



*Review of Contemporary Philosophy*  
Vol. 14, 2015, pp. 162–181, ISSN 1841-5261

## PHILOSOPHY OF EDUCATION IN THE AGE OF DIGITAL REASON

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**ABSTRACT.** In this conversation, Michael A. Peters discusses his philosophy of education in and for the age of digital media. The first part of the conversation classifies Michael Peters' work in three interlocked themes: philosophy, political knowledge economy, and academic publishing. It explores the power of dialogue for philosophical inquiry, positions dialogue in relation to human learning, and analyses the philosophical thesis of postdisciplinarity. It assesses the role of “big data” and “learning analytics” in (educational) research, and links various approaches to inquiry with creativity. The second part of the conversation introduces the notion of “philosophy as pedagogy,” and introduces Michael Peters' philosophy of technology. It inquires the role of educational philosophy in the contemporary network society, and explores links between postmodernism / poststructuralism and (neo)Marxism. The third part of the conversation explores the relationships between universalism and the Internet, locates digital postcolonialism, and looks into legacy of the Frankfurt School for learning in the age of digital media. Finally, it discusses Michael Peters' lifelong fascination with Ludwig Wittgenstein, and outlines the main trajectories of Wittgenstein's work into present and future of educational philosophy.

**Keywords:** educational philosophy; dialogue; philosophy as pedagogy; epistemology; big data; digital postcolonialism; universalism

### **Introduction**

Michael Adrian Peters is a philosopher, educator, global public intellectual, and one of the most important figures in contemporary philosophy of edu-

cation. Like many critical educators of his generation, Michael has working class background and started his career in high school teaching. After seven years, through PhD in the Philosophy of Education on the philosopher Ludwig Wittgenstein, he moved into the world of the academia. Through numerous adjunct and visiting positions, Michael was offered a Personal Chair at the University of Auckland (2000–2003), then became Research Professor at the University of Glasgow (2000–2005), and then was awarded an excellence hire position at the University of Illinois at Urbana-Champaign. Today, Michael Peters is Professor of Education at Waikato University (New Zealand), where he also co-directs the Global Studies in Education Program; Emeritus Professor at the University of Illinois at Urbana-Champaign (U.S.); Adjunct Professor in the School of Art, Royal Melbourne Institute of Technology (Australia); Adjunct Professor at the School of Foreign Studies, Guangzhou University (China); and Professorial Fellow in the School of Creative Arts, James Cook University (Australia). He is a lifelong Fellow of the New Zealand Academy of Humanities; a Honorary Fellow of the New Zealand Royal Society; a life member of the Society for Research in Higher Education (UK); and a life member of the Philosophy of Education Society of Australasia. He has been awarded an Honorary Doctorate of Letters from State University New York (U.S.) and an Honorary Doctorate of Philosophy from Aalborg University (Denmark).

In Michael's *Liber amicorum*, Peter Roberts writes: "The breadth of Michael's scholarship is remarkable. He has published more books, on a greater array of themes and topics, than any other philosopher of education in the world. His reach extends well beyond the traditional range for scholars in this field" (2014: 540–542). In numbers, Michael's opus spans over more than 60 books and 500 articles. He edits six journals: *Educational Philosophy and Theory* (since 1983), *Knowledge Cultures* (founding editor, since 2013), *Policy Futures in Education* (founding editor, since 2003), *E-Learning & Digital Media* (founding editor, since 2004), *Open Review of Educational Research* (founding editor, since 2014), and the upcoming *The Video Journal of Education and Pedagogy* (founding editor, starting in 2016). He also edits many book series, including: *Contexts of Education*, *Key Critical Thinkers in Education*, *Open Education*, *Creative Education* (with Tina Besley) (Sense), *Global Studies in Education*, *Education and Struggle* (with Peter McLaren) (Peter Lang), and *New Directions in the Philosophy of Education* (with Gert Biesta) (Taylor and Francis). Finally, Michael serves in editorial boards of over 15 journals, engages in various encyclopedic projects such as *The Encyclopaedia of Educational Philosophy and Theory* (co-edited with Andrew Gibbons, Tina Besley and Berislav Žarnić) (Springer), and contributes to popular independent news-portals such as *Truthout*.

Petar Jandrić (PhD) is Senior Lecturer in e-Learning and Director of BSc (Informatics) programme at the University of Applied Sciences in Zagreb (Croatia), visiting Associate Professor at the University of Zagreb (Croatia), professor and Director of Institute for Research and Knowledge Advancement at the Global Center for Advanced Studies (Michigan, US). His research interests are focused to the intersections between critical pedagogy and information and communication technologies. Research methodologies of his choice are inter-, trans- and anti-disciplinarity. Petar's previous academic affiliations include Croatian Academic and Research Network, National e-Science Centre at the University of Edinburgh, Glasgow School of Art and Cass School of Education at the University of East London. He writes, edits and reviews books, articles, course modules and study guides, serves in editorial boards of scholarly journals and conferences, participates in diverse projects in Croatia and in the United Kingdom, regularly publishes popular science and talks in front of diverse audiences. His recent books are *Digital Learning* (Školske novine & University of Applied Sciences, 2015) and *Critical Learning in Digital Networks* (Springer, 2015).

### **Learning and Inquiry in the Age of Digital Reason**

**Petar Jandrić:** Dear Michael, it is a real pleasure to talk to you! Admittedly, I have been thinking about this conversation for a long time. As editor, you provided great feedback and guidance for previous conversations in this series. Waiting for right questions to build up, I looked for the best moment to talk to you – and here we are. In order to conduct meaningful conversations, I tend to get a hold of everything written or edited by my interlocutors – in your case, Michael, that is a truly dreadful task! Could you please help me and our readers navigate through your immense body of work? What are your main preoccupations these days?

