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On the Future of the Humanities

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About Insights

Insights captures the ideas and work-in-progress of the Fellows of the Institute of Advanced Study at Durham University. Up to twenty distinguished and 'fast-track' Fellows reside at the IAS in any academic year. They are world-class scholars who come to Durham to participate in a variety of events around a core inter-disciplinary theme, which changes from year to year. Each theme inspires a new series of *Insights*, and these are listed in the inside back cover of each issue. These short papers take the form of thought experiments, summaries of research findings, theoretical statements, original reviews, and occasionally more fully worked treatises. Every fellow who visits the IAS is asked to write for this series. The Directors of the IAS – Michael O'Neill, Colin Bain, Barbara Graziosi and Tony Wilkinson – also invite submissions from others involved in the themes, events and activities of the IAS. *Insights* is edited for the IAS by Michael O'Neill.

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ON THE FUTURE OF THE HUMANITIES

How can the humanities change what they study? How can literary manifestos transform literature, while philosophy produces new alternative worlds? This article offers a fresh look at the old division between theoretical and practical fields of knowledge and suggests futuristic direction for the humanities. The concept of 'trans-humanities,' the transformative humanities, emphasizes the constructive rather than purely explorative aspect of humanistic inquiry.

Imagination is more important than knowledge.
Knowledge is limited. Imagination encircles the world.
Albert Einstein

One day, in the not too distant future, we may find the humanities an extinct species among academic disciplines. A recent article in the *Boston Globe* puts it clearly:

> At college campuses around the world, the humanities are hurting. Students are flocking to majors more closely linked to their career ambitions. Grant money and philanthropy are flowing to the sciences. And university presidents are worried about the future of subjects once at the heart of a liberal arts education (November 8, 2010).

The statistics are eloquent. In the last 40 years, the number of students majoring in the humanities in the US has declined by more than half, from 17% to 8%, according to the American Academy of Arts and Sciences. Even Harvard, that citadel of liberal education, has witnessed a rise in sciences and engineering majors (now comprising nearly a third of the undergraduate population), as well as in economics (11%) at the expense of English and history majors, which now each account for a mere 3%. All this serves to confirm Martha Nussbaum's diagnosis:

> The humanities and the arts are being cut away, in both primary/secondary and college/university education, in virtually every nation of the world. Seen by policy-makers as useless frills, at a time when nations must cut away all useless things in order to stay competitive in the global market, they are rapidly losing their place in curricula, and also in the minds and hearts of parents and children (Nussbaum, 2010, p. 2).

All this is true. But before asking society to embrace once again the value of the humanities, we should ask ourselves: what do the humanities do for society? How many ideas coming from the milieu of literary, philosophical and historical departments have recently achieved any international prominence, or at least at the level of interdisciplinary academic debates? Can we imagine the next era being heralded by the appearance of a particular treatise on aesthetics, a philological study, philosophical aphorisms or poetic meditations? Not by scientists, politicians or technologists, but a new Novalis or Schlegel brothers, Byron or Hugo? Physics and genetics, medicine and informatics, cosmology and sociology invest heavily in the climate of intellectual innovation. Ideas from these fields easily cross the thresholds of their mother disciplines. This has ceased to be the case with the humanities. As the humanities retreat from the forefront of history and society, losing their transformative thrust, humanities departments risk losing their best and brightest to other fields.

I believe that humanists should be responsible enough to accept at least part of the blame for the decline of their professions, rather than pointing an accusing finger at the job market, the economic crisis, the greed of corporations, the indifference of the government, shallow consumerism, superficial obsession with new technologies, etc. Unfortunately, the prevailing tone of contemporary works on the state of the humanities is one of lamentation and resentment. John Paul Russo of the University of Miami paradoxically ends his chapter, 'The Future of the Humanities in a Technological Society,' with an appeal to the monastic tradition:

> [I]t is worthwhile to recall that monastic refuge happened once in Western culture and the humanities survived. The light of learning at Lindisfarne and Citeaux, at St. Gall and Monte Cassino, could be rekindled by an apprenticeship to the word in the midst of our necessary participation in technological society. As Burckhardt said, the culture of the West may once again be saved by ascetics (Russo, 2005, p. 42).

