criteria in evaluating teachers, first with Wittgenstein (Stickney, 2009b); and then looking at judging teachers genealogically through Foucault (Stickney, 2012). The question around how we come to acquire expert judgment, offered by Wittgenstein as a matter of picking up tips but not formally through taking a course or being taught (PI, p. 227), has stayed with me my whole career. It is the clearest application of the later Wittgenstein's post-foundationalism to education, drawing on a recurring theme in his philosophical work.

> To be sure there is justification; but justification comes to an end (OC §191-92).

Recognizing limits to justifying our expert judgments of felicitous performance and mastery of techniques, beyond grounding these assessments in a deep contextualism (discerning relevant background and circumstances that lend meaning or significance; Medina, 2006) and as 'agreement within our *form of life'* (PI §§241-2), has occupied my thoughts for the last two decades[11], serving as the occasion for my paper on judging choreographies (in Michael Peter's *festschrift*; Stickney, 2014b); for addressing how educators read silence in the classroom (Stickney, 2010); and in adjudicating in the war between discovery math and fundamentals (Stickney, 2017b)[12]. It is also the point of departure for discussing Wittgenstein's insistence that some things are not taught formally or even 'learned', distinguishing between learning in the liberal arts and prior initiation or enculturation into language (Stickney, 2020a, b). I hope the readers will see in this work an appropriate use of Wittgenstein's post-foundationalism in educational philosophy, inspiring their own thinking along these lines.

Notes

1 Following convention, titles for Wittgenstein's works are abbreviated (PI = Philosophical Investigations, Z = Zettel, OC = On Certainty, CV = Culture and Value), with section (§) or page number (p.), with full citation and initials (e.g., RFM) in the References.

2 Mateus Stein, a PhD Student in Philosophy at Universidade Federal de Santa Maria (Federal University of Santa Maria), contacted me a year ago with a request to translate this paper into Brazilian Portuguese for eventual publication in an Open Access Brazilian Academic Journal on Philosophy or Education, and is still working on this.

3 Dwight Boyd, the Philosophy Department Chair at OISE/UT, was quite impressed, and this acceptance certainly made my dissertation defence go smoothly in June of that same year.

4 Peters and Burbules, however, ran a graduate seminar on Wittgenstein at University of Illinois, Urbana-Champaign.

5 On how Wittgenstein can be applied to our understanding of learning disabilities, see Macmillan (1995).

6 Kern's (2020) recent publication of her Queen's conference paper includes a caustic note on Luntley's "dead-end" debate: accusing him of failing to notice "the dogmatic character of his own position" and taking "himself to have fully characterized the available options". I was pleased to be left out of this one!

7 At PES (Toronto, 2016) the panel consisted of Nicholas Burbules, Michael Luntley, Paul Smeyers, Paul Standish and myself, Jeff Stickney (organizer); at PESGB (Oxford, 2016), Richard Smith, Michael Luntley, Paul Smeyers, Paul Standish and myself, Jeff Stickney (organizer).

8 Giving his paper at the Philosophy of Education Society meeting in Toronto (2016) Freisen even made references to S&M, which he then brushed aside in moving along with further accusations of brutality. I objected, in courtroom style, that he was using a prosecuting lawyer's trick of presenting irrelevant information with the aim of insinuating moral taint, which the jury then cannot really dismiss from their memories. Chris Winch (son of famous Wittgenstein scholar Peter Winch) and I decided to both write rebuttals (Chris attended my counter-paper at PESGB 2017), but fear our efforts contribute to spreading the rumours further instead of cleansing the record.

9 Available at: <https://www.youtube.com/watch?v=xpAvcGcEc0k>.

10 One of the most important methods I use is to imagine a historical development for our ideas different from what actually occurred. If we do this, we see the problem from a completely new angle. (CV, p.3 7e; cf. RFM II.72 on 'mathematical work for a study in anthropology')

11 When I started my doctoral dissertation at University of Toronto in 1999, I set out to address regimes of teacher inspection in Ontario, using the philosophies of Wittgenstein and Foucault.

