The International JOURNAL OLEARNING

Volume 16, Number 1

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THE INTERNATIONAL JOURNAL OF LEARNING http://www.Learning-Journal.com

First published in 2009 in Melbourne, Australia by Common Ground Publishing Pty Ltd www.CommonGroundPublishing.com.

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ISSN: 1447-9494

Publisher Site: http://www.Learning-Journal.com

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Typeset in Common Ground Markup Language using CGCreator multichannel typesetting system http://www.commongroundpublishing.com/software/

Education as Initiation to a "Form of Life": Conceptual Investigation and Education Theory

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Abstract: According to L. Wittgenstein and Wittgensteinians, there is a set of intuitions, propositions and practices that forms the community's bounds of sense. In this paper I discuss how fruitful this idea can be for education theory. I argue that, although the idea of an existing everyday framework can help explain how education works, any efforts to defend our current worldview as binding of our understanding boils down to conservatism. Following this view, comes the assertion that many problems posed today by philosophers and scientists are bogus and should be dismissed on the ground that they question our ordinary framework. Hence prescribing an even stronger version of conservatism that promotes quietism over intellectual challenge.

Keywords: Philosophy of Education, Wittgenstein, Form of Life, Conceptual Change, Science Education

Introduction

UR EVERYDAY FRAMEWORK includes a set of intuitions, preconceptions or dispositions that form the community's bounds of sense. (P.F. Strawson 1990) It involves propositions or practices that one cannot sensibly doubt since they are considered trivial (e.g. "The ophthalmologist is the doctor for the eyes"), self-proven (1+1=2) or just ordinary (one does not normally go around declaring *he knows* his name is John). It makes no sense to justify or dispute such propositions and practices; they are binding in a special way for they evoke the *norms* we live by.

L. Wittgenstein¹ and *ordinary language philosophers* (J.L. Austin, G. Ryle, J. Wisdom) had once invested a lot in the above claim. They thought it would help them give a new account for meaning as language-use and solve (or rather dissolve) certain philosophical problems, such as the mind-body problem. Our ordinary dispositions were supposed to reveal themselves in ordinary language. The philosopher should work as a language- analyst and bring to light all those preconceptions that we hold, hence unravel the conceptual norms of our community. Philosophers of education, such as P.F. Soltis (1968), R.S. Peters (passim) and others, enthusiastically joined this line of reasoning and applied it to educational concepts.

Ordinary language philosophy as such, has set decades ago. There are however certain aspects of it, as well as the teaching of Wittgenstein, that underlie arguments posed today

¹ There are many different interpretations of both early and late Wittgenstein. In philosophy of education especially there is a line of thought that, following R. Rorty and S. Cavell, reads Wittgenstein as a post-modern philosopher (See M. Peters & J. Marshall 1999; P. Smeyers & J. Marshall 1995; M. Peters, P. Smeyers, N.C. Burbules 2008). Here I concentrate on later Wittgenstein and I will follow P.M.S. Hacker's analytic interpretation because it strongly defends the views and arguments I will criticise, according to which there is a deep *conceptual* level in our understanding, that philosophy alone can analyse and which science cannot contest. (See Hacker 1986, 1993, 1996, 2003, 2008) Such a view has been very fruitful to philosophers of education such as R.S. Peters, J. Soltis and others.



by philosophers such as H. Putnam (2000), J. McDowell (2000), P.M.S. Hacker (Bennet & Hacker, 2003) and others. Those arguments have also influenced other disciplines, including education studies. (See, for example, P. Gilroy 2003; C. Winch 2004; C. Greiffenhagen &W. Sherman 2006; P. Smeyers & N.C. Burbules 2006) The works of all these theorists imply that there is a binding set of propositions and practices that underlies our worldview.

