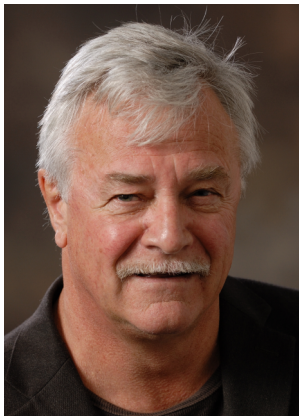
УДК: 130.2: 37.03



Michael PETERS ***Petar JANDRIĆ***

PHILOSOPHY'S PEDAGOGY IN THE AGE OF KNOWLEDGE CULTURES[1]

This conversation is an abbreviated version of the articles "Philosophy of education in the age of digital reason" (Peters & Jandrić, 2015a) and "Learning, creative col(labor)ation, and knowledge cultures" (Peters & Jandrić, 2015b). The conversation is preceded with a dedicated Open Letter to Ukrainian Philosophers of Education, co-authored by Michael Peters, Tina Besley, and Petar Jandrić. In the first part of the conversation, Michael Peters discusses his philosophy of education in and for the age of digital media and places his work in three interlocked themes: philosophy, political knowledge economy, and academic publishing. The second part of the conversation introduces the notion of "philosophy as pedagogy" and Michael Peters' philosophy of technology. The third part of the conversation explores digital postcolonialism, introduces Michael Peters' lifelong fascination with Ludwig Wittgenstein, and analyses the advent of knowledge cultures and their relationships to human learning. The fourth part analyses the dynamics between

[1] The extended version of this conversation is available at: Peters, M. A. & Jandrić, P. (2015). Philosophy of education in the age of digital reason. *Review of Contemporary Philosophy*, 14, and Peters, M. A. & Jandrić, P. (2015). Learning, creative col(labor)ation, and knowledge cultures. *Review of Contemporary Philosophy*, 14.

We give our special thanks to Tina Besley for joining us in the *Open Letter to Ukrainian Philosophers of Education*.

openness, capitalism, and anti-capitalism, and uses various recent examples to link that dynamics to democracy. The fifth part of the conversation links cybernetic capitalism to learning and knowledge production, and elaborates the movement of open education. The final, sixth part of the conversation explores practical and epistemic consequences of peer-to-peer and wisdom-of-the-group approaches. It shows that doing science is a privilege and a responsibility, and points towards transformation of academic labor from perpetuation of capitalism towards subversion.

Keywords*: educational philosophy, dialogue, philosophy as pedagogy, epistemology, big data, digital postcolonialism, universalism, cybernetic capitalism, openness, col(labor)ation, knowledge cultures, collective intelligence, creative labor.*

Learning and Inquiry in the Age of Digital Reason

Petar Jandrić: Dear Michael, it is a real pleasure to talk to you! 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 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 conversation, we 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 sceptical 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 recognise 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: 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 sceptical 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 sceptical 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 organise 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 epoque 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 analyse learning data for use by organisations to improve learning systems (ibid). Learning Analytics involves the use of computational techniques to analyse learner data, generate visualisations 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.

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 institutionalisation 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 favour 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: 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, analyse 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 21st 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.

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: 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 *re*location" (Peters, 2003: 421). In the context of your essay, 'location' refers to disciplinarity — modernism, Marxism, decolonisation, postmodernism, poststructuralism…

However, please allow me to relocate (post)colonialism into the border between reality and virtuality to develop a metaphor of colonisation 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 colonisation 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 centres of power are associated with the growth of the leviathan info-utilities 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: 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 emphasises 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 analyzing 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)

Cybernetic Capitalism and the New Forms of Openness

PJ: Capitalism, traditional and new, has always been linked to openness — Karl Popper and *The Open Society and Its Enemies* (1974) is a typical case in the point. However, in the opposite ideological camp — from counterculture of the 1960s, through early makers of digital technologies, to recent hackers and Internet activists (Turner, 2006 & 2013; Assange, Appelbaum, Müller-Maguhn & Zimmermann, 2012) — openness is also understood as a subversion of capitalism. Could you please analyze the dynamics between openness, capitalism, and anti-capitalism?