12 I discovered that John Mighton, the proponent behind JUMP Math training, did his Masters' thesis on Wittgenstein in the McMaster Philosophy Department.

References

ARCHAMBAULT, R. D. (Ed.). **Philosophical analysis and education**. London: Routledge & Kegan Paul, 1965.

BAKHURST, D. Training, transformation, and education. **Royal Institute of Philosophy Supplement**, v. 76, p. 301-327, 2015.

BAKHURST, D. Wittgenstein and education (Foreword). In: PETERS, M. A.; STICKNEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations. Singapore: Springer, 2017. P. v-xiii.

BAKHURST, D. Teaching, Telling, and Technology. **Journal of Philosophy of Education**, v. 54, n. 2, p. 305-318, 2020.

BARTLEY, W. W., III. **Wittgenstein**. 2. ed. LaSalle, IL: Open Court, 1985.

BURBULES, N. Learning and the limits of doubt. Response paper to Jeff Stickney. In: HOWE, K. (Ed.). **Philosophy of education society yearbook**. (Paper given at the PES annual meeting). San Francisco, 2005. P. 308-310.

CAVELL, S. **The claim of reason**: Wittgenstein, skepticism, morality, and tragedy. Oxford: Clarendon Press, 1979.

CIOFFI, F. Information, contemplation, and social life. In: CIOFFI, F. **Wittgenstein on Freud and Frazer**. Cambridge: Cambridge University Press, 1998.

FOUCAULT, M. **The uses of pleasure. History of sexuality**, v. 2. Trans. R. Hurley. New York: Random House, 1985

FOUCAULT, M. What is enlightenment? In: FOUCAULT, M. **Essential works**. vol. 1. New York: The Free Press, 1994a. P. 303-320.

FOUCAULT, M. The subject and power. In: FOUCAULT, M. **Essential works**. vol. 3. New York: The New Press, 1994b. P. 326-348.

FRIESEN, N. Training and *Abrichtung*: Wittgenstein as a tragic philosopher of education. **Educational Philosophy and Theory**, v. 49, n. 1, p. 68-77, 2017. DOI: http://dx.doi.org/10.1080/00131857.2016.1182415

GASKING, D. A. T.; JACKSON, A. C. Wittgenstein as a teacher. In: FANN, K. T. (Ed.). **Ludwig Wittgenstein**: The man and his philosophy. Berkeley: University of California Press, 1967.

GLOCK, H.-J. **A Wittgenstein dictionary**. Oxford: Blackwell, 1996.

GREEN, T. Topology of the teaching Concept. In: MACMILLAN, C. J. B.; NELSON, T. W. (Ed.). **Concepts of Teaching**. New York: Rand McNally, 1968.HACKING, I. **Historical ontology**. Cambridge, MA: Harvard University Press, 2002.

HEKMAN, S. Back to the Rough Ground. In: HEKMAN, S. **Moral Voices, Moral Selves**: Carol Gilligan and Feminist Moral Theory. University Park: Pennsylvania State University Press, 1995. P. 113-169.

HIRST, P. What is Teaching? **Journal of Curriculum Studies**, v. 3, n. 1, May 5, 1971.

HIRST, P. H. Liberal Education and the Nature of Knowledge. In: DEARDEN, R. F.; HIRST, P. H.; PETERS, R.S. (Ed.). **Education and the development of reason**. London: Routledge & Keagan Paul, 1974. P. 391-414.

KANT, I. **The educational theory of Immanuel Kant**. Trans. and ed. with an introd. by E. Franklin Buchner. Philadelphia: Lippincott, 1904.

KERN, A. **Sources of knowledge. On the concept of a rational capacity for knowledge** D. Smyth, Trans. Cambridge, MA: Harvard University Press, 2017.

KERN, A. Human Life. Rationality and Education. **Journal of Philosophy of Education**, v. 54, n. 2, p. 268-289, 2020.

KOMISAR, P. Teaching: Act and enterprise. In: MACMILLAN, C. J. B.; NELSON, T. W. (Ed.). **Concepts of teaching**. New York: Rand McNally, 1968.