In this paper I aim to discuss how fruitful this idea can be for education theory: I will briefly explore Wittgenstein's claim that the ordinary conceptual framework imposes certain dispositions on us. Then I will come to education and investigate the educational effects of such a view. I am going to argue that although the assumption of an existing everyday framework can help explain how education works, any efforts to preserve our current worldview as binding of our understanding boils down to conservatism. Following this view comes the assertion that many problems posed today by philosophers and scientists question ordinary dispositions and should be dismissed, thus prescribing an even stronger version of conservatism that promotes quietism over intellectual struggle.

The Bounds of Sense

Ordinary language concepts embody distinctions, practices, intuitions or even bias. Some of these can change easily while others lie at the very root of our everyday life and work as the rules of our understanding. They are attached to the concepts we use and should be clarified if we want to understand how we view the world. In Wittgenstein's *On Certainty* the description of a river implies a distinction between: (a) empirical propositions that change easily; and which are depicted as the flux of the river and (b) the conceptual background that hardly ever evolves; and which is depicted as the riverbed. Just as the riverbed delimits the flux, the conceptual defines the empirical. (Wittgenstein 1977, § 94-99).

Putting the conceptual into a different level amounts to saying that philosophy is qualitatively different from science - it is taken in as a unique kind of conceptual investigation. Philosophical quests "arise when language *goes on holiday*". (Wittgenstein 1997, §38) So, they are regarded as pseudo-problems that should be dissolved by grammatical clarification. "When this is done the expression is completely clarified and our problem solved." (§91) "But this simply means that the philosophical problems should *completely* disappear". (§133) Philosophical analysis is supposed to clear misunderstandings away and thus make any philosophical worries disappear. Philosophical puzzlement arises due to misunderstandings regarding the use of concepts. (See Wittgenstein 1997, §24, 224, 257, 427, Hacker 1986, 168-175, Baker & Hacker 1997, 283-285)

The human desire to find out the *real reasons* lying *behind* the phenomena and to reach the *deep* structure of reality is what creates part of this puzzlement. (Hacker 1986, 73-74) Yet, philosophy cannot provide such a view; only science can penetrate the phenomena. So philosophy is explicitly proposed as *therapy* from such philosophical perplexities. (Wittgenstein 1997, §133) Philosophy should just remind one of the grammatical rules that have been ignored (§127). It "puts everything before us and neither explains nor deduces anything" (§126); it only clarifies the use of language whenever a perplexity comes up. Philosophy cures conceptual misunderstandings.

Scientific problems on the other hand, are rigidly posed questions that deal with the reality we are trying to comprehend. The empirical world is to be studied by science. Biology or physics penetrate the phenomena and offer new discoveries. But scientific reasoning has its

limitations too. Ordinary dispositions are yet again the bounds of what makes sense to suggest. Even scientific hypotheses are constructed within our background of concepts and preconceptions. Every question presupposes conceptual rules and practices. For "... the *questions* that we raise and our *doubts* depend on the fact that some propositions are exempt from doubt..." (Wittgenstein 1977, § 341)

Wittgenstein goes on suggesting that he regards "this certainty, not as something akin to hastiness or superficiality, but as a *form of life*..." (§ 358) *Form of life* refers to our historical-social-cultural everyday framework. It provides us with *grammar* and with the community's bedrock certainties, which, at any given time, lie beyond doubt. Within them runs the flux: all kinds of human practices interacting with each other. The community's concepts and practices are the background of understanding. There is a ground of certainty underlying all quests; a pre-rational commitment to a common worldview. It is only within this context that it is intelligible to talk about knowledge or doubt. All experience, even scientific theories, is made out of concepts. Conceptual norms prescribe what questions we can sensibly ask.

Ordinary Intuitions and Novel Explanations

There is a background of dispositions and practices that is taken for granted while performing any kind of empirical investigation. Within it runs the empirical flux. Science is part of this flux. Yet, restricting science within our current conceptual background, invites a crucial difficulty. It hardly leaves any room for conceptual breakthroughs and it cannot explain how revolutionary theories occur: How did it happen and Einstein's theory of relativity or quantum physics emerged? Both those theories have put very fundamental dispositions of our form of life in question.