MP: The dynamics of which you speak refers centrally to the forms of openness and closure around the propertarian paradigm of *intellectual property* and ownership of ideas. There are of course many different kinds of openness as geopolitics, as political economy, as ethical economy. Globalization as political openness takes different political forms (with no guarantees). For example:

(I) гла́сность — Glasnost (literally *openness*), 1980s — Glasnost was a policy that called for increased openness and transparency in government institutions and activities in the Soviet Union introduced by Mikhail Gorbachev that signified less censorship and more freedom of information. The term was used also as a means to combat political corruption. It came to represent a set of reforms that led to less censorship, greater transparency and freedom of information especially during the 1980s. These reforms are forms of the introduction of "open government." A movement that began in the 1960s to promote freedom of information and picked up greater gravitas in the western world with the passage of legislation designed to make the state more transparent to its citizens.

(II) 邓小平理论 — Deng Xiaoping "Opening up", 1978–1989. In the post-Cultural revolution the theory of "opening up" was initially based on the customized thought of Mao Zedong. It included four modernizations after 1978 (economy, agriculture, scientific and technological development and national defense) that were designed to open up the economy and normalize business with U.S. under the banner "Socialism with Chinese characteristics" — meaning socialism and market economy are not incompatible. In 1984, UK agreed to return Hong Kong in 1997, and in 2001, China joined the WTO, thus completing the first phase of opening up China to the rest of the world. In 1981, in line with his famous statement of Chinese pragmatism — «it doesn't matter whether a cat

is black or white, if it catches mice it is a good cat» — Deng Xiaoping began to open up and liberalize the Chinese economy. This was primarily a form of economic openness with some political concessions but the real question is whether the economic reforms will necessitate greater political openness.

(III) بربع الاتاروثل — The Arab Spring, 2010 — Openness and democracy. In Tahrir Square, Cairo, there were calls for 'freedom' — freedom from "sultanistic" tyranny. The freedom movement drew on the history of non-violent movements: Rosa Parks, Martin Luther King, and Malcolm X. It did not use the language of global capital but was based around indigenous understandings of citizenship, rights and social justice. The protests began in 2010. By 2015, rulers in power in Tunisia, Egypt, Libya and Yemen had been forced out and protests had begun in Bahrain, Syria, Algeria, Iraq, Jordan, Kuwait, Morocco and Sudan. In most cases, youth demonstrated *en masse* against unsatisfactory rule of dictators who had routinely violated human rights and engaged in political corruption. The aftermath has been characterized by widespread violence and regional instability, resulting in huge number of deaths and refugees. Clearly, social media and new digital technologies played a decisive role in undermining state media, coordinating protests and fomenting political change. It is too soon to say what the long term impacts of these populist uprisings will be, and whether the democratic promise will be redeemed.

(IV) The Occupy Movement, 2011 — With roots in the Arab Spring and protest against anti-austerity measures, the Occupy Movement began as a protest against Wall Street and finance capitalism. Adbusters co-founder Kalle Lasn has compared the protests to the Situationists and 1968 (Lasn and Elliott, 2011). Douglas Rushkoff called it "America's first true Internet-era movement" (2011). Here is a form of protest based on social media networking where social media are used as tools for political coordination. Of course, there are historical reversals too: Where did the Arab Spring go? What happened to these experiments in democracy? What has happened to Russia under Putin? In the latter case, we are definitely witnessing a systematic movement away from the democratic reforms of the early 1990s toward a closed secret society based on the cult of Putin and strongman dictatorship.

PJ: Can you relate openness and cybernetic capitalism to learning and knowledge production?

MP: With the advent of the Internet, principles of openness have become the basis of innovative institutional forms that decentralize and democratize power relationships, promote access to knowledge, and encourage symmetrical, horizontal peer learning relationships. New «peer philosophies» are at the heart of a notion of «openness» that would advocate the significance of peer governance,

peer review, peer learning, and peer collaboration as a collection of values that form the basis for open institutions and open management philosophies. These in turn offer significant implications for localized and individual empowerment, where learners can work together using effective pedagogies to meet the needs of their communities.

We can consider open publishing, open access and archiving as parts of the wider movement called *Open Education* that builds on the nested and evolving convergences of open source, open access and open science, and also emblematic of a set of still wider political and economic changes. Open education ushers in 'social production' as an aspect of the global digital economy, an economy that is both fragile and volatile as the current world credit and banking crisis demonstrates so well. The present decade can be called the 'open' decade (open source, open systems, open standards, open archives, open everything), just as the 1990s were called the 'electronic' decade (e-text, e-learning, e-commerce, e-governance). And yet, it is more than just a 'decade' that follows the electronic innovations of the 1990s. It is a change of philosophy and ethos, a set of interrelated and complex changes, that transforms markets and the mode of production, ushering in a new collection of values based on openness, the ethic of participation and peer-to-peer collaboration.