LUNTLEY, M. Learning, empowerment, and judgement. **Educational Philosophy and Theory**, v. 39, n. 4, p. 418-431, 2007.

LUNTLEY, M. Training and learning. [Response to Jeff Stickney]. **Educational Philosophy and Theory**, v. 40, n. 5, p. 695-711, 2008.

LUNTLEY, M. Training, training, training: The making of second nature and the roots of Wittgenstein's pragmatism. **European Journal of Pragmatism and American Philosophy**, v. IV, n. 2, p. 88-104, 2012.

LUNTLEY, M. Wittgenstein and the path of learning. In: PETERS, M. A.; STICK-NEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations. Singapore: Springer Nature, 2017. P. 437-452.

MACMILLAN, C. J. B. How not to learn: Reflections on Wittgenstein and learning. **Studies in Philosophy and Education**, v. 14, n. 2-3, p. 161-169, 1995.

MARSHALL, J. D. Wittgenstein and Foucault: Resolving philosophical puzzles. In: MARSHALL, J.; SMEYERS, P. (Ed.). **Philosophy and education**: Accepting Wittgenstein's challenge. Dordrecht; Boston; London: Kluwer Academic Publishers, 1995. P. 205-220.

MARSHALL, J. D. A critical theory of the self: Wittgenstein, Nietzsche, Foucault. **Studies in Philosophy and Education**, v. 20, n. 1, p. 75-91, 2001.

MEDINA, J. **The unity of Wittgenstein's philosophy**. Necessity, intelligibility, and normativity. Albany: State University of New York Press, 2002.

MEDINA, J. Wittgenstein's social naturalism: The idea of 'second nature'. In: MOYAL-SHARROCK, D. (Ed.). **The third Wittgenstein**: The post-investigation works. Aldershot: Ashgate, 2004.

MEDINA, J. **Speaking from elsewhere**. A new contextualist perspective on meaning, identity, and discursive agency. Albany: State University of New York Press, 2006.

MONK, R. **Ludwig Wittgenstein**: The Duty of Genius. London: Vintage, 1990.

MONK, R. Philosophical biography: The very idea. In: KLAGGE, James C. (Ed.). **Wittgenstein. Biography and philosophy**. Cambridge: Cambridge University Press, 2001. P. 3-16.

MULHALL, S. **On being in the world**. Wittgenstein and Heidegger on seeing aspects. London; New York: Routledge, 1990.

MULHALL, S. Seeing aspects. In: GLOCK, H.-J. (Ed.). **Wittgenstein**. A critical reader. Oxford: Blackwell, 2001.

OLSSEN, M. Wittgenstein and Foucault: The limits and possibilities of constructivism. **Critical Perspectives on Cultural and Policy Studies in Education**, v. 13, n. 2, p. 71-78, 1995. (Special issue: Constructivism in science education).

OWEN, D. Genealogy as perspicuous representation. In: HEYES, C. (Ed.). **The grammar of politics**. Wittgenstein and political philosophy. Ithica; London: Cornell University Press, 2003.

PETERS, M. A. Philosophy and education: 'After' Wittgenstein. In: MARSHALL, J.; SMEYERS, P. (Ed.). **Philosophy and education**: Accepting Wittgenstein's challenge. Dordrecht; Boston; London: Kluwer Academic Publishers, 1995.

PETERS, M. A.; MARSHALL, J. **Wittgenstein**: Philosophy, postmodernism, pedagogy. Westport, CT; London: Bergin and Garvey, 1999.

PETERS, M. A.; BURBULES, N.; SMEYERS, P. **Saying and doing**: Wittgenstein as a pedagogical philosopher. Boulder: Paradigm Press, 2008.

PETERS, M. A.; STICKNEY, J. **Wittgenstein's Education**: "A Picture Held Us Captive". Springer Brief Series on Key Thinkers in Education, Paul Gibbs (Series Editor). Singapore: Springer Nature, 2018.

PETERS, M. A.; STICKNEY, J. Philosophy of Education 1945-2010 and the 'Education of Reason': Post-foundational approaches through Dewey, Wittgenstein, and Foucault. In: THOMSON, Iain; BAKER, Kelly Michael (Ed.). **Cambridge History of Philosophy**. Cambridge University Press, 2019a.