One could suggest that even according to Wittgenstein, some dispositions, even grammatical ones, can turn into flux. And vice versa: some empirical propositions may in time harden and become part of the riverbed (Wittgenstein 1977, § 94-99). Our conceptual background may have to be revised, at least partly; some of today's empirical views might end up comprising tomorrow's presuppositions. Yet Wittgenstein talks of *bedrock* propositions and dispositions, implying that among the grammatical propositions some are not revisable. (Strawson 1985, p.17) Moreover, he denies that concepts can be *reduced* to empirical facts. So, even though we cannot draw a strict line between the empirical and the conceptual, those two areas are *logically different* at any given moment. Concepts are irreducible for they are normative. What is more, even if we accept some movement between the grammatical and the empirical level, the river image implies that the evolution is very slow. Besides, the very idea that science and philosophy are different in kind can only survive if a distinction between the conceptual and the empirical also survives.

It is therefore suggested that we all share some conceptual commitments that are biding for our every practice, and that certain theories should be dismissed on the basis that they violate our grammatical framework. A theory cannot *make sense* if it is against our worldview; it is *contradictory* or *senseless*. Our concepts imply rules, which bind us to certain dispositions. Yet, if one dismisses any theory that puts in question aspects of our common worldview,

² This view is different from the naturalists' who suggest that, in principle, there is no boundary between analytic (conceptual) and synthetic (empirical) knowledge. (see W.V. Quine 1980). For Wittgensteinians, conceptual norms are different *in kind* from empirical (causal) propositions.

they are no longer performing just a *conceptual* investigation: they are stepping into the sphere of the empirical and take a stand on empirical and scientific matters.

I think this is exactly what most Wittgensteinians are doing. The issue of artificial intelligence is a good example of such a practice: P.M.S. Hacker denies there is any chance that computer scientists will ever succeed in constructing artificial intelligence programs. The very concept of *intelligence*, he argues, implies certain conceptual commitments: intelligent behaviour implies intentionality; it involves semantics, and cannot be ascribed in some inanimate, body-less creature (Hacker 1993, p.80). The *grammar* of the concept *intelligence* does not leave any room for computers having artificial intelligence. (See also Bennett & Hacker 2003)

Even if one agrees with the conceptual analysis summed up above, they would have to admit that such an analysis takes a stand not just on how concepts work but also on *how things are* (or even on *how things are going to be*). Wittgensteinians like Hacker claim they are just *clarifying* concepts. Still they insist that artificial intelligence will never be a *fact*. Therefore they transcend philosophers' alleged role as solely grammatical investigators. They are trying to prescribe answers to empirical questions, based solely on linguistic habits. Or at the very least, they are trying to *prevent* questions from being posed.

Conceptual investigation as proposed from Wittgenstein and many Wittgensteinians eternalises a worldview. Present theories are justified as bedrock certainties of our form of life. Not only science (or philosophy) is prevented from evolving but also *grammar* and *form of life*. Yet if one sticks to our present attitudes and conceives them as binding for our every practice, they are just plain conservative: they argue for the present worldview, they block any alternative theories and their sole argument is that current descriptions are just the manifestation of the correct use of language.

The Wittgensteinian Standpoint on Education

In the analytic tradition, philosophers of education have often shared some version of the Wittgensteinian standpoint. They work on the clarification of educational key-concepts: They ask for *the ideal of the educated man*, inquiring our intuitions on what qualities should a person possess in order to be considered educated. (R.S. Peters 1972) Likewise, the concept of *education* and *learning*, the concept of *punishment* or *discipline* are analysed. (See R.S. Peters 1966, 1967, 1973; Soltis 1968; Barrow & Woods 1982; Hirst & White 2003)

Philosophy of education is often practiced as a conceptual investigation: terms, which are relevant to education issues, are isolated and analysed in order to clarify our understanding of the phenomenon. Their analyses may influence the way we practice education too. Before any theory or practice is suggested, the key concepts should be clarified: we need to become aware of what we are talking about or of what rules and commitments those concepts impose on us.