**Michael Peters:** Thank you, Petar, for this interview. I know the preparations you have made and the readings. I am relishing the prospect of conversation with you and have looked over the nice statement of your probing questions. I guess that I work on three main related themes: philosophy, political knowledge economy, and academic publishing. In the first theme, philosophy, I have a lasting interest in Wittgenstein (at least since my PhD on his later works); also Heidegger and Nietzsche; contemporary French philosophers such as Foucault, Lyotard, Derrida; critical theory and Frankfurt school including Habermas; and American pragmatism, especially Rorty. In the second theme, political knowledge economy, I have recently done a trilogy *Imagination: Three Models of Imagination in the Age of the Knowledge Economy* (Murphy, Peters & Marginson, 2010). I am also doing quite a lot of work on neoliberalism, various books on Higher Education and the University

including collaborations with Ron Barnett, social knowledge production, creative, knowledge and open knowledge economies, cybernetic capitalism, strong influence of Marx and radical political economy mediated through theorists like Negri and Hardt. Finally, in the third theme, academic publishing, I am interested in open journals, journal editing peer review, big data, and bibliometrics.

Let me add to this statement – which really serves only to establish a research profile – that the links between themes are much deeper. I am interested in the forms of thought: the material and the historical forms that thought has taken through genres (philosophy as a kind of writing) and through different media.

**PJ:** In this series of conversations, I use dialogical approach to explore issues pertaining to learning in the age of digital media. What are the main challenges in (design and interpretation of) dialogical approach to the theme? What are its main advantages?

**MP:** As you intimate in your question, dialogue is an ancient form that defines the Western philosophical tradition that comes down to us especially through the Platonic dialogues, a kind of dramatization of the dialectics where Socrates in dialogue with another drives the opponent to an *elenchus* or contradiction. At this point, the game of arguing for the sake of conflict, or *eristics*, is over. While I am hugely interested in this form as a kind of philosophical model, I do not think it serves us well today. The power relations in the dialogue are not symmetrical and Socrates always wins – although he professes ignorance. I am a little skeptical even if the dialectics does turn up “truth” or least eliminates spurious nonsense. But then I think it is necessary to understand that the form of thought we call dialogue is a dynamic and ever-changing vehicle for thought and for engagement.

Thus, we can talk of many kinds of dialogue based around the innovations of Nietzsche, Kierkegaard, and Buber (the existential encounter); Heidegger and Gadamer (the hermeneutical model of participants as co-seekers of truth aiming at consensus); the critical dialogue of Habermas (“the ideal speech situation” without any form of coercion driven by argumentation alone); Freire’s dialogue as cultural action; Rorty’s conversation based on Gadamer and Oakeshott (“the conversation of mankind”), Wittgenstein’s and Derrida’s genres of dialogue as forms of speaking to oneself as an interior dialogue; and so on. We need to recognize its various historical forms and to determine which model is appropriate, and under what conditions, as a basis for learning in the age of digital media. For myself, I herald the structure of the peer-to-peer learning dialogue structured by the “we-think” – by a process of collective intentionality and the wisdom of the group. This lateral and symmetrical conception is the basis for peer philosophies that I am exploring,

especially the peer-to-peer and its implications for collective creativity and the intellectual commons.

**PJ:** During my studies of physics, technology, social science, and humanities, I was privileged to talk and listen about learning in the age of digital media with people from diverse research and non-research traditions. Breaking through vast differences in jargon and style, I noticed that they are often interested in similar themes, express similar concerns, and develop similar emotional responses. For a long time, I have felt that these insights could become much more powerful if I could only somehow bring them together. In this series of conversations, therefore, I am talking to people from six traditional disciplines: philosophers, social scientists, educators, media theorists, practitioners and activists, artists.

Placed within a single collection, such series of conversations may become a useful resource for someone who wants to read about various perspectives in one place. As a research enterprise, however, this series inevitably bumps into various epistemological constraints arising from crossing borders between traditional disciplines. In a recent interview, you said: “In terms of epistemology and pedagogy I am an anarchist or at least embrace a theory of epistemological and pedagogical anarchism (in Feyerabend’s sense). I am a little disrespectful of territories, turfs, specializations at least in the humanities and social sciences.” (Stickney, 2014: 366–368). In the context of our theme, however, I must ask you to look beyond humanities and social sciences. How do we break traditional epistemic borders and foster true dialogue across various disciplines and worldviews? How can we integrate various strands of human knowledge on learning and digital media?

**MP:** You have picked up on my anarchist side that I inherit from a range of people, but Feyerabend (1993[1970]) put it in a rather delightful form when he called it epistemological anarchy – really meaning that we cannot reduce method to rules or to logic. In conversation, there is often no *telos*, participants maybe be radically other, there is no agreed upon goal and no consensus. In this context, if we believe Chomsky (1957 & 1965), we witness the novel utterance (the creative sentence) as a daily phenomenon. The structure of conversation is unpredictable, often disjunctive, highly interactive, although it may also be simply a set of parallel structures that touch occasionally. The dialogue as conversation has a pragmatic element to it that reminds me of Bakhtin, Rorty and Pierce (though it different ways).

The ability to converse clearly is a bonus when one is dialoguing across disciplines. In the last instance, however, all disciplines are parasitic on dialogue as ordinary conversation and the conversation goes as long as parties are interested. This model (sometimes I say “street philosophy” based on street cred) is also radically postfoundational – there are no foundations, it is simply anchored in cultural practice and we experiment and do what we do.

It seems to me that dialogue as conversation (a topic I have published on) (Peters, 2012a) is the universal means of learning. On the unification of scientific knowledge I am a little more skeptical because of the failure of the logical empiricists who embarked on such a program. So let me say that the unification thesis is a philosophical position that needs examining.

**PJ:** Could you please examine this philosophical position a bit more closely?

**MP:** The thesis and ideal of scientific unification died with the logical positivists. Today, according to UNESCO, there are over 3,500 separate fields of knowledge (in Peters, 1999). Surely we cannot believe that they are unified by something called the “scientific method”? What unifies casebook law, with sociology of media, particle physics, or Latin studies? Maybe, at the level of knowledge ideals, we might see some commonality. As you can see, I am skeptical and not sure why this is considered a problem. I certainly am not a scientific reductionist and do not want to collapse social states into physical states and physical states into micro-physical states. Although, I do think that the emerging epoch of digital reason is homogenizing scientific practices and actually changing the nature of science through “big data” analysis. Education itself has its own variation in “learning analytics.”