However picturesque the image of the humanities taking refuge in monasteries may be, I believe that the humanities are worthy of a better future, and one very different from their past. The crisis in the humanities is first and foremost a crisis of imagination. There is no future for those disciplines and methods that turn away from the future. The reaction I often encounter in response to the title of my work in progress, 'The Future of the Humanities,' is surprise: 'Do you really believe that the humanities have a future?' I do indeed believe in the future of the humanities, but in order to have a future, the humanities should be open to it. For the last three decades they have been hypnotized by the past.

From 'Post-' to 'Proto-'

If we try to single out one specific term or concept that dominated the late twentieth-century humanities, it would be neither a noun nor an adjective, but a prefix – 'post-'. *Postmodernism*, *poststructuralism*, *postcommunism*, *postcolonialism* and many other 'posts' were regularly attached to both nouns and adjectives, and sometimes even verbs ('to postmodernize'). The magic of this prefix allowed theoreticians to put any concept under the sign of its transcendence, relegating the term to the past.

This mode of innovation, however, was ambivalent and, in a certain sense, self-defeating, because it presumed a new concept's dependence on the past. For example, *post-structuralism* describes a theoretical position that claims to supersede structuralism; ironically, it binds itself to the very concept (structuralism) it attempts to overcome. 'Post-historicism' binds itself to historicism, 'post-utopianism,' to utopianism. This irony becomes even more evident with the proliferation of 'posts' themselves, signifying new stages of their self-transgression. A typical example of this 'post-post' discourse can be found on a website devoted to academic philosophy:

> Recent debates within the humanities have explored the alleged time of post-history, post-postmodernity, post-art, post-capitalism, post-philosophy, post-poststructuralism, post-gender, post-race, post-metanarratives: the list is as un-ending as the debates themselves (http://www.um.edu.mt/news/philosophysoc.html).[1]

At the turn of the twenty-first century, however, we are witnessing a major shift in cultural attitudes: from retrospectivism to prospectivism. We live not so much *after* (modernity, structuralism, communism), as in the very beginning of a new epoch, whose features must now be more positively characterized in terms of 'proto-' rather than 'post-': *proto-global*, *proto-informational*, *proto-virtual*, and *proto-cyborgian*, to name but a few.

'Proto-' (from the Greek *protos* – the first, the initial, the tentative) describes the mindset of the early twenty-first century. *Proto-* signals a humble awareness of the fact that we live in the earliest stage of the unknown civilization; that we have touched some secret sources of power and knowledge that can eventually destroy us; that all of our glorious achievements are only pale prototypes of what the coming bio- and info- technologies are pregnant with. We are dwarfed by the very grandeur of this perspective and are aware of our own fragility in the face of the unpredictable future. Nietzsche expressed this *proteic* sensitivity in his *Gay Science*: 'We, the new, the name-less, the hard-to-understand, we firstlings of a yet untried future – we require for a new end also a new means [...]' (Nietszche, 1910, p. 351).

To take one example, our civilization can be called *proto-global*, because the term 'global' in fact implies a civilization that has mastered all sources of energy on the earth and is able to regulate its climate completely, a condition that, according to the Russian astrophysicist Nikolai Kardashov, might take about three to four hundred years to achieve.

Prominent scientists such as Stephen Hawking and Edward O. Wilson are among the many who clearly define the character of our time as *proto-*, rather than *post-*. As Hawking writes in his book *The Universe in a Nutshell*, 'Now we are at the beginning of a new era, in which we will be able to increase the complexity of our internal record, the DNA, without having to wait for the slow process of biological evolution' (Hawking, 2001, p. 165). This implies that our present condition is *proto-biotechnic*. Wilson, a leading figure in contemporary biosciences, remarks in his book *Consilience: The Unity of Knowledge* that 'predictive syntheses [between various branches of knowledge], the ultimate goal of science, are still in an early stage, and especially so in biology' (Wilson, 1999, p. 136). Thus, the current stage of interdisciplinary co-operation can be called *proto-synthetic*. As Britain's leading futurologist, James Martin, writes in his recent book:

> The true computer revolution is yet to come – with ubiquitous sensors, nanotechnology, global data warehouses and totally pervasive access to networks of extreme bandwidth. The main reason the true computer revolution is ahead of us is that machines will become intelligent. Computers can be immensely more powerful than the human brain because their circuits are millions of times faster than the neurons and axons of the brain [...]. We are now seeing the first baby steps of this new intelligence (Martin, 2006, pp. 207, 219).