Apart from encouraging conceptual analysis, the Wittgensteinian viewpoint can help explain how education works. It depicts education as a process of initiation in our common worldview. (R.S. Peters 1964) We are trained, from a very early stage, in a common framework of concepts, dispositions and rules that social practices impose on us. (P. Smeyers & N.C. Burbules, 2006) Formal education, scientific education included, is part of this initiation. The Wittgensteinian notion of *form of life* can help us understand the whole process of growing up and also the phenomenon of education.

In addition to the appeal to grammar, the normative use of language is enticing in its own right: philosophy of education deals with ideals that education should advance. Our concepts include those ideals. Education practices aim at initiating us into *the form of life*'s ideals, hence promoting epistemic and moral standards. (See also Burbules & R. Smith 2005)

What's more, the Wittgensteinian picture can give an account of how any critique of today's framework is being self-limited within a cluster of ideas and does not come out as anarchy. The assessment of society's practices or dispositions is, at the most part, self-limiting by those very practices and dispositions. Any adequate account of education should recognise that education has a large part to play in order for those limits to work. Wittgenstein's river flux-riverbed analogy can help understand how it is that some aspects of our ordinary intuitions remain the same while others suffer strong criticism and change.

Some might even argue that this is the goal of education altogether: to prevent total criticism, transformation and anarchy, while promoting a "limited" critical rationality that can only renew what is worth-renewing. (C. Winch 2004) Wittgensteinian philosophy of education can provide arguments in favour of Winch's position: It resists radical change or innovations on the ground that they do not make sense.

To make a long story short, the Wittgensteinian perspective is very useful for education theory: It does provide us with an explanation of how and why education works. It can help those who see education as an initiation to a community argue in favour of the community's intuitions and practices. It accounts for how critical thinking cannot go far beyond the ordinary framework. It can even be used in order to defend the pursuing of a self-limiting critical reasoning form a more revolutionary one. All these have made ordinary language philosophy as practised by Wittgenstein or his (explicit or implicit) followers very appealing to education-theorists even today.

Some implications of this view though are not obviously appealing. For it is far from obvious that all education aims at is the persistence of today's practices, the initiation to current conceptions and the limitation of critical thinking.

The Wittgensteinian implication that science, for example, can never transcend the bounds of sense, makes it hard to explain the evolution of both scientific and ordinary worldview. Its sole function is to keep us restricted within practices or dispositions that supposedly rest beyond justification. Such a view can easily be interpreted conservatively, if taken to promote ordinary intuitions over novel explanations. Smeyers & Burbules (2006) argue that conservatism can be avoided; yet, most interpretations of Wittgenstein, including Hacker's, cannot prevent such a charge. According to them, as far as philosophy is concerned, "if it's new, it is wrong" (Hacker 2008) since it lies beyond our common viewpoint.

If we apply this view to education, both official and unofficial learning is depicted as engaging the young into the community's present practices and worldview. Yet if, on top of that, one considers this framework as the *bounds of sense*, then the suggestion is that this framework can hardly be questioned. The conservatism I ascribed to the Wittgensteinian view above then becomes more obvious when one comes to education. Training is seen as an introduction to norms *one cannot* sensibly *question*. Such a view can hardly pose an ideal for education today. For it prevents critical thinking or reassessment of ideals.

Debates in the philosophy of education show that this approach argues for traditional ideas or ideals. For example, R.S. Peter's analysis of the notion of an *educated man* suggest that *he* should have a body of knowledge, care about epistemic standards, pursue good deeds etc. (Peters 1972) J.R. Martin (2003) objects that Peter's analysis promotes a sexist, biased

ideal of what an educated person should know, would enjoy or can do; an ideal that neglects what women have offered in our societies. Her paper implies a rival analysis of *educated people*, according to which education should stop encouraging masculine values and attitudes and alienate women from themselves.