**PJ:** Could you please assess the role of “big data” and “learning analytics” in contemporary education?

**MP:** This is a huge question that I am currently exploring in a special issue of *Policy Futures in Education* co-edited with Robert Lingard, Tina Besley and Jillian Blackmore (to be published in 2016). Farnam Jahanian, who heads the National Science Foundation directorate for Computer and Information Science and Engineering (CISE), presented a paper entitled “The Promise of Big Data” at the Big Data Partners Workshop on 3 May, 2013, as part of The White House Initiative of Big Data, 2012, where he made the following claim: “Advances in information technologies are transforming the fabric of our society, and data represents a transformative new currency for science, engineering, education and commerce” (Jahanian, 2013: 2). Jahanian suggests that a “paradigm shift” has occurred from “Hypothesis-driven to Data-driven Discovery” and he illustrates this claim by reference to three sources:

1. *Science* – In the 11 February 2011 issue, *Science* writers joined with colleagues from *Science Signalling*, *Science Translational Medicine*, and *Science Careers* to provide a broad look at the issues surrounding the influx of research data (Science Editorial Collective, 2011). The collection of articles highlights both the challenges posed by the data deluge and the opportunities that can be realised if we can better organize and access the data.
2. *The Economist's* 14-page special report: The data deluge (*The Economist*, 2010).

3. Microsoft Research's (2009) *The Fourth Paradigm: Data Intensive Scientific Discovery* which, it claimed, presented the first broad look at the rapidly emerging field of data intensive science.

These sources and a range of other related initiatives indicate a profound shift in the nature of knowledge production. As Bernard Steigler (2014) writes in *The Digital Future of the University*, "The digital constitutes a new *épistémè*: it is the very nature of knowledge in all its forms that will be affected. This technology will function for our époque in the same way that writing did for antiquity." Bernard Stiegler is a French philosopher at Goldsmiths, University of London and at the Université de Technologie de Compiègne.

"Analytics" is a term used in business and science to refer to computational support for capturing digital data to help inform decision-making (UNESCO, 2012: 1). "Learning analytics" is a term used by those in the education community who are seeking to understand the implications of these developments for how we analyze learning data for use by organizations to improve learning systems (ibid). Learning Analytics involves the use of computational techniques to analyze learner data, generate visualizations of learning dynamics, and build predictive models to test theories. As data can be gathered in real time, the proposal is that there is a possibility of continuous improvement via multiple feedback loops. As you can see from this brief description, there are many issues not least to do with control, access to data, authority to access data and for what reasons, student surveillance. And the list goes on and on: Foucault might be justified in reactivating the concept of educational panopticum.

**PJ:** During the past few decades, major breakthroughs in natural sciences such as physics, chemistry or medicine seem to result almost exclusively from the work of large teams. Gone is the time of lone rangers who develop theories and ideas in isolation of their studies and laboratories; by and large, they have been replaced by large managed teams of experts in narrow disciplines. In social science and humanities, however, the most respected achievement is still an academic monograph – a piece of research conducted by one or few persons. Could you please compare these two approaches to inquiry? Could you please outline their main implications for creativity?

**MP:** I know this is a common view but have not reviewed the empirical evidence for such a claim. Clearly, the digital humanities and social media technologies increasingly breakdown the isolation of the long-distance scholar. I do think that this Romantic ideal and practice is a feature of the past and that more and more people in the humanities will come together collectively to advance their research. Think of the conferences and other collective forms of knowledge production in the humanities and social sciences. Increasingly, I think, we will see new collective forms of knowledge production in these

areas – and not only because of changed technological conditions. Nowadays, state and regional bureaucracies are demanding and mandating new collective processes in the education of doctoral students, and team approaches are becoming incentivized through research funding.

On the two models of inquiry, I tried to answer this question in a paper called “Education, Creativity and the Economy of Passions: New Forms of Educational Capitalism.” If I can quote from part of the abstract:

This paper reviews claims for creativity in the economy and in education distinguishing two accounts: ‘personal anarcho-aesthetics’ and ‘the design principle.’ The first emerges in the psychological literature from sources in the Romantic Movement emphasizing the creative genius and the way in which creativity emerges from deep subconscious processes, involves the imagination, is anchored in the passions, cannot be directed and is beyond the rational control of the individual. This account has a close fit to business as a form of ‘brainstorming,’ ‘mind-mapping’ or ‘strategic planning,’ and is closely associated with the figure of the risk-taking entrepreneur. By contrast, ‘the design principle’ is both relational and social and surfaces in related ideas of ‘social capital,’ ‘situated learning,’ and ‘P2P’ (peer-to-peer) accounts of commons-based peer production. It is seen to be a product of social and networked environments – rich semiotic and intelligent environments in which everything speaks. (Peters, 2009b)

### **Philosophy’s Pedagogy**

**PJ:** You are a philosopher and a publisher – above all, however, you are a teacher. In the introduction to your *Selected Works* (2012b: 8) and in more detail elsewhere (Peters & Marshall, 1999; Peters, Burbules & Smeyers, 2008), you write about pedagogical philosophers, or “provocateurs,” and develop the notions of “philosophy as pedagogy” and “pedagogical philosophy.” Could you please outline the links between philosophy and pedagogy? How do they reflect in your own work?