PETERS, M. A.; STICKNEY, J. Wittgenstein at Cambridge: Philosophy as a way of life. **Educational Philosophy and Theory**, v. 51, n. 8, p. 767-778, 2019b.

REJALI, D. Wittgenstein's Hut. In: PETERS, M. A.; STICKNEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations. Singapore: Springer, 2017. P. 79-100.

SAVICKEY, B. **Wittgenstein's art of investigation**. London; New York: Routledge, 1999.

SAVICKEY, B. Wittgenstein's Philosophy: *Viva Voce*. In: PETERS, M. A.; STICKNEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations. Singapore: Springer, 2017. P. 63-78.

SCHEMAN, N. Forms of life: Mapping the rough ground. In: SLUGA, H.; STERN, D. (Ed.). **The Cambridge companion to Wittgenstein**. Cambridge: Cambridge University Press, 1996.

SCHEMAN, N.; O'CONNOR, P. (Ed.). **Feminist interpretations of Ludwig Wittgenstein**. University Park: The Pennsylvania State University Press, 2002.

SMEYERS, P. Initiation and newness in education and child-rearing. In: SMEYERS, P.; MARSHALL, J. (Ed.). **Philosophy and education**: Accepting Wittgenstein's challenge. Dordrecht: Kluwer, 1995. P. 105-125.

SMEYERS, P. Assembling reminders for educational research: Wittgenstein on philosophy. **Educational Theory**, v. 48, n. 3, p. 287-308, 1998.

SMITH, R. D. On dogs and children: Judgements in the realm of meaning. **Ethics and Education**, v. 6, n. 2, 2011.

SMITH, R. D.; BURBULES, N. What it makes sense to say: Wittgenstein, rule-following and the nature of education. **Educational Philosophy and Theory**, v. 37, n. 3, p. 417-422, 2005.

STANDISH, P. Why we should not speak of an educational science. In: MARSHALL, J.; SMEYERS, P. (Ed.). **Philosophy and education**: Accepting Wittgenstein's challenge. Dordrecht; Boston; London: Kluwer Academic Publishers, 1995. P. 143-158.

STANDISH, P. Wittgenstein and the scene of teaching. In: INTERNATIONAL CONFERENCE OF THE NORDIC WITTGENSTEIN SOCIETY, 2012, Institute of Philosophy, Education, and the Study of Religions (IFPR), University of Southern Denmark, Denmark. **Proceedings...** University of Southern Denmark, 2012. (Also delivered at ECER, 2014.).

STANDISH, P. Wittgenstein's Impact on the Philosophy of Education. **Philosophical Investigations**, v. 41, n. 2, p. 223-240, 2018.

STICKNEY, J. Teaching and learning in Wittgenstein's philosophic method. In: HOWE, K. (Ed.). **Philosophy of Education Society yearbook**. USA: The Philosophy of Education Society. 2005. P. 299-308. (Paper given at the PES annual meeting, San Francisco). Available at: <http://ojs.ed.uiuc.edu/index.php/pes/article/viewFile/1637/371>. Accessed on: 02 jun. 2020.

STICKNEY, J. Deconstructing discourses about 'new paradigms of teaching': A Foucaultian and Wittgensteinian perspective. **Educational Philosophy and Theory**, v. 38, n. 3, p. 327-371, 2006.

STICKNEY, J. Training and mastery of techniques in Wittgenstein's later philosophy: A response to Michael Luntley. **Educational Philosophy and Theory**, v. 40, n. 5, p. 678-694, 2008a.

STICKNEY, J. Wittgenstein's 'relativity': Agreement in forms of life and training in language-games. **Educational Philosophy and Theory**, v. 40, n. 5, p. 621-637, 2008b.

STICKNEY, J. Casting teachers into education reform and regimes of inspection: Resistance to normalization through self-governance (Chap. 14). In: PETERS, M. A. et al. (Ed.). **Governmentality studies in education**. Rotterdam: Sense Publishers, 2009a.