For the purpose of this paper, I don't need to get into the details of the Peters- Martin debate. It is important to notice, though, that it is possible to give different accounts of the concept of an *educated person*; such alternative descriptions give us a clue that such analyses are not neutral explanations of what the term means, but actually promote ideals for society. Philosophers are not describing but rather prescribing ideas. And if they chose to stick to traditional prescriptions they impose conservative norms on education. The Wittgensteinian perspective defended by Hacker clearly promotes traditional, even old fashioned, dispositions.

What's more, the Wittgensteinian viewpoint cannot account for the very fact that those norms are being questioned all the time. New theories are being proposed, and these theories also help ordinary dispositions change. Wittgensteinians cannot explain how rival analyses come up (like Martin's, for example) that question their own ones. Only if one interprets Wittgenstein more liberally, could one account for the fact that forms of life change, and so do beliefs and concepts too. Conceptual evolution can be rational, as a result of society's progress. Grammar evolves through history. Even at the conceptual level the interaction of disciplines and the developments in any one of them can provide reasons for changing grammar and our form of life's dispositions.

Contemporary discussion concerning the *conceptual change programme* in science education partly relies on such a liberal image of conceptual evolution. (Carey 1986; Vosniadou 1989; Vosniadou & Ioannides 1998; Leach & Scott 2003) Teaching science, for example, is supposed to start out with concepts that children have and introduce new concepts that are more scientific by changing those earlier ones. This programme exploits the work on conceptual changes in the history of science in order to account for the development of young children's thinking.

As expected, criticism of this programme implies a stronger Wittgensteinian viewpoint; again the claim is that naive or common sense conceptions of phenomena do not conflict with science but rather stand at a deeper level. Greiffenhagen & Sherman (2006), for example, write that common sense and science are different frames of reference; ordinary dispositions represent a *natural attitude* of everyday life. They form *a principal reality* from which all other realities derive. They suggest that the analogy between conceptual change in the history of science and conceptual changes in the thought of children is based on a misunderstanding of the relation between scientific and commonsensical dispositions. Ordinary language philosopher G. Ryle (1954) is reported to have favoured their claim. The suggestion is that science, just as like art, religion or whatever human practice, is grounded in the same bedrock presuppositions of the community.

Wittgensteinian points have strongly affected theories of education. Yet, this account ignores the fact that every day new scientists, artists and philosophers try revolutionary ideas. Everyday new theories are brought in and, as science, art, philosophy or other practices develop, *the community's dispositions evolve as well*. If we insist that our current worldview is binding at a deeper level, we automatically resist conceptual evolution.

Intellectual Quietism and Education

I have already argued that Wittgensteinians, although they present themselves as authorities on the conceptual that don't need to step into the empirical, do in fact offer empirical prescriptions. Namely conservative ones, in the sense that they argue in favour of what they take to be the current conception on things. Wittgensteinians also regard education as an initiation to current forms of life, their view implying cautiousness regarding changes at the conceptual level. Yet, underlying those difficulties, there is an even deeper level of conservatism that has to do with their overall attitude concerning philosophical puzzles.

Traditional philosophical questions regarding consciousness, perception, ethics, aesthetics and politics are never presented as genuine problems. They are bogus because they are *general*, *abstract*, *open* or *meta-problems*, in short *because they are philosophical* problems. In fact any enquiry that is general or puts forward questions on some meta-level (questions about meaning, about language, about the mind, about morality) are considered philosophical and thus bogus. Wittgensteinians are not willing to assign such questions to science either. For all those concepts mentioned above involve rules and come with norms that lie beyond scientific investigation. Such quests then are not to be investigated at all.

A lucid example is the mind- body problem. It is held that questions regarding consciousness lie in some deep misunderstanding in the way the problem is formulated. Wittgensteinians try to restate the problem in such a way that the problematic feature disappears. (Seager 1999, pp. 15-26) For example, they try to by-pass the problem of explaining how the physical mechanisms on the material brain generate or underlie mental experience. (Bennet & Hacker 2003) Their analyses claim to show that mind-language has a grammar of its own. Although many of its uses mislead us into false images, a close clarification process will resolve conceptual errors and put the problem to rest. Science has nothing to offer on the question since it is not an empirical problem.