Thus, the current stage of computing can be called 'proto-electronic' or 'proto-cybernetic.'

Such examples of the '*proto-*' are ubiquitous at the turn of the twenty-first century. The growing power of computers presents some evidence of artificial *proto-intelligence*; genetic and cloning experiments, of artificial *proto-life*; and electronic networks of *proto-global* community and collective *proto-mind*. I call this new world outlook, specific to the early twenty-first century, *proteism*, investing this term with several interrelated meanings:

1. Proteism is an alternative to postmodernism and other instances of *post-*. *Proto-* defines itself vis-à-vis the coming future, not the past;

2. Proteism studies emerging, not yet-formed phenomena in the earliest fluid stage of their development, when they only promise or tend to become, rather than exist. Proteism deals with beginnings, not with middles or ends; it approaches each phenomenon as if it were a sketch or a draft;

3. The term proteism refers to the figure of Proteus in ancient Greek mythology, the deity of the seas and waves, who was famous for his power to assume any shape at will, transforming into

fire, water, trees and animals. Civilization of the future is *proteistic* because it consists of flows of energy and information that easily change their material form. In Francis Bacon's allegory 'Proteus or Matter,' Proteus is viewed as a symbol of all changing matter. But if Bacon had a chance to witness the discovery of nuclear power, radiation, light waves or gravitation fields he would probably change his point of view: matter is rather the principle of stasis, or arrested motion, as compared with the proteism of energy and the even greater proteism of information, which can be transmitted in the package of words, numbers, formulas, genes, organisms, light rays, quantum interactions. Finally it is possible that even human beings, as the father of cybernetics Norbert Wiener assumed, are informational matrices that can be transmitted by cable or wirelessly.

4. *Proteism* is not only a research methodology, but also a field of self-consciousness and dramatic sensitivity. Proteism is an elegiac optimism that in the birth of new things foresees their near demise and is imprinted with a sense of both embryology and archeology. We are embryos of the distant future civilization and at the same time relics of its remote past.

In further elucidating these ideas, I will make continued reference to Mikhail Bakhtin, who proposed, among many other things, the concept of 'embryonic genres'; this idea can usefully be applied to many cultural formations whose birth we are witnessing today. Bakhtin notes with regret the state of literary studies:

> What we foreground is the *ready-made* and *finalized*. Even in antiquity we single out what is ready-made and finalized, and not what has originated and is developing. We do not study literature's preliterary embryos (Bakhtin, 1986a, p. 139).

Elsewhere, Bakhtin opposes two fundamental theoretical tenets – 'finalizing' and 'initiating' – or, in our terminology, 'post-' and 'proto-.' Each offers a different approach to the question of

> genre as a definite (essentially, petrified) whole, and [of] embryonic genres (thematic and linguistic), with a still undeveloped compositional skeleton, so to speak, the 'first signs' of a genre (1986b, p. 513).

The prefix 'proto-,' with which I propose to designate the 'first signs' of a genre, would reflect a radical Bakhtinian transition from finality to initiation as a mode of thinking. Post-post-postmodern culture suddenly views itself as a proto-global, proto-virtual, proto-biotechnic, proto-synthetic culture. Thinking in terms of beginnings and initiations presupposes an open future, rather than a consummation of the past. Everything that the previous generation perceived under the sign of 'post-,' this generation views as 'proto-'; not as a completion, but rather as a first draft of new cultural formations.

Since the 1970s, the humanities have been issuing a series of death sentences to culture, as if they were presiding at a military tribunal: the death of metaphysics, the death of author, the death of history, of Utopia, of originality, of humanity, and so on, until, and as a consequence, the *death of the humanities themselves*. Now it becomes clear that the Socratic art of philosophical midwifery, assisting at the birth of the new, is a more appropriate vocation for the humanities. The Bakhtinian 'embryonic approach' to nascent genres and cultural formations is an important contribution to this ancient Socratic tradition.