**MP:** Quite simply, I say that pedagogy is historically one of the tripos of ancient Greek society, which took hold after the institutionalization of philosophy along with politics (education for citizenship in the *polis*). What stronger link could there be? This tripos intimately links philosophy, politics and pedagogy especially with respect to the *demos* and the democratic way of life. Much follows from this, especially the important questions of the digital age such as collective intelligence, collective action, co-construction and co-design of democratic goods. Philosophy as pedagogy implies that philosophy depends upon the pedagogical forms of the dialogue – the seminar, lecture, tutorial etc. – which are the oral equivalents of the written genres of



the treatise, thesis, fable, manifesto etc. The philosophers I favor are those I call pedagogical philosophers: Socrates, Nietzsche, Wittgenstein, Heidegger, Dewey, Freire. These ideas are explicitly reflected in my work related to developing the conception of philosophy as pedagogy and implicitly reflected in my pedagogical practice. For more detail, see my recent book *Of Other Thoughts: Non-Traditional Ways to the Doctorate: A Guidebook for Candidates and Supervisors* (Engels-Schwarzpaul & Peters, 2013).

**PJ:** In a great overview article entitled “Towards Philosophy of Technology in Education: Mapping the Field,” you outline the main streams in contemporary philosophy of technology and show that

it has crucial significance for education for education is not only a discipline often conceived as the study of education with an accent on its improvement, it is also a giant enterprise, increasing the centre of the knowledge economy, where such improvements are now driven by both economic theories concerning the importance of technology and technical innovations touted to transform its development (Peters, 2006: 112).

Could you please outline your philosophy of technology? Who are your main theoretical influences; how does it work in practice?

**MP:** I am interested in the history of the philosophy of technology and its emerging political economy. I am strongly influenced by Heidegger, but reject aspects of his analysis related to the promise of digital technology by holding out for non-capitalist forms that establish ecologies of public or open spaces for global civil culture to flourish. In this I am also influenced by Marcuse’s *One-dimensional Man* (1964) and Foucault’s *Technologies of the Self* (1982). This thrust in my thinking has two prongs:

(1) An analysis of cybernetic rationality and the form it takes with the massive new info-utilities, its replacement of the old gas and oil industries of industrial capitalism, and its dominance of the so-called knowledge economy.

(2) An attempt to support, analyze and build public knowledge cultures, a term I invented and used in my book *Building Knowledge Cultures: Education and Development in the Age of Knowledge Capitalism* (Peters and Besley, 2006). I have pursued public knowledge cultures in various ways, especially around the development of new journals but also in relation to the history of open journals systems, open publishing, the intellectual commons and the sorts of things that I talk about in *The Virtues of Openness* (Peters and Roberts, 2012).

Using these two prongs, I want to scrutinize more carefully the philosophers of liberal modernity (Dewey, Popper, Habermas) who do not understand the significance of “counterpublics” and the control of public discourse.

**PJ:** In the age of the network, philosophy of education contains elements of (philosophy of) pedagogy, technology, politics.... Arguably, these elements

have always been there – however, it is hardly to dispute that modernity creates a unique dynamic between them. Engineering traditions of philosophy of technology seem less suitable than humanistic traditions (Peters, 2006: 112); analytic tradition of R. S. Peters and the London School seem to offer only a part of the picture (Peters, 2014: 114–117); Heidegger’s “only a God can save us” (1981) is obviously overly pessimistic; and Haraway’s project of socialist-feminism (1991) has been surpassed by other approaches as “the cognisphere takes up where the cyborg left off” (Hayles, 2006: 165). In your view, Michael, what is the current state of the art of contemporary philosophy of education? What does it mean to be a philosopher of education in early 21<sup>st</sup> century?

**MP:** This is such an important question I would like to make it the centre of a conference or journal issue. And I have thought about this question. First, I would go for the easy answer, and say that all these traditions have something to offer – the question is knowing their proper place. There is nothing wrong with conceptual analysis, but not as a sole activity. Heidegger helps us to view the history of Western metaphysics, but there are alternative readings. Haraway and Hayles respectively take us into a gendered analysis of technology and its posthuman forms – and these are both crucial advances. In my view, we need to understand new postdisciplinary formations that are best represented by the rise of ecology as a young science.

Based on a radical transdisciplinarity, the new postdisciplinary formations proceed from an understanding of open, non-linear, dynamical systems (characterized by cybernetics, chaos and complexity) where something new can be born. (Perhaps the best approach is that of cosmological physics of evolution or biological evolution applied to the understanding of the significance of information in the universe). I would like to change the term but for me there is no value in clarifying concepts when kids are victims of war, going hungry, have no access to education, and are being systematically exploited. All of these intellectual activities must be put in the service of caring for our children and the planet otherwise it meaningless to me.

**PJ:** You are “a thinker typically understood as a postmodern and poststructuralist philosopher/educator” (Papastepanou, 2012: 2836). Yet, you seem to collaborate perfectly well with (neo)-Marxist humanist thinkers such as Peter McLaren – who also happen to launch powerful critiques of postmodernism / poststructuralism (i.e. McLaren, 2006). From first-hand experience, I know that Peter is a great person to work with (and I also know that you are dear friends!) so your collaboration arrives at no surprise. Looking at theory behind the person, however, could you please outline your main argument for and against neo-Marxism? Why do you think that postmodern/ poststructuralist approaches are the way to go?

**MP:** In my recent response to Peter, who as a dear friend contributed to my recent festschrift *Postscript on Marxism* (Lăzăroiu, 2014), I responded:

These labels ‘revolutionary Marxism,’ ‘postmodernism’ and ‘post-structuralism’ should be not taken too literally in my view. The process of identification by association can be scary but like any stereotyping mechanism we can and should reject these broad descriptions as being definitive of philosophical identity and work instead with what scholars say – we should follow the arguments.

I went on to say:

...if you want to understand postmodernism read, view and listen to the music, theatre, architecture, dance, philosophy, literature, sociology, criticism, cultural studies, economics etc. that developed in different cultural conditions in America, Britain, Australia, China, India, South America and elsewhere. What can one say about this diversity except the banal comment that post-modernism can be characterized as a reevaluation and critique of the culture of modernism, and a reaction against its universalist tendencies? What do these artists, architects, musicians and writers share? What do Robert Venturi, Charles Jencks, Charles Olson, John Cage, Terry Riley, Henryk Gorecki, George Crumb, Steve Reich, Phillip Glass, Lou Harrison, Michael Nyman, Jorge Luis Borges, Samuel Beckett, Vladimir Nabokov, William Gaddis, William Burroughs, Kurt Vonnegut, John Barth, Donald Barthelme, E. L. Doctorow, Don DeLillo, Thomas Pynchon, Kathy Acker have in common? What do these philosophers have in common: Nietzsche, Heidegger, Derrida, Foucault, Lyotard, Rorty, Jameson? This is why I say it really should be seen less as a label and more as a guide to reading.