Questions that upset our ordinary intuitions, then, such as the artificial intelligence programs, or physicalistic approaches to the mind, are not to be explored by any genuine research program. The same strategy is always proposed: One just has to dispose of whatever it is that creates the philosophical problem by *analysing the questions that generate it in such a way that makes it harmless*. The Wittgensteinian approach explicitly promotes quietism over intellectual enquiry when he writes: "The real discovery is the one that makes me capable of stopping doing philosophy when I want to..." (Wittgenstein 1997, §133) Therapy from questions that are general or provoking is suggested as an intellectual ideal.

If applied to education, this view is hardly welcomed. Education is supposed to encourage people's critical thinking and encourage rational reasoning processes. It offers intellectual tools that might help us think more clearly and question intuitions or theories that seem ungrounded, even widespread ones. Philosophy too is promoting the same rationale. Yet, for Wittgensteinians, problems that depend on general and abstract questions are treated as bogus. Worries that disturb the current worldview should be eliminated or dissolved.

Education theorists should hardly embrace this view against general intellectual problems. But it seems that even the conception of education as an initiation to current forms of life invites such a view. For whatever puts fundamental preconceptions in question is either opposed to or just put aside and buried. At the end of the day, most Wittgensteinian-style *conceptual investigation* boils down to *quietism*. Such a quietist attitude can hardly prescribe an ideal for education. We expect education to foster curiosity and trust in our intellectual

powers. We want education to promote change and account for new possibilities. Wittgensteinian quietism stands against all the values education should endorse, and supports a deep and peculiar kind of conservatism.

Conclusion

In this paper I tried to explore Wittgenstein's and Wittgensteinians' proposal that there is a rock bottom set of dispositions underlying our conception of the world. Only if this view is interpreted liberally, can it be fruitful for philosophy and education. If one sticks to our current worldview, and suggests that whatever questions our disposition is dismissed as senseless, they just resist conceptual evolution. By holding that the bounds of sense lie within the ordinary worldview, they restrict us in our current cluster of beliefs and intuitions.

Yet, the Wittgensteinian approach implies an even stronger version of conservatism. It treats any general theoretical question as a pseudo-quest that should be dismissed. Such a stand cannot be endorsed as general attitude towards intellectual puzzles. It suggests that if a problem questions ordinary prejudices, or if it is not easily solvable, it is hollow. Education cannot promote intellectual quietism as an ideal.

References

Baker G.P. & Hacker P.M.S. (1997) Wittgenstein: Meaning and Understanding (Oxford, Blackwell).Barrow, R. & Woods, R. (1982) An Introduction to Philosophy of Education (London & New York, Routledge).

Bennett, M.R. & Hacker, P.M.S. (2003) *Philosophical Foundations of Neuroscience* (Oxford, Blackwell).

Burbules, N.C. & Smith R. (2005) What it Makes Sense to Say: Wittgenstein, rule-following and the nature of Education, *Educational Philosophy and Theory* 37.3, pp. 425- 430.

Carey, S. (1986) Cognitive Science and Science Education, American Psychologist 41.10, pp. 1123-1130.

Churchland, P.M. (2005) Cleansing Science, *Inquiry* 48.5, pp. 464-477.

Dearen, R.E., Hirst, P.H. & Peters, R.S. (1972) *A Critique of Current Educational Aims* (London, Routledge & Kegan Paul).

Gilroy, P. (2003) The Revolutions in English Philosophy and Philosophy of Education, in Hirst P.H. & White, P., eds (2003) *Philosophy of Education*, (London, Routledge) pp. 61-79.