STICKNEY, J. Wittgenstein's contextualist approach to judging 'sound' teaching: Escaping enthrallment in criteria-based assessments. **Educational Theory**, v. 59, n. 2, p. 197-216, 2009b.

STICKNEY, J. Reconciling forms of Asian humility with assessment practices and character education programs in North America. **Ethics and Education**, v. 5, n. 1, p. 67-80, 2010.

STICKNEY, J. et al. **Philosophy. Thinkers, theories and questions**. Senior author and consultant. Toronto: McGraw-Hill Ryerson, 2011.

STICKNEY, J. Judging teachers: Foucault, governance and agency during education reforms. **Educational Philosophy and Theory**, v. 44, p. 649-662, 2012.

STICKNEY, J. Philosophical fellowship: An interview with Michael Peters and Nicholas Burbules. In: LAZAROU, G. (Ed.). **Liber amicorum**: A Philosophical Conversation among Friends. New York: Addleton Academic Publishers, 2014a. P. 1-23.

STICKNEY, J. Dancing with Wittgenstein (After Foucault). In: LAZAROIU, G. (Ed.). **Liber amicorum**: *A Philosophical Conversation among Friends. A Festschrift for Michael A. Peters.* New York: Addelton Academic Publishers, 2014b.

STICKNEY, J. Wittgenstein for adolescents? Post-foundational epistemology in high school philosophy. **Ethics and Education**, v. 9, n. 2, p. 201-219, 2014c.

STICKNEY, J. System alignment and consensus discourse in reforms: School effectiveness frameworks and instructional rounds. Philosophical responses from Oakeshott, Mouffe and Rancière. Presented at the annual meeting of the Philosophy of Education Society of Great Britain (Oxford, New College, 2012). **International Journal of Leadership in Education**, v. 18, n. 4, p. 487-513, 2015.

STICKNEY, J. Wittgenstein as educator. In: PETERS, M. A.; STICKNEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations (Chap. 3). Singapore: Springer. 2017a. P. 43-61.

STICKNEY, J. Wittgenstein and judging the soundness of curriculum reforms: Investigating the math wars. In: PETERS, M. A.; STICKNEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations. Singapore: Springer, 2017b. P. 481-502.

STICKNEY, J. Teacher 'training' under three philosophical lenses: The Analytic School of Philosophy of Education, Wittgenstein, and Foucault. In: PETERS, M. A. (Ed.). **Encyclopedia of Teacher Education**. Singapore: Springer, 2019.

STICKNEY, J. Wittgenstein's Language-games of Education: Reading higher and lower registers of 'learning' in *On Certainty.* In: SKILBECK, A.; STANDISH, P. (Ed.). **Wittgenstein and Education**: Not Sparing Others the Trouble of Thinking. Oxford: Wiley, 2020a. Forthcoming.

STICKNEY, J. Seeing trees: Investigating poetics of place-based, aesthetic environmental education with Heidegger and Wittgenstein. **Journal of Philosophy of Education**, v. 54, n. 5, 2020b.

STICKNEY, J.; PETERS, M. A. Journeys with Wittgenstein: Assembling Sketches of a Philosophical Landscape. In: PETERS, M. A.; STICKNEY, J. (Ed.). **A companion to Wittgenstein on education**: Pedagogical investigations (Chap. 1). Singapore: Springer, 2017. P. 3-25.

STICKNEY, J.; BURBULES, N. (Ed.). Wittgenstein Section. In: PETERS, M. A. (Ed.). **The Encyclopaedia of Philosophy and Education**. v. 3. Singapore: Springer, 2017. P. 2358-2399.

TANESINI, A. **Wittgenstein**: A feminist interpretation. Cambridge, UK; Malden, MA: Polity Press, 2004.

TAYLOR, C. To follow a rule. In: TAYLOR, C. *Philosophical arguments.* Cambridge, MA; London: Harvard University Press, 1995. P. 165-180.

TAYLOR, C. **Modern social imaginaries**. Durham; London: Duke University Press, 2004.

TEMELINI, M. The ability to go on differently: The diversity of being trained and guided; e The primacy of training in a shared form of life. In: TEMELINI, M. **Wittgenstein and the study of politics**. Toronto: University of Toronto Press, 2015.