The Transformative Humanities

> Mental interests, hypotheses, postulates, so far as they are bases for human action – action which to a great extent transforms the world – help to make the truth which they declare.
>
> William James

The future-oriented humanities must not limit themselves to scholarship, but rather should seek to create their own ways to change what they study, to transform the human world. The creative aspect of the humanities has not yet found its recognition in the established classification and methodology of scientific disciplines. The crucial question that faces us may be formulated as follows: are the humanities a purely scholarly field, or should there be some active, constructive supplement to them? We know that technology serves as the practical extension ('application') of the natural sciences, and politics as the extension of the social sciences. Both technology and politics are designed to transform what their respective disciplines study objectively: nature and society. Is there, then, any activity in the humanities that would correspond to this transformative status of technology and politics? In the following schema, the third line demonstrates a blank space, indicating the open status of the practical applications of the humanities:

Nature	–	natural sciences	–	*technology*	–	transformation of nature
Society	–	social sciences	–	*politics*	–	transformation of society
Culture	–	the humanities	–	?	–	transformation of culture

There is a coherent connection between theoretical and practical disciplines regarding the exploration and transformation of nature and society; but the third line in this schema suggests that we need a *practical branch of the humanities*, which will function like technology and politics, but which is specific to the cultural domain.

What are we to call such a new, practical branch of the humanities? Naming is sometimes the best way to define a problem; a name contains the embryo of a concept and the beginning of future theory. Several terms can be suggested that could operate in that blank space (the current embryonic stage of theorizing leaves the future open to multiple possibilities):

Culturonics might denote a discipline that deals with culture practically, in the mould of 'electronics,' 'bionics,' 'avionics,' 'tectonics' (the art of building), 'mnemonics' and other 'applied,' constructive disciplines;

Pragmo-humanities would suggest that the humanities have a pragmatic aspect that regulates the relationship between their practitioners and users, their authors and addressees;

Techno-humanities would refer to the *art of the humanities*. This includes the art of building new intellectual communities, new paradigms of thinking and modes of communication, rather than simply studying or criticizing the products of culture. We should bear in mind that the humanities constitute the level of *meta-art*, different from the primary arts of literature, painting, or music, all of which comprise the object of humanistic inquiry. The fact that the humanities belong to this meta-discursive level does not preclude their practical, productive orientation. The humanities do not produce works of art, but rather generate new cultural positions, movements, perspectives, and modes of reflexivity. The concept of *techno-humanities* does not imply that the humanities should steal the idea of 'techno' from scientific technology; on the contrary, it was technology that stole 'techno' (Greek '*techne*' – 'art, skill, craft') from the humanities. Now it is time for its re-appropriation. By utilizing this term 'techno,' we do not intend to 'scientize' the humanities, but, on the contrary, to draw them closer to art, to creativity in the sphere of ideas and communications.

However, the broadest term for this transformative branch of the humanities would be the *transhumanities*; that is, the humanities that aim to transform the area of their studies. The transformative humanities encompass all humanistic technologies, all practical applications of cultural theories. When offering a certain theory, we need to ask ourselves if it is able to

inaugurate a new cultural practice, an artistic movement, a disciplinary field, a new institution, life-style, or intellectual community.

I will give an example of what I understand by the transhumanities. The main insights of literary theory, as we study its innovative ideas and peak achievements, are found not in scholarly monographs or articles, but in literary manifestos. These are products of theoretical imagination, rather than of empirical study and scholarly scrutiny. The manifestos of Neoclassicism, Romanticism, Naturalism, Symbolism, Futurism, Surrealism, etc. are not based on the discipline of research; that is, the 'careful, systematic, patient study and investigation in some field of knowledge,' as it is defined by the Webster Dictionary. Manifestos proclaim new literary movements and cultural epochs, and they initiate these movements by the very act of their announcement. Manifestos are performative rather than descriptive speech acts; they implement what they pronounce.

The majority of the key concepts that laid the ground for literary studies in the past initially came from these imaginative proclamations, which were not supported by any systematic research. What are irony and the grotesque, what are image and symbol, what are 'naïve' and 'sentimental,' what is a poetic landscape or realistic character: all of this we know primarily from manifestos. Later academic scholars have contributed to the clarification and interpretation of these concepts; but, as a rule, the founders of new literary movements are not the scholars – they are a separate rank of creators, the creators of ideas and theories, transformative thinkers, humanistic inventors.