And if you will excuse for reproducing more of my response here:

Certainly, postmodernism and poststructuralism should be treated as guides to reading but we might also suppose that there are some serious commitments. The philosophical reading of postmodernism, considered as a whole, tends to emphasize a number of overlapping cluster concepts that emphasize its *openness*, its *critique of essence* or essentiality, and its *philosophy of difference*, and *protection of diversity*, including the following: anti-foundationalism; anti-essentialism; anti- or post-epistemological standpoint; anti-realism about meaning and reference; suspicion of transcendental arguments and viewpoints; rejection of the picture of knowledge as accurate representation; rejection of truth as correspondence to reality; rejection of canonical descriptions and final vocabularies; suspicion of metanarratives.

The list is taken from Bernd Magnus’ (1989) discussion of Nietzsche in relation to postmodern criticism. To Magnus’ list we

might also add what Rorty calls ‘*antirepresentationalism*’ and also add, alongside ‘suspicion of metanarratives’, *the turn to narrative and narratology*, more generally – the ‘*petite récits*’ pitted against metanarratives by Lyotard (1984). We might also add an emphasis on linguistic use and *therapeutic view of philosophy*; that is, an embodiment of many of the features of the list above and an ethos, above all, concerning philosophy as a critique of language summed up best in the famous quotation from the *Investigations*: “Philosophy is a battle against the bewitchment of our intelligence by means of language” (#109). It is a view that underlies the development of social sciences and cultural studies in the latter half of the twentieth-century; perhaps, sloganized in the twin methodological imperatives: the linguistic turn, the significance of representation, and the so-called ‘social construction of reality,’ on the one hand; and, the attempt to overcome the dualisms, the search for certainty and essences, and the subjectivism that is the legacy of the Cartesian thought. (Peters, 2014: 210–215)

Let me add to this by saying intellectual thought is driven too much by labels and by imprecise categories that operate on the principle of exclusion and “death of association’ when really we all should be doing the hard work of actually tracing the connections, influences, similarities, differences and theoretical hybrids.

I have never rejected Marxism or neo-Marxism. All I would say that the forms of Western Marxism are diverse. There are many different forms including Heideggerian Marxism of Marcuse, and the Marxism of Deleuze and Guattari, or the autonomist Marxism of Antonio Negri. In fact I find contemporary Italian political thinking that follows this tradition and tries to combine Marx, Foucault and Deleuze very fruitful for my purposes. I wrote a little book called *Poststructuralism, Marxism and Neoliberalism: Between Theory and Politics* (Peters, 2001a) with the aim of demonstrating that “poststructuralism” is not anti-Marxist or anti-structuralist. Also the term “post-structuralism” is so jejune: it obscures the links to Nietzsche and Heidegger, it masks the differences between thinkers, it exploits inherent bias in national traditions, and raises the question of the lack of interpenetration between European traditions of thought by reifying nationalism in philosophy. It is an American term that conflates “difference” which is one of the central lessons of this complex movement.

### **Where Is Digital (Post)Colonialism?**

**PJ:** Speaking of difference, it is impossible to avoid its mirror image – universalism. Could you please explore it in few sentences?

**MP:** I am suspicious of universalism as a cover for various forms of ethnocentrism, westernization, modernization, Europeanization, Americanization. There are surely pedagogical lessons in this, if we take colonialism and postcolonialism seriously. In every case that purports a universalism, we must subject it to severe intellectual tests and make sure that it is not simply the cultural projection of the dominant power. This is an ethical and political obligation of all thinkers, especially those of the “imperial” west. On the other hand, I am interested in the evolutionary rationality that develops as a form of globalism which moves us closer to a set of values that might provide a global ethics of the environment and of the other. So, as Heraclitus suggests “things change” and as Darwin suggests “they evolve:” What do these evolutionary arguments mean for logic and for critical philosophy? How do we take advantage of them in intercultural philosophy?

For me, the best systems of thought here are based on the lessons of Gödel’s incompleteness theorem (the inherent limitation of all axiomatic systems including the attempt to give arithmetic logical foundations), Heisenberg’s uncertainty principle (that states a fundamental limit to precision of measurement at the subatomic level), and Einstein’s relativity theories (observation is relative to the observer). They are in contemporary terms dealing with one-linear, dynamical, open, transformational systems – I think the best examples are applications of dynamic system analysis in cosmological physics and evolutionary biology. We need to apply similar approaches to history and philosophy, especially when analyzing or theorizing emerging global systems.

**PJ:** Emerging global systems are in many ways universalist and hegemonic. For instance, the Internet is a prime example of domination of English language and Latin alphabet. At the one hand, such unification provides people with far-reaching and potentially powerful voices; at the other hand, however, it diminishes importance of local systems of thought and knowledges. As a Wittgensteinian philosopher, could you please assess the relationships between the Internet and “language games”? More generally, could you please assess the dynamic between individualism and collectivism in the network society?

**MP:** In terms of world languages: Mandarin, Spanish, English, Hindi, Arabic, Portuguese, Bengali, Russian, Japanese, Punjabi, German. As we all know the Internet, like the world publishing and knowledge systems, favor English as the *lingua franca*. Although, this is rapidly changing, and possible soon to be replaced by Mandarin. This reflects the geopolitics of language, including forced language acquisition and the prohibition of various indigenous languages in schools. In New Zealand, Maori was forbidden to be spoken in a period before the 1980s! Language dominance is a consequence of colonialism and conquest, and therefore cannot be divorced from questions of power and politics of imperialism. As a consequence of globalization, we

have also seen what anthropologists call small language death – especially in the Pacific, with 250 Aboriginal languages in Australia, and 500 in Borneo and surrounding islands. On the other hand, it could be argued that the Internet is the best platform for language revival and the best possibility for enhancing small language reproduction including of these languages that are predominantly oral. So this is a double-edged question. As far as the general question goes, individualism is associated with property rights as they can be extended to intellectual property, while collectivism *per se* shows itself in new forms of collective intelligence such as peer production – which is a feature of social media in general and a development out of open affordances.