Greiffenhagen C. & Sherman W. (2006) Kuhn and Conceptual Change: on the analogy between conceptual changes in science and children, *Science and Education* (On line first, Published online: 30 -12- 2006, http://www.springerlink.com/content/k331552124565n51).

Hacker, P.M.S. (1986) Insight and Illusion (Oxford, Clarendon Press).

Hacker, P.M.S. (1993) Wittgenstein: Meaning and Mind (Oxford, Blackwell).

Hacker, P.M.S. (1996) Wittgenstein's Place in Twentieth-Century Analytic Philosophy (Oxford, Blackwell).

Hacker, P.M.S. (2008) Philosophy: a contribution not to human knowledge but to human understanding (Lecture delivered at the University of Athens, 29 June 2008).

Hirst P.H. & White, P., eds (2003) *Philosophy of Education*, (London, Routledge).

Leach J. & Scott, P. (2003) Individual and Sociocultural Views of Learning in Science Education, *Science and Education* 12.1, pp. 91-113.

Martin, J.R. (2003) The Ideal of the Educated Person, in Hirst P.H. & White, P., eds (2003) *Philosophy of Education*, (London, Routledge) pp. 311-327.

McDowell, J. (2000) Mind and World (Cambridge, Mass, Harvard University Press).

Peters, M. & Marshall, J. (1999) Wittgenstein: Philosophy, Postmodernism, Pedagogy (Westport, Connecticut Bergin & Carvey).

Peters, M., Smeyers, P. & Burbules, N.C. (2008) Showing and Doing: Wittgenstein as a Pedagogical Philosopher (Paradigm Publishers).

Peters, R.S. (1964) Education as Initiation (Lecture delivered at the University of London, Institute of Education, 9 December 1963).

Peters, R.S. (1966) Ethics and Education (London, Allen & Unwin).

Peters, R.S. (1967) The Concept of Education (London, Routledge).

Peters, R.S. (1972) Education and the Educated Man, in Dearen, R.E., Hirst, P.H. & Peters, R.S., *A Critique of Current Educational Aims* (London, Routledge & Kegan Paul).

Peters, R.S. (1973) The Philosophy of Education (Oxford, Oxford University Press).

Phillip, D.Z. (1999) *Philosophy's Cool Place* (New York, Cornell University Press). Smeyers, P. & Marshal, J., eds (1995) *Philosophy and Education: Accepting Wittgenstein's challenge* (Dordrecht Kluwer Academic Publishers).

Putnam, H. (2000) *The Threefold Cord: Mind, Body and the World* (New York, Columbia University Press).

Quine, W.V. (1980) Two Dogmas of Empiricism, in Quine, W.V., ed, *From a Logical Point of View* (Cambridge, Mass, Harvard University Press) pp. 20-47.

Ryle, G. (1954) Dilemmas (Cambridge, Cambridge University Press).

Seager, W. (1999) Theories of Consciousness (London & New York, Routledge).

Smeyers, P. & Burbules, N.C. (2006) Education as Initiation into Practices, *Educational Theory* 56.4, pp. 439-449.

Soltis F. J. (1968) An Introduction to the Analysis of Educational Concepts (Reading, Addison-Wesley).

Strawson, P.F. (1985) Skepticism and Naturalism: Some Varieties (London, Methuen & Co. Ltd).

Strawson, P.F. (1990) The Bounds of Sense (London & New York, Routledge).

Vosniadou, S. & Ioannides C. (1998) From Conceptual Development to Science Education: a psychological point of view, *International Journal of Science Education* 20.10, pp. 1213-1230.

Vosniadou, S. (1989), On the Nature of Children's Naive Knowledge, *Proceedings of the 11 th Annual Conference of the Cognitive Science Society*, pp. 404-411.

Winch C. (2004) Developing Rationality as a Pedagogical Aim, *Journal of Philosophy of Education*, 38.3, pp. 467-484.

Wittgenstein, L. (1977) On Certainty (Oxford, Blackwell).

Wittgenstein, L. (1997) *Philosophical Investigations* (Oxford, Blackwell).

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