Under which existing academic categories can this constructive activity of theory be placed? Does it belong to the realm of scholarship or literary fiction? It quite clearly belongs to neither. Manifestos are neither factual nor fictional – they are *formative*. They aim to produce new literary facts, rather than to register and analyze existing facts, past and present. The proper place of manifestos is precisely in the as yet unmarked domain of *theoretical inventions*, or the *transhumanities*. The humanities should embrace both modes of cognitive advancement recognized by the sciences: *discovery* of some existing principles and facts, and *invention* of those tools and ideas that can transform a given area of study. *Inventorship*, as a mode of creativity, should become as indispensable a companion to scholarship in the humanities as technology is to science. The transhumanities can be defined in Bakhtin's words as 'the co-creativity of those who understand [culture],' as the constructive and transformative potential of cultural theories.

Our academic institutions, however, currently have no place for such peculiar avenues of conceptual creativity. There are departments for literary theory and scholarship ('comparative literature'); departments or programs for fiction and creative writing; but not for constructive writing in 'practical theory,' nor for the transhumanities.

Is there any institution in contemporary academia in which creative thinkers, *literary inventors and builders* like Friedrich Schlegel, Vissarion Belinsky, Friedrich Nietzsche, André Breton or Walter Benjamin could flourish as professionals? Imagine Friedrich Nietzsche applying for the position of assistant professor at a department of philosophy somewhere in the United States. He brings his book *Thus Spake Zarathustra* as confirmation of his credentials. A book without a single reference, with no list of sources, devoid of scholarly apparatus, and full of pompous and vague metaphysical declarations voiced by the arrogant author in the guise of an ancient Persian prophet. Most likely Nietzsche would be denied even the position of an instructor, despite the fact that dozens of full and distinguished professors of philosophy have made their careers studying Nietzsche's oeuvre and commenting on his philosophy of the superman.

Nietzsche himself was not a researcher in the academic sense of the word. He was a seeker and visionary, the inventor of ideas that inspired a number of highly influential social, artistic and philosophical movements in the twentieth century.

The contemporary academy dismisses humanistic inventorship, despite holding it in such high retrospective esteem. The views, works and biographies of humanistic inventors are deemed worthy objects of extensive and scrupulous academic study. Yet the very constructive impetus of their writing, its 'inventive' genre, lacking proper documentation and scholarly 'apparatus,' would undoubtedly prevent them from entering academia. This paradox can be compared to the improbable scenario in which a university would exclude an engineering school or computer technology department on the grounds that, unlike departments of physics or chemistry, they deal with inventions and not discoveries. Engineering in the humanities is no less important.

The academy's failure to recognize the cognitive status of the transhumanities raises the question of whether various intellectual capacities are adequately represented at our universities. According to Alfred North Whitehead, one of the most outstanding philosophers of the twentieth century, 'the task of a University is the creation of the future, so far as rational thought, and civilized modes of appreciation, can affect the issue' (Whitehead, 1938, p. 233). Humanistic inventorship, even more directly than humanistic scholarship, shapes our future. For the humanities to survive, and to enhance their intellectual impact on contemporary society, their transformative branches need to be recognized and institutionalized in contemporary universities by means of the establishment of programs in creative thinking, in humanistic technologies and humanistic inventions. The Academy needs creative minds in these fields no less than they need the Academy.

From Multicultural to Transcultural

> A primary function of art and thought is to liberate the individual from the tyranny of his culture in the environmental sense and to permit him to stand beyond it in an autonomy of perception and judgment.
>
> Lionel Trilling

According to Bakhtin, 'the most intense and productive life of culture takes place on the boundaries of its individual areas and not in places where these areas have become enclosed in their own specificity' (Bakhtin, 1986a, p. 2). This by now well-known statement carries a special relevance for our *proto-global* age. Is the 'multicultural' model – the pluralistic world of self-enclosed cultures, each valuable in itself – sufficient for understanding new cross-cultural flows? Instead, do global studies have to develop a new model that will challenge the 'mosaic' structure of multiculturalism, as multiculturalism earlier challenged the 'melting pot' model and the idea of a 'universal' cultural canon? Assuming that the most beautiful patterns in culture (as in nature) are created by overlapping waves coming from various traditions, epochs and disciplines, can we move now from the model of 'difference' (or *différance*) that dominated the humanities in the 1970s–1990s to a model of *inter-ference*?[2]