Intellectual property is the major mechanism for securing forms of human capital in the knowledge economy. Of course, the intellectual commons is the exact opposite of this enclosure trying to make ideas free. Popper is more of a democrat than Hayek whose early work was based on a theory of information as a basis for open markets. On the other side, there are those like Yochai Benkler, Steven Johnson and Michel Bauwens, who have made the case in different ways for open commons and for open knowledge production (one of my interests). Their arguments to my mind proceed from the social character of knowledge (Marx, Wittgenstein, Heidegger, Dewey), that provides the basis for various critiques of the notion intellectual property including: information is not property, is not non-rivalrous, wants to be free, free speech arguments, the social nature of information, cost of digital publishing (see Moore and Himma, 2014).

PJ: Your recent book, *The Creative University*, shows the advent of knowledge society has brought along "creativity as the new development paradigm" (Peters and Besley, 2013: 3). Could you please link openness and creativity?

MP: This is one of the key arguments I have been trying to make in a variety of ways. By emphasizing the link between openness as freedom (especially freedom of speech and of expression) as a political condition for creativity. By trying to demonstrate that, psychologically speaking, openness to experience

(and the ability to change one's mind on the basis of evidence) is a precondition to creativity. By arguing that freedom of communication — of being able to communicate with anyone at all at any time (a form of open communication promoted by new communication technologies) — encourages an ethic of sharing and collaboration as the basis for forms of collective intelligence. By stressing that the "open mind" psychologically correlates well with personality traits that indicate tolerance, sensitivity and acceptance of the other. In particular, I make the link between openness and creativity through user-generated cultures — see Chapter 2 of *The Pedagogy of the Open Society* (Peters, Liu and Ondercin, 2012) and also *Virtues of Openness* (Peters and Roberts, 2012).

PJ: An important part of your work is related to academic publishing. You edit numerous journals and books, and also research the changing nature of contemporary knowledge — in short, your rich publishing engagement is a true act of critical praxis. Along these lines, you recently wrote that your "work as an editor demands that I have a working political economy of academic publishing and also a philosophy of technology" (in Stickney, 2014: 261–266). Could you please describe your political economy of academic publishing?

MP: My political economy starts with the idea that intellectuals and academics need to understand something about the material and historical forms their ideas take in journal systems, in books, and now in digital forms. In this way, we can take control of our own labor processes and understand the potential to take control and re-establish new forms of global civil society and new public spaces. So this means actually doing things, i.e. working in the world of academic publishing and experimenting with its forms. It means understanding the significance of editing and of new digital forms of publishing. It means trying to understand the material and historical contexts of the creation of ideas.

PJ: Earlier, you said that the current state of the art of educational philosophy "is such an important question I would like to make it the centre of conference or journal issue". Based on your impressive engagement spanning through several decades, Michael, how do you conceive (academic) editing? What is its significance in contemporary science? How did it arrive to such a special place in your opus?

MP: Academic editing is a set of skills that is essential to academic writing and publishing and also deeply involved with process of peer review. That is the cornerstone of scholarship and the enterprise of science itself. The skills of editorship, not just the act of editing, of course entail making judgments

about academic work, whether a piece of research passes muster, whether it has met criteria for acceptability, whether it can be read and understood by a larger audience. I want to give it a very large role in the larger movement of scholarship, because for me it carries certain responsibilities of mentoring the younger scholars, of resolving different assessments of the same research, of encouraging constructive criticism. Editorship and editing stand at the very centre of knowledge production.

Remember it was Henry Oldenburg, as the first editor of the Philosophical Transactions of the Royal Society, who wrote the first reports that comprised the journal. Peer review did not kick in for another hundred years (1731 from memory, introduced by the Royal Society in Edinburgh for reason of indemnifying the institution). It seems curious to me that institutionalized science was developed about 300 years ago, and now drives a global knowledge system based on journal systems — some 18,000 academic journals that carry some 3 million articles per year. I place a great deal of faith in science and in the way that open scientific inquiry can eventually sort out the issues and arrive at truthful conclusions. So editing and editorship, especially in relation to journals, is an important part of this modern experiment.

PJ: Such approach to editing is closely related to the concept of knowledge cultures invented by you and Tina Besley (Peters and Besley, 2006)…

MP: I have begun to give some of the essentials of an account of "knowledge cultures" around questions of co(labor)ation — as opposed to human capital — what I regard as a form of "creative labor". I have written about this elsewhere under the term "radical openness." The outlines of knowledge cultures can also be seen in my remarks about co-creation and co-production. The guiding argument concerns the social character of knowledge. Knowledge and the value of knowledge is rooted in social relations — the argument I derive from Marx and Wittgenstein. Knowledge cultures are epistemic communities of inquiry, both in a Kuhnian and Peircean sense. We used the term also deliberately to drive a wedge between "economy" and "society."