**PJ:** In the review essay “Mapping the New Imperialism: Where Is Postcolonialism,” you say: “The question is a spatial one. *Where* is postcolonialism? It’s a question of location, or more precisely *relocation*” (Peters, 2003: 421). In the context of your essay, “location” refers to disciplinarity – modernism, Marxism, decolonization, postmodernism, poststructuralism... However, please allow me to relocate (post)colonialism into the border between reality and virtuality to develop a metaphor of colonization of cyberspace. (As of recently, Ana Kuzmanić and I have done some work in this direction (Jandrić & Kuzmanić, 2015)). In this context, which lessons from colonization of physical spaces should we bring along into our collective journey into virtuality? In short, Michael, where is digital postcolonialism?

**MP:** In order to explore this question we need first to explore “digital colonialism” and the question of question the term colonialism (which has a reasonably precise meaning in relation to the exercise of imperial power by the West over its colonies). Given that the “digital” in the sense of the coming of the Internet has been around only since the 1990s we are talking about a relatively short period in human history, say roughly twenty-five years. I am not sure that the term makes sense unless it stands for a set of unequal power relations extended over a colony. Are there “digital colonies”? Certainly we can say clearly there are unequal power relations between those with online access and those without it and therefore inequalities of access to education, information and knowledge. We might also say that the new digital centers of power are associated with the growth of the leviathan info-tilities that emerged out of the computer and information service corporation, mostly all American. By a stretch I think we might come to accept that “digital colonies” are information conduits for American culture and provide little chance for the development of indigenous digital cultures.

Now “digital postcolonialism” then would equate with the opportunity for user-generated cultures to flourish in an open and collaborative digital environment. One thing that strikes me here is the way that the digital postcolonialism does not map onto the map of the world as it is broken up into countries — mainly the administrative division of Western powers. In

some cases it does, especially we talk about indigenous peoples (where there is proximity to land), and in some cases there is no real attachment to any country or piece of land. The new “postcolonial cultures” are driven by new social movements that have developed digital presence and extensions, or new user groups of shared interest that are pragmatically oriented. I think your work in this respect is interesting and useful when you say that digital postcolonialism “rejects common simplifications such as technological determinism and points to small power dis-balances as the main sites of resistance against the pairing of techno-education with global neo-liberal ideologies” (Jandrić & Kuzmanić, 2015). I think you make a good point. The real object of study should be digital capitalism or what I call the forms of cybernetic capitalism, hence my concern for what is possible and new forms of power and control in the epoch of digital reason.

**PJ:** In the context of cybernetic capitalism, it is impossible to avoid the Frankfurt School of Social Science. What are its main contributions to our understanding of learning in the age of digital media?

**MP:** Of course the Frankfurt School is no more; it is no longer a school in Frankfurt having been disestablished by the university. However, its theoretical legacy around the work of first, second and third generation thinkers is useful. Think only of Adorno and Horkheimer’s *Dialectic of Enlightenment* (2002[1944]), or their critique of instrumental rationality. From Grunberg to first generation of Adorno, Horkheimer, Fromm, Benjamin, Pollock, Lowenthal, and Reich; to the second generation of Habermas, Dahrendorf, Brandt, Offe, Schmidt, and Wellmer; to the third generation who move offshore and into the Third World represented by Honneth, Martin Jay, Chantal Mouffe but also Spivak, Fraser, Bhaba, and many others; critical theory has provided a living testimony of the power of radical political economy of Marx and Engels.

I do not know the work of Rainer Forst, but I believe that he is said to constitute a fourth generation. When he won the Leibniz prize in 2012, Forst was named the most important philosopher of his generation. He usefully stages the historical development of the Frankfurt School around the program of *Dialectic of Enlightenment* (Horkheimer and Adorno, 2002[1944]). Habermas’ reformulation around the Hegelian-Weberian-Marxist inspired critical theory of communication and its distortion in the modern world, and Honneth’s reformulation of social struggle as social recognition, to build own critique of “relation of justification.” See Forst’s book *Contexts of Justice: Political Philosophy beyond Liberalism and Communitarianism* (2002) and also the interview between Reiner Forst and Xavier Guillaume (Guillaume, 2012).

Forst says the main question of critical theory is still the same: what is the rational ordering of society and what prevents it? The question he acknowledges requires a self-reflexivity about “reason.” In one sense I think this is a

very German project, insofar as it revolves around the concept *vernünftig* (“rational”). While I respect Forst’s answer, this is not my question. I am more interested in the descent of systems of thought, their mutations as they are exported and then picked up in foreign contexts. In this sense, I am more interested in application of critical theory in Third World contexts. Critical theory has gone off-shore, a process that helps to shed its Eurocentric bias.

**PJ:** Looking at philosophical roots of your work, I cannot help but ask about your life-long fascination with Wittgenstein. Where does it come from; how does it reflect to your philosophy of education?

**MP:** I was a school teacher for seven years. During this time, in conversation with mathematicians, I was really turned on to logic. Rod Harries, Assistant Principal who was also tutor in philosophy, persuaded me to do a degree in philosophy of science at Canterbury University, where Karl Popper was from 1937–43. We started with the movement of logicism, with Frege, Russell and the early Wittgenstein, and moved on to Popper, Kuhn, Feyerabend, etc. I was hooked. Rod was also the reason to go back to university again, this time Auckland University, to study Wittgenstein in a Masters degree. Here, I managed to swing every paper around to look at aspects of Wittgenstein’s work starting with the *Tractatus Logico-Philosophicus* (1974). This kind of work really clicked with me and I emerged with a Master with First Class Honours that secured a PhD scholarship allowing me to complete a thesis on Wittgenstein and the problem of rationality.