'Interference' is not intended here as an intrusion or intervention, but, in line with its definition in physics, as denoting the mutual action of two or several waves of sound and light. The *interferential* model in cultural studies may succeed models based on one-directional 'influences' of mono-cultural canons or impenetrable 'differences' of multicultural diversity. This interferential model no longer isolates cultures from each other; rather, it opens perspectives

of their self-differentiation and mutual involvement. While recognizing all cultures as valuable in themselves, the Bakhtinian approach invites us nonetheless to take the next step. Cultures are inherently insufficient when isolated from one another. They need to develop the quality of *humility* and openness to each other, rather than revel in the 'pride' of self-identity and self-aggrandizement. According to Bakhtin, 'only in the eyes of an alien culture, does another culture open itself in a fuller and deeper way' (1986a, p. 7). Persons cannot fully visualize their own faces; only others can see their true appearance. Thus, paradoxically, the distinctiveness of Russian culture may be more deeply perceived by non-Russians; the distinctiveness of 'white' culture, by 'non-whites,' and so forth. Bakhtin's concept of *vnenakhodimost'*, 'outsideness,' is not only an advantageous situation for understanding, but its prerequisite.

This interferential approach leads us from multiculturalism to transculturalism. Transculturalism is not just a method of cultural studies based on the value of 'outsideness,' but also a mode of being located at the crossroads of cultures. Culture, by releasing us from physical limitations, imposes new limitations of a symbolic order: its own idiosyncrasies, manias, phobias, ideological assumptions and restrictions, modes of indoctrination, and informational filters. Transculture is the next step in the ongoing human quest for freedom, in this case the liberation from the 'prison-house of language' and a variety of self-imposed and self-deifying cultural identities.

Of course, transculture does not fully release us from our 'primary' cultural bodies, just as culture does not release us from our physical bodies. Each successive sphere of existence – nature, culture, transculture – is irreducible to the previous one and changes its meaning. We may characterize freedom achieved through transculture once again in the words of Bakhtin: '[it] cannot change existence, so to speak, materially (nor can it want to) – it can change only the *sense* of existence (1986a, p. 137). Natural objects, such as stone or water, change the *sense* of their existence as they are interwoven in the context of various cultures. Similarly, a certain cultural tradition, ritual, or symbol (such as ethnic food or a literary convention) changes the *sense* of its existence as it is interwoven in the expanding transcultural context. A simple example: for a contemporary New Yorker, rice has a different taste than for a medieval Chinese peasant who has never tasted anything like French roquefort, Russian bliny or Italian spaghetti.

In the same way that artists choose colors to combine them creatively in their paintings, transculture offers a universal symbolic palette on which any individual can blend colors to produce an expressive self-portrait. As a transcultural being, I can subscribe to any ethnic or confessional tradition and decide the degree to which I make it my own. I am not chained to my pre-existent cultural identity that allegedly has grown from my physical identity, my origin, ethnicity, gender, etc. The generous and expansive transcultural space gives a new meaning to all elements of existing cultures in terms precisely of their 'outsideness' or 'being located beyond.' This realm *beyond* all cultures is located *within* transculture (see also Berry and Epstein, 1999, pp. 1–6, 15–27, 79–90).

Knowledge as an Instrument of Thinking

The primary duty of academia and academics is usually perceived to be research: the gathering of data and facts for the advancement of knowledge. The notion of knowledge is central to all contemporary definitions of academic research and of science, and this is further justified by the very origin of the Latin word *Scientia*, meaning 'knowledge'; according to *Encyclopedia Britannica*, 'a science involves a pursuit of knowledge covering general truths or the operations of fundamental laws.' If, however, science is identified exclusively with knowledge, the following questions, crucial for the self-definition of the human sciences, arise:

how is knowledge acquisition related to the activity of thinking? Does thinking serve as a means for the enhancement of knowledge or, on the contrary, is knowledge merely a useful instrument of thinking?