From Human Capital to Creative Labor

PJ: With Addleton publishers, you started an academic journal entitled *Knowledge Cultures*. How does it embody your theoretical insights in practice?

MP: Actually, if I might broaden the question a little, I would like to try and capture an insight about ideas. After the ideation phase, ideas have a material embodiment — normally in terms of a codification in symbols, in language,

and often in oral or written forms — when they become embodied in texts. I embrace a materialist view of ideas and a historical one: the forms of thought embodied in language are expressed in different genres. So in philosophy we have many different genres from the dialogue through the treatise to the thesis. Academic writing also takes various forms: the pervasiveness of the monograph and the scientific article is a product of an industrial age. I say to my students "the article is a dirty little industrial machine", trying to make the point about homogenization and standardization of scientific thought. In part, I wrote about this in *Academic Writing, Philosophy and Genre* (Peters, 2009) and also in *Philosophy's Pedagogy* (Peters and Patel, 2010).

My point here is that I try to link the intellectual (academic) process with the publishing process. As academics we must take more responsibility for the form our thinking takes. I established *Knowledge Cultures* when my good friend George Lăzăroiu, a Romanian philosopher living in New York and one of the inspirations for Addleton Academic Publishers, asked me if I was interested in establishing a new journal. As it was, I had been thinking about a new journal for a while, and floated the idea with a couple of publishers who did not grasp the idea, or if they did, they did not like it. Here is the description I drafted back in 2012 for the journal website: "Knowledge Cultures is a multidisciplinary journal that draws on the humanities and social sciences at the intersections of economics, philosophy, library science, international law, politics, cultural studies, literary studies, new technology studies, history, and education. The journal serves as a hothouse for research with a specific focus on how knowledge futures will help to define the shape of higher education in the twenty-first century. In particular, the journal is interested in general theoretical problems concerning information and knowledge production and exchange, including the globalization of higher education, the knowledge economy, the interface between publishing and academia, and the development of the intellectual commons with an accent on digital sustainability, commons-based production and exchange of information and culture, the development of learning and knowledge networks and emerging concepts of freedom, access and justice in the organization of knowledge production". (Peters, 2012c)

As you can see, I was searching for a new ecology of disciplines to address a new set of issues for the university. I have been editing journals for a long time. I have been editor of *Educational Philosophy and Theory* (Routledge) since 1999 and I established two journals when I was in Scotland — *Policy Futures in Education* and *E-Learning and Digital Media* (both SAGE journals now). Next year, I am to establish *The Video Journal of Education and Pedagogy* as a Springer journal.

PJ: Different ways of producing knowledge produce different kinds of knowledge. Therefore, the upcoming *The Video Journal of Education and*

Pedagogy challenges the very basis of knowledge production by transferring it into another medium. At a more generic level, video journals and other new forms of scholarship are mere symptoms of social transformation from "textual cultures" to "visual cultures". Walter Benjamin, Guy Debord, Jean Baudrillard, Gilles Deleuze, and many others, have explored various aspects of this transformation in regards to knowledge. In *Imagination: Three Models of Imagination in the Age of the Knowledge Economy*, you outline "pedagogies as ways of seeing" by saying: "Pedagogies of visual culture would seek to understand both the meaning of images, the way in which they comprise a language and help us to analyse vision as a social, cultural and historical process. It would examine the history of changing technologies that are involved in the production, circulation, and reception of images as well the exploration of theories of seeing and looking as social and cultural practices". (Peters, 2010: 352). Could you analyse the role of images (and, in relation to your new journal, the role of video), at the intersections of knowledge creation and learning? At the level of practice, what is it exactly that you expect from your new journal?

MP: It is probably a little early to answer this question, because the journal which I have been thinking about for a couple of years isn't to be launched until early 2016. I am also constrained in terms of innovation, because — as much as I would like for it to be free — I have chosen to go with a big publisher (Springer) who has the resources to sustain this venture. *The Video Journal of Education and Pedagogy* is the first in education, maybe in the humanities and social sciences, to base itself on moving images. What I call the "video article" will take a precise form: introduction, research question, literature discussion, video (15 minute clip), discussion and bibliography. Small steps to start with, as we have to get academics used to this idea and also publishers.