After the thesis which I never published, I was intrigued with Lyotard’s creative misreading of Wittgenstein, and that sent me down a certain track. I subsequently wrote two books on Wittgenstein with friends Jim Marshall (Peters & Marshall, 1999), Nick Burbules and Paul Smeyers (Peters, Burbules and Smeyers, 2008), and also held conversations with another Wittgensteinian Fazal Rizvi. It was the source of my ideas of philosophy as pedagogy and of the notion of pedagogical philosophers which I have developed over the years. I could say much more about this influence, especially the ways in which – through the cultural turn and an emphasis on social practice (a view that strongly influenced Pierre Bourdieu) – Wittgenstein was responsible for a paradigm change in the humanities and social sciences, alongside the huge influence he had in logic, philosophy and mathematics.

**PJ:** Could you please outline the main trajectories of this paradigm change in the context of contemporary learning?

**MP:** Let me refer readers to an Introduction I wrote recently to an online collection of my articles entitled “Wittgenstein and the Philosophy of the Subject” where

I outline a view of subjectivity, knowledge, and representation ‘after’ Wittgenstein, a position that provides a more appropriate platform for philosophy of education in the age of globalization,



preserving a link to Wittgenstein and his philosophy while investigating the sources for a notion of education as openness and engagement. (Peters, 2014)

In this text, I offer some remarks of the significance of Wittgenstein's work in *breaking with* and offering a critique of the Cartesian model of subjectivity and cognition. My argument in general is that Wittgenstein's disassembly of the Cartesian model of subjectivity provides the basis for model of education as openness, engagement and *copoiesis* (co-creation), one that is more suited to the global, networked and digital environment we live in.

I am more convinced than ever that Wittgenstein's work, especially of the *Philosophical Investigations* (2001) and *On Certainty* (1975), gives us some of the tools to understand cognition in terms of enactivism and the extended mind. Enactivism is shorthand for a view of the mind in terms of the individual's and species interaction with the environment. It is a view associated with Varela's and Maturana's biological pragmatism that emphasizes embodied cognition. Wittgenstein gives us grounds for challenging the computational analysis of minds as individualist, internalist and locked away from the world. On this view, very common to cognitivist scientists, cognition is best seen by analogy to the computer. Let us say this is the dominant view of the digital age. By contrast, Wittgenstein enables us to see that the mind is to be identified with purposeful activity in the world, only realizable through the activities of the body, and extended by tools usage in a language-dominated social environment. This is a very different paradigm of cognition. It is one that understands the significance of "meaning as use" and the importance of social practice as the intersubjective basis for knowledge.

This is one of starting points in my work with Tina Besley in *Building Knowledge Cultures* (Peters and Besley, 2006). Recently, I have come to think that it underlies a conception of collective intelligence that allows for the co-creation and co-production of knowledge, of digital goods in general, and of social democratic processes. There are strong links from this form of digital epistemology and epistemic democracy to issues of academic publishing in open formats: the future of the scholarly journal, the philosophical and historical significance of peer review and the centrality of peer production of knowledge.

**PJ:** Then, knowledge cultures are directly linked to the notion of "philosophy as pedagogy"...

**MP:** One last word about "philosophy as pedagogy" and "pedagogical philosophers:" philosophy as pedagogy concerns a "style of thinking" and a way of doing philosophy. In other words, as I explain in the essay "Philosophy as Pedagogy: Wittgenstein's Styles of Thinking:" "Wittgenstein not as a philosopher who provides a *method* for analysing educational concepts but rather

as one who approaches philosophical questions from a *pedagogical* point of view” and

his [Wittgenstein’s] styles are, I will argue, essentially *pedagogical*; he provides a teaming variety and vital repertoire of non-argumentational discursive forms – pictures, drawings, analogies, similes, jokes, equations, dialogues with himself, little narratives, questions and *wrong* answers, thought experiments, gnomic aphorisms and so on – as a means primarily to shift our thinking, to help us escape the picture that holds us captive. (Peters, 2001b)

**PJ:** Thank you a lot, Michael! I cannot wait for the next part of our conversation!

## REFERENCES

- Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.
- Chomsky, N. (1965). *Aspects of a Theory of Syntax*. Cambridge, MA: MIT Press.
- Engels-Schwarzpaul, A. C., and Peters, M. A. (eds.) (2013), *Of Other Thoughts: Non-Traditional Ways to the Doctorate: A Guidebook for Candidates and Supervisors*. Rotterdam, Boston, Taipei: Sense.
- Feyerabend, P. (1993/1970). *Against Method*. London: Verso.
- Forst, R. (2002), *Contexts of Justice: Political Philosophy beyond Liberalism and Communitarianism*. Berkeley, CA: University of California Press.
- Foucault, M. (1982), “Technologies of the Self,” in L. H. Martin, H. Gutman and P. H. Hutton (eds.), *Technologies of the Self: A Seminar with Michel Foucault*. Amherst, MA: The University of Massachusetts Press, 16–49.
- Guillaume, X. (2012), “The Right to Justification: Towards a Critical Theory of Justice and Democracy. An Interview with Rainer Forst,” in G. Browning, M. Dimova-Cookson, and R. Prohovnik (eds.), *Dialogues with Contemporary Political Theorists*. Basingstoke, Hampshire: Palgrave Macmillan, 105–120.
- Haraway, D. (1985/1991). *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge.
- Hayles, N. K. (2006), “Unfinished Work from Cyborg to Cognisphere,” *Theory, Culture & Society* 23(7/8): 159-166.
- Heidegger, M. (1981), “‘Only a God Can Save Us:’ The Spiegel Interview,” in T. Sheehan (ed.), *Heidegger: The Man and the Thinker*. Chicago, IL: Precedent Press, 45–67.
- Horkheimer, M., and Adorno, T. W. (2002/1944), *Dialectic of Enlightenment: Philosophical Fragments*. Stanford, CA: Stanford University Press.
- Jahanian, F. (2013), “Harnessing the Promise of Data. Data to Knowledge to Action: Building New Partnerships,” White House Office of Science and Technology Policy. Washington, DC, November. Retrieved 22 March 2015 from [https://www.nitrd.gov/nitrdgroups/images/9/92/Farnam\\_Jahanian\\_-The\\_Promise\\_of\\_Big\\_Data.pdf](https://www.nitrd.gov/nitrdgroups/images/9/92/Farnam_Jahanian_-The_Promise_of_Big_Data.pdf).