There is a significant semantic difference between 'to know' and 'to think.' *To know* means to possess information, to have established or fixed in the mind a concept about a certain object. *To think* means to perform in the mind certain actions with concepts, to combine and separate them, moving from one level of generalization to another. Thinking is a dynamic operation with concepts that are represented in the static form of knowledge. Thinking produces everything that humans add to the surrounding world, i.e. the entire trans-natural realm of history and culture. Thinking adds to knowledge a second reality, the handmade and head-made world that embraces ideas and values, art and technology.

This priority of thinking is especially pertinent to the humanities. Most of the thoughts that have had a profound impact on humankind are not based on any facts whatsoever; rather, they contain collective experiences and aspirations, with different people often having contradictory ideas, e.g. 'Love thy neighbor,' 'All people are born equal,' 'Man is a rational animal,' 'Man is a fallen creature,' 'Life is a miracle,' 'Life is meaningless.' Theodor Roszak, an American historian, calls such thoughts, which may rule a society in the absence of any logical proof or empirical verification, 'master-ideas' (Roszak, 1994, pp. 92–4). He emphasizes that, although master-ideas are not based on any facts at all, they themselves have become the foundation for numerous facts of political, cultural and religious history, later studied by the human and social sciences. After all, if Shakespeare had not thought up his plays or Napoleon had not devised a new European order, literary scholars and historians would be deprived of some of their most important subjects, the foundational facts of European culture and history. Thinking creates historical facts that become objects of historical knowledge, which in its turn is used by thinking in order to create new facts.

Thus, knowledge should be considered a moment or aspect of thinking, and not the other way around. Thinking employs knowledge as its adaptive mechanism. In order to transform the world with assurance, we have to reflect it adequately. In the past, the concept of 'adaptation' was used extensively in the Darwinian theory of evolution to describe organisms accommodating to their natural milieu. However, this view is now rejected by many biologists, who opt for the position of *constructionism*: an organism does not so much adapt to its milieu as constructs it, i.e. it adapts its milieu to itself. In the words of Richard Lewontin, a contemporary authority on evolutionary biology:

> It is not the case that environments have an autonomous set of laws, and organisms discover them, meet them, and have to cope with them but [...] in fact, environments are a consequence of what Marx called 'the sensuous activity' of organisms [...]. [O]rganisms have constructed the world in which we live [...] (Lewontin, 1994, p. 506).

If constructionism is correct in describing the sensuous activity of organisms, then it should be even more applicable to intellectual activity, which is even more independent of the conditions of the material environment. Adaptation is only a means for construction. Knowledge is the mind's adaptive mechanism, by which thinking coordinates itself with the environment, in order to transform it effectively in accordance with its own needs. Any fragment of an artificial milieu, from a book to a car, from a chair to a rocket, bears the imprint of thinking and can be viewed as a system of embodied concepts.

Thus it would be more accurate to define the task of scientific and academic institutions not as the acquisition of knowledge, but as intellectual activity in the forms of both knowledge and

thinking. This includes (1) the discovery and systematization of existing facts and principles; and (2) the production of new concepts and ideas that may be used effectively in the development of civilization. Knowledge is information about the present state and connections of facts, whereas thinking is the transformation of these connections, the creation of new ideas and concepts that may be converted into objects or properties of the future world.

Creative Communication and the Fate of the University

Education is one aspect of this creative potential of the humanities that the processes of technologization and corporatization of the university now challenge. Two questions are crucial with regard to the self-determination of the university in the twenty-first century:

1. Can computer-based educational technologies, such as distance learning, replace the University as the real Place, the community of collaborators and interlocutors?

2. What makes the University different from a shopping mall, a commercial centre for buyers of diplomas and professions?

These two questions are interconnected and, in fact, provoke a single answer. The university is neither an informational network nor an intellectual supermarket, because it is at root a humanistic institution. Its purpose is *to educate humans by humans for the sake of humanness*. Education is a form of creative communication, or, in Bakhtin's words, 'the event-potential of dialogic cognition' (1986a, p. 161). The technologization or commercialization of education would undermine the dialogical nature of the humanities as the core of the university curriculum. Alexander Pushkin's poem 'Conversation of a Bookseller with a Poet' (1824) includes one remarkable passage: 'Inspiration is not for sale, though it is possible to sell a manuscript.' Teachers share with students their inspiration, not only their manuscripts (notes, books, ideas). Of all academic disciplines, only the humanities are fully commensurable with and dialogically open to their human subjects and addressees.