My idea was rejected several times by other publishers until I hit upon a sustainable business model. The role of images will take different forms: interviews (ahem!), clearing house for extant address and keynotes, videos in various classes (demonstrations of teaching, classroom observation), performance (music, dance etc), indigenous studies, and so on. We will also build in a component which will be dedicated to visualization methodologies. (Here I can smuggle in questions concerning philosophy of visual cultures.) One issue that looms large is of course the ethics of video and its representation. But ask me again after the journal has been running for a year! All my optimism might have drained away; but I think it is worth an experiment. Philosophy and pedagogy have been wedded both to the oral and written forms — now they require new media including video. What this means for academic work will be an interesting question.

PJ: Lot of your work is based on peer-to-peer dialogue and the wisdom of the group. Could you please explore epistemic consequences of such approach?

MP: I would classify peer-to-peer as a form of collective intelligence and I think that potentially we can identify various literatures on or related to the questions of collective intelligence:

- Political — epistemic democracy.
- Biological — "swarm intelligence", social insects.
- Administrative, public policy — co-creation and co-production of public services, peer production.
- Cognitive — the embodied mind (extended, embedded, enacted), social cognition.
- Technological — artificial intelligence, social media, machine learning.
- Evolutionary — the cumulative effects and evolutionary development of cultural inventions (like writing) that encourage media that promote social or collective intelligence and collective action.

The concept of collective intelligence is prefigured in political philosophy and in related notions like "collective consciousness" (Carl Jung). It emerged later in the study of social insects, and then in the synergies of open source, networked and social media technologies based on the Internet.

In an early application in 1785, the Marquis de Condorcet wrote *Essai sur l'application de l'analyse à la probabilité des décisions rendues à la pluralité des voix* (Essay on the Application of Analysis to the Probability of Majority Decisions). The essay includes what is known as *Condorcet's jury theorem* that gives the relative probability of a given group of individuals arriving at a correct decision. His theorem has led to studies of the logic of majority judgements (Hawthone, 2009) and to notions of epistemic democracy (List & Goodin 2001), where the concern is more for the social-decision tracking of truth than fairness, though democracy can be justified either way. This approach seeks to generalize Condorcet's jury theorem. Elizabeth Anderson investigates the epistemic powers of democratic institutions through an assessment of three epistemic models of democracy, including the Condorcet Jury Theorem, to argue for Dewey's experimentalist model that defined "democracy as the use of social intelligence to solve problems of practical interest (Dewey 1981; Putnam 1990)" (Anderson, 2006: 13). David Estlund (2007) explains that there is a great deal of variety in epistemic approaches to democracy based on the value of free public discourse that epistemologically guides political practice.

Others philosophers have assumed that there is an intimate connection between epistemology and democracy — Rousseau, Mill, Peirce, Dewey, Habermas, Rawls, and Rorty. In particular, for me it is useful to focus on Peirce's accounts of the logic of the "community of inquiry."

PJ: Please allow me to bring this conversation to an end with a brief introspective look. You, I, and many other academics throughout the world, spend our days reading, writing and talking. Doing science has always been a privilege — and the one that should be enjoyed with responsibility and care. What happens to this privilege in the age of cognitive capitalism? How can we transform our (digital) labor from perpetuation of capitalism towards subversion?

MP: A great question — all your questions have been insightful and I have enjoyed collecting my thoughts to answer them. Doing science is a privilege and a responsibility, I agree entirely. And we should never forget to theorize our own privilege nor take for granted our position as scholars and researchers — especially, but not only, when our work involves human subjects — children or members of a disadvantaged group. These are ethical questions and there have been on-going debates about research ethics and "western science" now for some years. In psychology, especially the question of informed consent has often gone unnoticed. In the era of cognitive capitalism, digital labor becomes the commodity. Then, education at all levels is co-opted into providing "digital labor" in the same way that factory owner of the industrial age demanded "skilled labor." In the first instance, we have to understand the position of the school and the university under cognitive capitalism. We need to understand and deconstruct "the epoch of digital reason" and all of its manifestations as they unfold historically. As we do this, we can see asymmetries of power that can be exploited, and new assemblages and opportunities to develop new forms of openness. These forms may be represented as a set of overlapping shared spaces that might reconstitute "the social" at the global level: social media, social production, social innovation, social democracy. All thrive on collective intelligence and what I call "creative labor." Creative labor that theorizes creativity from the point of labor rather than capital is the antithesis of human capital and points towards a cultural evolution that some have referred to as "cognitive economy" or "cognitive capitalism". I am not as optimistic as Hardt and Negri, but I do see new social potential in this emerging paradigm.