TOULMIN, S. **Return to reason**. Cambridge, MA; London: Harvard University Press, 2001.

TULLY, J. Wittgenstein and political philosophy. **Political Theory**, v. 17, n. 2, p. 172-204, 1989.

TULLY, J. **Strange Multiplicity**. Constitutionalism in an Age of Diversity. Cambridge: Cambridge University Press, 1995.

TULLY, J. Wittgenstein and political philosophy. Understanding practices of critical reflection. In: HEYES, C. (Ed.). **The grammar of politics**. Wittgenstein and political philosophy. Ithica and London: Cornell University Press. 2003. P. 17-42.

WILLIAMS, M. The significance of learning in Wittgenstein's later philosophy. **Canadian Journal of Philosophy**, v. 24, n. 2, p. 173-203, 1984.

WILLIAMS, M. The etiology of the obvious. Wittgenstein and the elimination of indeterminacy. In: WILLIAMS, M. **Wittgenstein, mind and meaning**. Toward a social conception of mind (Ch 8). London and New York: Routledge, 1999.

WILLIAMS, M. **Blind obedience**. London: Routledge, 2010.

WINCH, C. Wittgenstein on training. Comment on Norm Friesen. **Educational Philosophy and Theory**, v. 51, n. 1, p. 63-69, 2019.

WITTGENSTEIN, L. **Remarks on the foundation of mathematics**. Trans.: G. E. M. Anscombe. Oxford: Basil Blackwell (RFM), 1956.

WITTGENSTEIN, L. **Preliminary studies for the "Philosophical Investigations"**: Generally known as the blue and brown books. Oxford: Basil Blackwell (BB), 1958.

WITTGENSTEIN, L. **Tractatus Logico-Philosophicus.** Trans.: D. F. Pears; B. F. McGuinness. London: Routledge and Kegan Paul (TLP), 1961.

WITTGENSTEIN, L. **Lectures and conversations on aesthetics, psychology and religious beliefs**. Berkeley; London: University of California Press (LC), 1966.

WITTGENSTEIN, L. **Zettel**. Trans.: G. E. M. Anscombe. Oxford: Basil Blackwell (Z), 1967.

WITTGENSTEIN, L. **Philosophical investigations**. 3. ed. Trans.: G. E. M. Anscombe. Oxford: Basil Blackwell. 1968. PI§, or PI.

WITTGENSTEIN, L. **On certainty**. Trans.: D. Paul; G. E. M. Anscombe. Oxford: Basil Blackwell (OC), 1969.

WITTGENSTEIN, L. **Wittgenstein's lectures**. Cambridge, 1932-35. Oxford: Blackwell (WL), 1979.

WITTGENSTEIN, L. **Culture and value**. Trans.: G. H. von Wright Ed., in collaboration with H. Nyman and P. Winch. Oxford: Basil Blackwell (CV), 1980.

WITTGENSTEIN, L. Last writings on the philosophy of psychology (Vol. 1). In: WRIGHT, G. H. von; NYMAN, H. (Ed.). **Preliminary studies for part II of "Philosophical Investigations"**. Trans.: C. G. Lukhardt and M. A. E. Aue. Oxford: Blackwell (LW I), 1982.

WITTGENSTEIN, L. Preface to the 'dictionary for elementary schools'. In: KLAGGE, J. C.; NORDMANN, A. (Ed.). **Philosophical occasions** (1912-1951). Indianapolis; Cambridge: Hackett (PO), 1993a.

WITTGENSTEIN, L. Remarks on Fraser's Golden Bough. In: KLAGGE, J. C.; NORDMANN, A. (Ed.). **Philosophical Occasions** (1912-1951). Indianapolis; Cambridge: Hackett (PO), 1993b. P. 115-119.

Jeff Stickney is Lecturer, Curriculum, Teaching and Learning Department, Ontario Institute for Studies in Education, University of Toronto.
ORCID: http://orcid.org/0000-0002-5519-8769
Email: jeff.stickney@utoronto.ca