Education is one of the most intimate moments in the life of a personality – an experiment in creative communication with other minds. Usually, professional activity, even in the creative arts, is presented in premeditated forms and predetermined genres. Paintings, poems and dances are finished products from which their producers – artists, poets and choreographers – have already distanced themselves. Even dancers or singers demonstrate on the stage what they prepared in advance. In education, the mystery of human creativity is revealed most intimately and spontaneously as the self-creation of a personality here and now, through dialogue with others. Education is not only a social, but also an existential event, or, more precisely, an increasingly rare example of *existential sociality*, where social and existential dimensions intersect.

Though 'reproducibility' is considered a standard requirement for academic research, education involves *irreproducible* moments of human interaction. It is 'becoming-through-knowledge,' rather than acquisition of knowledge as such. Sometimes in the classroom I ask myself if my instruction could be computerized, transferred to a disk, and offered as a digital package. I hope the answer is 'No.' Education is an improvisational activity that exercises the human capacity for wonder and unpredictability. Education is not just talking about what we already know; it initiates a social event of creative co-thinking, where what is unknown to me is revealed only in the presence of others.

Conclusion: The Interrogativity of the Humanities

My aim here is not to make any predictions about the future of the humanities, but to interrogate those possibilities that may or may not be realized. In the words once again of Bakhtin, '[I]f an answer does not give rise to a new question from itself, it falls out of the dialogue and enters systemic cognition, which is essentially impersonal' (1986a, p. 168). Questions have their own irreducible value as a source of existential anxiety and intellectual inspiration. To Bakhtin's thesis on the 'answerability of art,' we may want to add the idea of the '*interrogativity* of theory' in relation to the humanities as a whole.

The natural and social sciences are at their best in answering human questions; the humanities, in questioning scientific answers. The great explorers and self-explorers of humanity, beginning with Socrates (and including Bakhtin), have bequeathed to us their modes of interrogation more than their systems of beliefs and convictions. Their answers are questionable, but their questions are irrefutable.

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Notes

[1] http://www.um.edu.mt/news/philosophysoc.html (accessed December 8, 2006)

[2] Both verbs, *to differ* and *to interfere*, are derived from the same Latin root *ferre*, Greek *pherein*, to bear, to carry. 'To differ' thus means 'to carry apart,' while 'to interfere' means 'to bring between.'

Reference List

Bakhtin, M. (1986a) *Speech Genres and Other Late Essays*. Translated by McGee, V. W. Austin: University of Texas Press.

- - - . (1986b) *Literaturno-kriticheskie Stat´i*. Moscow: Khudozhestvennaia literatura.

Berry, E. and Epstein, M. (1999) *Transcultural Experiments: Russian and American Models of Creative Communication*. New York and London: Palgrave Macmillan.

Hawking, S. (2001) *The Universe in a Nutshell*. New York: Bantam.

Lewontin, R. C. (1994) Facts and the Factitious in Natural Sciences. In Chandler, J., Davidson, A. and Harootunian, H. Questions of Evidence: Proof, Practice, and Persuasion across the Disciplines. Chicago and London: The University of Chicago Press.

Martin, J. (2006) *The Meaning of the 21st Century: A Vital Blueprint for Ensuring our Future*. London: Eden Project Books.

Nietzsche, F. (1910) *Joyful Wisdom* ('La Gaya Scienza'). Translated by Common, T. Book 5, Fragment 382. Edinburgh and London: The Dakin Press.

Nussbaum, M. (2010) *Not For Profit: Why Democracy Needs the Humanities*. Princeton: Princeton University Press.

Roszak, T. (1994) *The Cult of Information: A Neo-Luddite Treatise on High-Tech, Artificial Intelligence and the True Art of Thinking*. Berkeley: University of California Press.

Russo, J. P. (2005) *The Future without a Past: The Humanities in a Technological Society*. Columbia and London: University of Missouri Press.

Whitehead, A. (1938) *Modes of Thought*. New York: Macmillan.

Wilson, E. (1999) *Consilience: The Unity of Knowledge*. New York: Vintage.

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