References:

Anderson, E. (2006). The Epistemology of Democracy. *Episteme: A Journal of Social Epistemology* 3(1), 8–22.

Assange, J., Appelbaum, J., Müller-Maguhn, A., & Zimmermann, J. (2012). *Cypherpunks: Freedom and the future of the Internet*. New York: OR Books.

Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton.

Chomsky, N. (1965). *Aspects of a Theory of Syntax*. Cambridge, MA: MIT Press.

Deleuze, G. (1995). *Negotiations 1972-1990*. New York: Columbia University Press.

Dewey, John (1981). Creative Democracy: The Task before Us. In The Later Works of John Dewey, 1925–1953, vol. 14, Essays, ed. J.A. Boydston, 224–30. Carbondale, IL: Southern Illinois University Press.

Engels-Schwarzpaul, A. C. & Peters, M. A. (Eds.). (2013). *Of Other Thoughts: Non-Traditional Ways to the Doctorate: A Guidebook for Candidates and Supervisors*. Rotterdam, Boston, Taipei: Sense.

Estlund, D. M. (2007). *Democratic Authority: A Philosophical Framework.* Princeton: Princeton University Press.

Feyerabend, P. (1993[1970]). *Against Method.* London: Verso.

Foucault, M. (1982). Technologies of the Self. In L.H. Martin, H. Gutman & P.H. Hutton (Eds.). *Technologies of the Self: A Seminar with Michel Foucault*. Amherst: The University of Massachusetts Press, 16–49.

Gorbachev, M. (2014). Необходимо вернуться к новому мышлению. *Novaya Gazeta*, 99(5). Retrieved 22 July 2015 from http://www.novayagazeta.ru/comments/65126.html.

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 (pp.45–67). Chicago: Precedent 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 2013. Retrieved 22 March 2015 from https://www.nitrd.gov/nitrdgroups/images/9/92/Farnam_Jahanian_-The_Promise_of_Big_Data.pdf.

Jandrić, P. & Kuzmanić, A. (2015). Digital Postcolonialism. In P. Kommers, P. Isaias (Eds.), *Proceedings of 13th International Conference on e-Society.* Madeira: IADIS, 87–94.

Lasn, K. & Elliott, J. (2011). The origins of Occupy Wall Street explained: an interview. *Salon*, 4 October 2011. Retrieved 22 March 2015 from http://www.salon.com/2011/10/04/adbusters_occupy_wall_st/.

List, C. & 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.

Marquis de Condorcet (1785). *Essai sur l'application de l'analyse á la probabilité des décisions rendues á la pluralité des voix*. Retrieved 22 March 2015 from http://gallica.bnf.fr/ark:/12148/bpt6k417181.

Microsoft Research. (2009). The Fourth Paradigm: Data Intensive Scientific Discovery. Retrieved 22 March 2015 from http://research.microsoft.com/en-us/collaboration/fourthparadigm/.

Moore, A. & Himma, K. (2014). Intellectual Property. In E.N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition). Retrieved 7 March 2015 from http://plato.stanford.edu/archives/win2014/entries/intellectual-property/.

Murphy, P.; Peters, M. Marginson, S. (2010). *Imagination: Three Models of Imagination in the Age of the Knowledge Economy*. New York: Peter Lang.

Peters, M. (2012c). Knowledge Cultures. Retrieved 22 March 2015 from http://www.addletonacademicpublishers.com/knowledge-cultures.

Peters, M. & Olssen. M. (2011). Neoliberalism, Higher Education and Knowledge Capitalism. In M. Peters, *Neoliberalism and After?: Education, Social Policy, and the Crisis of Western Capitalism.* New York: Peter Lang, pp. 42–74.

Peters, M. (2010). Model Three: Re-Imagining Education. In P. Murphy, M. Peters & S. Marginson, *Imagination: Three Models of Imagination in the Age of the Knowledge Economy*. New York: Peter Lang, 329–382.

Peters, M. (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. & Besley, T. (2006). *Building knowledge cultures: Education and development in the age of knowledge capitalism.* Lanham, MA: Rowman & Littlefield.

Peters, M. A. & Besley, T. (2006). *Building knowledge cultures: Education and development in the age of knowledge capitalism.* Lanham, MA: Rowman & Littlefield.

Peters, M. A. & Besley, T. (2013). *The Creative University*. Rotterdam: Sense.