- Jandrić, P., and Kuzmanić, A. (2015), "Digital Postcolonialism," in P. Kommers and P. Isaias (eds.), *Proceedings of 13th International Conference on e-Society*. Madeira: IADIS, 87–94.
- Lăzăroiu, G. (ed.) (2014), *Liber amicorum: A Philosophical Conversation among Friends*. New York: Addleton Academic Publishers.
- List, C., and Goodin, R. E. (2001), "Epistemic Democracy: Generalizing the Condorcet Jury Theorem," *Journal of Political Philosophy* 9(3): 277–306.
- Marcuse, H. (1964), *One-dimensional Man*. Herbert Marcuse Archive.
- McLaren, P. (ed.) (2006), *Rage and Hope: Interviews with Peter McLaren on War, Imperialism, and Critical Pedagogy*. New York: Peter Lang.
- Microsoft Research (2009), "The Fourth Paradigm: Data Intensive Scientific Discovery." Retrieved 22 March 2015 from <http://research.microsoft.com/en-us/collaboration/fourthparadigm/>.
- Murphy, P., Peters, M., and Marginson, S. (2010), *Imagination: Three Models of Imagination in the Age of the Knowledge Economy*. New York: Peter Lang.
- Papastepanou, M. (2014), "Michael A. Peters' Discursive Universalism," in G. Lăzăroiu (ed.), *Liber amicorum: A Philosophical Conversation among Friends*. New York: Addleton Academic Publishers, 149–158.
- Peters, M. A. (2012b), *Education, Philosophy and Politics: The Selected Works of Michael A. Peters*. London: Routledge.
- Peters, M. (2014), "Wittgenstein and the Philosophy of the Subject," Retrieved 22 March 2015 from <http://explore.tandfonline.com/page/ed/education-expert-panel/education-philosophy-expert-michael-peters/education-philosophy-expert-michael-peters-full-introduction>.
- Peters, M. A., and Besley, T. (2006), *Building Knowledge Cultures: Education and Development in the Age of Knowledge Capitalism*. Lanham, MA: Rowman & Littlefield.
- Peters, M. A., and Marshall, J. (1999), *Wittgenstein: Philosophy, Postmodernism, Pedagogy*. New York: Bergin and Garvey.
- Peters, M. A., and Roberts, P. (2012). *The Virtues of Openness: Education, Science and Scholarship in the Digital Age*. Boulder, CO: Paradigm.
- Peters, M. A. (2001a), *Poststructuralism, Marxism and Neoliberalism: Between Theory and Politics*. Lanham, MD: Rowman & Littlefield.
- Peters, M. A. (2001b), "Philosophy as Pedagogy: Wittgenstein's Styles of Thinking," *Radical Pedagogy* 3(3).
- Peters, M. A. (2003), "Mapping the New Imperialism: Where is Postcolonialism?," *Policy Futures in Education* 1(2): 421–424.
- Peters, M. A. (2006), "Towards Philosophy of Technology in Education: Mapping the Field," in J. Weiss, J. Nolan, J. Hunsinger, and P. Trifonas (eds.), *The International Handbook of Virtual Learning Environments*. Dordrecht: Springer, 95–116.
- Peters, M. A. (2009), "Education, Creativity and the Economy of Passions: New Forms of Educational Capitalism," *Thesis Eleven* 96(1): 40–63.
- Peters, M. A. (2009a), *Academic Writing, Philosophy and Genre*. London: Wiley-Blackwell.

- Peters, M. A. (2012a), "Western Models of Intercultural Philosophy," in T. Besley and M. Peters (eds.), *Interculturalism, Education and Dialogue*. New York: Peter Lang, 29–52.
- Peters, M. A., and Britez, R. G. (2008). *Open Education and Education for Openness*. Rotterdam: Sense.
- Peters, M. A., Burbules, N. C., and Smeyers, P. (2008), *Showing and Doing: Wittgenstein as a Pedagogical Philosopher*. Boulder, CO: Paradigm.
- Roberts, P. (2014), "Endless Energy: Portrait of an Intellectual," in G. Lăzăroiu, *Liber amicorum: A Philosophical Conversation among Friends*. New York: Addleton Academic Publishers, 24–31.
- Science Editorial Collective (2011), "Special Online Collection: Dealing with Data," *Science*, 11 February. Retrieved 22 March 2015 from <http://www.sciencemag.org/site/special/data/>.
- Stickney, J. (2014), "Philosophical Fellowship: An Interview with Michael Peters and Nicholas Burbules," in G. Lăzăroiu (ed.), *Liber amicorum: A Philosophical Conversation among Friends*. New York: Addleton Academic Publishers, 1–24.
- Stiegler, B. (2013), "The Digital Future of the University," Retrieved 22 March 2015 from <http://www.samkingsley.com/2014/01/15/the-digital-future-of-the-university-stiegler/>.
- The Economist (2010), "The Data Deluge," 25 February. Retrieved 22 March 2015 from <http://www.economist.com/node/15579717>.
- UNESCO (2012), "Policy Brief: Learning Analytics." Retrieved 22 March 2015 from [iite.unesco.org/pics/publications/en/files/3214711.pdf](http://iite.unesco.org/pics/publications/en/files/3214711.pdf).
- Wittgenstein, L. (1974), *Tractatus Logico-Philosophicus*. London: Routledge and Kegan Paul.
- Wittgenstein, L. (1975), *On Certainty*. Oxford: Wiley Blackwell.
- Wittgenstein, L. (2001), *Philosophical Investigations*. London: Blackwell.