Peters, M. A. & Bulut, E. (Eds.). (2011). *Cognitive capitalism, education and digital labor.* New York: Peter Lang.

Peters, M. A. & Jandrić, P. (2015a). Philosophy of education in the age of digital reason. *Review of Contemporary Philosophy*, 14.

Peters, M. A. & Jandrić, P. (2015b). Learning, creative col(labor)ation, and knowledge cultures. *Review of Contemporary Philosophy*, 14.

Peters, M. A. & Marshall, J. (1999). Wittgenstein: Philosophy, Postmodernism, Pedagogy. New York: Bergin and Garvey.

Peters, M. A. & Patel, R. (2010). Philosophy's pedagogies — Dialogue or street talk? *Nordic Studies in Education*, 4, 201–213.

Peters, M. A. & Roberts, P. (2012). *The Virtues of Openness: Education, Science and Scholarship in the Digital Age*. Boulder, London: Paradigm.

Peters, M. A. (1999). *After the Disciplines: The Emergence of Cultural Studies*. Westport, CT: Bergin & Garvey.

Peters, M. A. (2001a). *Poststructuralism, Marxism and Neoliberalism: Between Theory and Politics*. Lanham, Boulder, New York, Oxford: 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 & P. Trifonas (Eds.), *The International Handbook of Virtual Learning Environments*. Dordrecht (The Netherlands): Springer, pp. 95–116.

Peters, M. A. (2009). *Academic Writing, Philosophy and Genre*. London: Wiley-Blackwell.

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. (forthcoming). Disciplinary Technologies and the School in the Epoch of Digital Reason. In S. Gallo & A. Filordi (Eds.), *Foucault's Discipline and Punish after forty years*.

Peters, M. A.; Liu, T. C.; Ondercin, D. J. (2012). *The Pedagogy of the Open Society: Knowledge and the Governance of Higher Education.* Rotterdam, Boston, Taipei: Sense.

Peters, M. P. (2012a). Western Models of Intercultural Philosophy. In T. Besley & M. Peters (Eds.), *Interculturalism, Education and Dialogue.* New York, Bern, Berlin, Bruxelles, Frankfurt am Main, Oxford, Wien: Peter Lang, 29–52.

Peters. M. A. & Britez, R. G. (2008). *Open Education and Education for Openness*. Rotterdam, Boston, Taipei: Sense.

Peters. M. A. (2012). *Obama and The End of the American Dream: Essays in Political and Economic Philosophy*. Rotterdam, Boston, Taipei: Sense.

Peters. M. A.; Burbules, N. C. & Smeyers, P. (2008). *Showing and Doing: Wittgenstein as a Pedagogical Philosopher*. Boulder, CO: Paradigm.

Popper, K. (1974). *The Open Society and Its Enemies*. London: Routledge and Kegan Paul.

Putnam, H. (1990). A Reconsideration of Deweyan Democracy, *Southern California Law Review* 63: 1671–97.

Roberts, P. (2014). Endless Energy: Portrait of an Intellectual. In G Lăzăroiu, *Liber amicorum: A Philosophical Conversation among Friends*. New York: Addleton Academic Publishers, pp. 24–31.

Rushkoff, D. (2011). Think Occupy Wall St. is a phase? You don't get it. CNN, 5 October 2011. Retrieved 22 March 2015 from http://edition.cnn.com/2011/10/05/opinion/rushkoff-occupy-wall-street/index.html.

Science Editorial Collective. (2011). Special Online Collection: Dealing with Data. *Science*, 11 February 2011. 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, *Liber amicorum: A Philosophical Conversation among Friends*. New York: Addleton Academic Publishers, pp. 1–24.

Stiegler, B. (2014). The digital future of the university. Retrieved 22 March 2015 from http://www.samkinsley.com/2014/01/15/the-digital-future-of-the-university-stiegler/.

Ther, P. (2009). *A Laboratory of Transnational History: Ukraine and Recent Ukrainian Historiography*. Budapest: Central European University Press.

The Economist. (2010). The data deluge. The Economist, 25 February. Retrieved 22 March 2015 from http://www.economist.com/node/15579717.

Turner, F. (2006). *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago: University of Chicago Press.

Turner, F. (2013). *The Democratic Surround: Multimedia and American Liberalism from World War II to The Psychedelic Sixties*. Chicago: University of Chicago Press.

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.

Майкл Пітерс, Петар Яндрич. **Філософська педагогіка в добу культур знань.**

Дана бесіда є скороченою версією статей «Філософія освіти в епоху цифрового розуму» (Peters & Jandrić, 2015a) і «Навчання, творче співробітництво і культури знань» (Peters & Jandrić, 2015b). Бесіді передує звернення до українських філософів освіти, підписане Майклом Пітерсом, Тіною Безлей і Петаром Яндричем. У першій частині бесіди Майкл Пітерс обговорює філософію освіти «в» і «для» доби цифрових медіа та презентує свою роботу за трьома взаємопов'язаними темами: філософія, політична економіка знань і академічні публікації. У другій частині розмови вводяться поняття «філософія як педагогіка» і «філософія технології» Майкла Пітерса. В третій частині бесіди досліджується цифровий постколоніалізм, презентована одвічна захопленість Майкла Пітерса Людвігом Вітгенштайном, аналізується поява культур знань та їхнє відношення до навчання. В четвертій частині розкривається динаміка між відкритістю, капіталізмом і анти-капіталізмом, також використовуються різні сучасні приклади, щоб пов'язати цю динаміку з демократією. У п'ятій частині бесіди показано спрямованість кібернетичного капіталізму на навчання і виробництво знання, розробляється механізм відкритої освіти. В останній, шостій частині бесіди, досліджено практичні та епістемологічні наслідки таких підходів як «усі з усіма» та «мудрість групи». Це засвідчує, що заняття наукою є привілеєм і обов'язком, та вказує у бік трансформації наукової праці від увічнення капіталізму до його повалення.

Ключові слова: *філософія освіти, діалог, філософія як педагогіка, епістемологія, цифровий постколоніалізм, універсалізм, кібернетичний капіталізм, відкритість, спів(праця), культури знань, колективний розум, творча праця.*

Майкл Питерс, Петар Яндрич. **Философская педагогика в эпоху культур знаний.**

Данная беседа является сокращенной версией статей «Философия образования в эпоху цифрового разума» (Peters & Jandrić, 2015a) и «Обучение, творческое сотрудничество и культуры знаний» (Peters & Jandrić, 2015b). Беседе предшествует обращение к украинским философам образования, подписанное Майклом Питерсом, Тиной Безлей и Петаром Яндричем. В первой части беседы Майкл Питерс обсуждает философию образования «в» и «для» эпохи цифровых медиа и представляет свою работу по трем взаимосвязанным темам: философия, политическая экономика знаний и академические публикации. Во второй части разговора вводятся понятия «философия как педагогика» и «философия технологии» Майкла Питерса. В третьей части беседы исследуется цифровой постколониализм, представлена вечная увлеченность Майкла Петерса Людвигом

Витгенштейном, анализируется появление культур знаний и их отношение к обучению. Четвертая часть раскрывает динамику между открытостью, капитализмом и анти-капитализмом, также используются различные современные примеры, чтобы связать эту динамику с демократией. В пятой части беседы показана направленность кибернетического капитализма на обучение и производство знаний, разрабатывается механизм открытого образования. В последней, шестой части беседы исследованы практические и эпистемологические последствия таких подходов, как «все со всеми» и «мудрость группы». Это показывает, что занятия наукой является привилегией и обязанностью, и указывает в сторону трансформации научной работы от увековечения капитализма к его свержению.

***Ключевые слова**: философия образования, диалог, философия как педагогика, эпистемология, цифровой постколониализм, универсализм, кибернетический капитализм, открытость, со(труд)ничество, культуры знаний, коллективный разум, творческая работа.*

***Michael PETERS** is Professor of Education at Waikato University (New Zealand), mpeters@waikato.ac.nz*

***Petar JANDRIĆ**—(PhD) is Professor in e-Learning and Programme Director of BSc (Informatics) at the University of Applied Sciences in Zagreb (Croatia), pjandric@tvz.hr*

***Tina BESLEY** is currently Director of Global Studies in Education at the University of Waikato and is Vice-President of the Philosophy of Education Society of Australasia (PESA), t.besley@waikato.ac.nz*

***Майкл ПІТЕРС**—професор освіти в Університеті Вайкато (Нова Зеландія), mpeters@waikato.ac.nz*

***Петар ЯНДРИЧ**—(PhD,) професор електронного навчання та програмний директор з бакалаврської підготовки (інформатика) в Університеті прикладних наук в Загребі (Хорватія), pjandric@tvz.hr*

***Тіна БЕСЛЕЙ** – Директор глобальних студій з освіти в Університеті Вайкато, вице-Президент Товариства філософії освіти Австралії (PESA), t.besley@waikato.ac.nz*