

**TRANSFORMATIVE EDUCATION  
AND THE FUTURE OF THE SPECIES**

*Frank Parkinson*

You say you want a revolution.  
Well, you know  
We all want to change the world.  
You tell me that it's evolution.  
Well, you know  
We all want to change the world ...  
You say you got a real solution.  
Well, you know  
We'd all love to see the plan.

John Lennon and Paul McCartney  
*Revolution 1 (1968)*

## Summary

The overarching assumption of the paper is that the human species at its present level of development is incapable of solving the problems it has created. A change so radical is now required that it would be accurate to call it a reinvention of the species. In this the role of education will be absolutely critical. If reinvention implies a disjunction, it is reasonable to expect that there will be revolutions in the aims, content, methods, structures and economics of education, and this paper takes a first step into a future in which will call for many conventional assumptions about education to be turned upside down.

Insofar as education proper, as against professional training, is always directed towards transformation of consciousness, education at all levels must now be directed to taking the species to a higher level of logical, historical, imaginative and empathic awareness. Taken together such a complex of changes amounts to a new philosophy of education, the significance of which, and the practical structures and methodology will take time to unfold. It will be of particular importance to make use of information technology in the broad aim of consciousness-raising on this evolutionary scale.

Two papers are planned to follow, one dealing with curriculum and method at primary and tertiary level, the other with the particular problems of tertiary education today, not least the economic barrier to entry that has recently appeared. It will argue for the establishment of a free university, borrowing from the experiences the Open University, but going much further. The term "free university" does not imply that it will be totally "without fees", but that it will depend upon a principle of mutual help. In so doing it hopes to open discussion about the purpose and methods of higher education, thus extending the great debate about the concept of university initiated by John Henry Newman and Wilhelm von Humboldt.

## Transformative Education: Present and Future

### An Evolutionary Disjunction

As an identifiable field of academic study transformative education may be said to have been conceived with the publication of Jack Mezirow's *Transformative Dimensions of Adult Learning* in 1991 and brought to birth with the first issue of the *Journal of Transformative Education* in 2003. Its goals and methods are still not fully agreed, but *Wikipedia* defines its broadest and commonly agreed goal as the intention to "induce more far-reaching changes in the learner than other kinds of learning." Such a definition is hardly more than a tautology until the nature of the hoped-for changes are spelled out in more detail, and that is where the Achilles heel of transformative education is revealed most clearly and explains why, with the notable exception of the University of Toronto, it has no clearly defined place in the academic study of education.

Mezirow, a Professor at Columbia University, like almost all educationists in the second half of the twentieth century, had been much influenced by Paulo Freire's "education into consciousness" but went beyond it, most notably by emphasizing that, however else defined, the goal of transformative education (henceforward TE) could not be reached without the individual going through a period of psychological disorientation. This at least indicates that TE is more than just a passing fashion in an educational world that sometimes appears to feed on fashions. This paper will develop the broad thesis that at the heart of TE is a disjunction of some kind, making four proposals that are in varying degrees revolutionary, namely:

- that the long term goal of TE should be seen within an evolutionary context as a deliberate attempt to raise the species to a higher level of development
- that its core structure should be the self-learning group
- that it must agree on a common narrative to contain or replace existing tribal and religious narratives from which we take our identity
- that it must integrate information technology not merely as an aid but as an essential element.

The paper owes much to Mezirow and particularly his realization that a truly transformative education must involve a traumatic break with familiar ways of understanding almost everything, especially one's self and the meaning of existence. It should be noted, however, that while it shares Freire's goal of a new kind of literacy, its key idea of consciousness-transformation differs significantly from his philosophy of *conscientização*. TE's force and relevance emerge from the evolutionary challenge, while Freire's theory and praxis emerge against a background of social injustice and a Marxist idea of class struggle. As regards praxis, TE shares Freire's ideals, but differs in the emphasis it would put on child-centred and "non-authoritative" learning.[1]

The radical nature of the proposed new ideal of education will necessarily take time to unfold, but the fact, just noted, that it will integrate information technology in a creative way is at least initial evidence that it will be very different from the educational world of fifty years ago, which was almost entirely based on books, chalk and talk. Like it or not, information technology (henceforward IT) is already changing education and human nature in a fundamental way. The eminent neuroscientist Baroness Susan Greenfield (among others) has expressed fears that screen technologies are having long term effects

on the present generation by effectively disabling certain neuronal circuits in the brain and, in her words, almost literally “blowing the mind”. [2]

The need to reinvent the species is by no means a recently felt imperative. One can, indeed, trace it back to the concept of “the new man” that is central in St Paul’s epistles. A century ago H. G. Wells was writing, “The fact that man is not final is the great unmanageable, disturbing fact” [3], and more recently Thomas Berry argued for change “at the species level” through transformative education. [4]. The essential role of education in human development is a given, but its unique importance in raising the evolutionary bar is less widely recognized. One modern writer who does recognize it is the historian Paul Kennedy. In his words, “The forces for change facing the world could be so far-reaching, complex and interactive that they call for nothing less than the reeducation of humankind .... Global society is in a race between education and catastrophe.” [5]

Once it be accepted that we can only progress now by making radical changes in what we consider to be “ordinary human nature”, then the horizons of education must be expanded in ways not previously considered. Such expansion cannot simply be “more of the same” but may be expected to bring with it exactly the kind of initial disorientation which Mezirow predicts and which Thomas Kuhn identified as the mark of genuine paradigm change in science [6]. TE must lead towards a psychological disjunction, which many will resist, and ultimately to a socio-economic restructuring.

In one sense there could not be a worse time for innovation at the foundations of education, since the world is now clearly entering into a period of socio-economic collapse that must eventually call for a restructuring. A world divided into nation states since the Treaty of Westphalia in 1648 is now breaking up, as global banking interests force upon it a “new world order” and corruption at all levels of society becomes increasingly a norm. The 2013 “Failed States Index”, published by the magazine *Foreign Policy*, lists from 192 member countries of the UN an astonishing 177 nations that show a significant degree of social dysfunction and a dozen or more where breakdown is effectively total. This is only one factor in a world now undergoing upheaval at the deepest level, as climate change, oil depletion, overpopulation and growing economic chaos converge to what may be accurately described as a perfect storm. In another sense, however, there could not be a better time for the emergence of radically new educational vision, since, as in nature, catabolic disintegration is a necessary prelude to radical restructuring. The most dramatic example of this in nature is probably the pupal phase during which the caterpillar reinvents itself as a butterfly. In the early stages of this metamorphosis there appears to be nothing but the total breakdown of the previous cellular structure and no sign at all of the new life-form that is to come, other than the imaginal cells visible only under the microscope.

### **Education as Self-learning**

Self-motivated learning is an essential principle of TE, but it is important to avoid the extremes of much so-called “child-centred” and “progressive” education, where it is often promoted as unquestionable dogma. While self-learning is still the dominant ideology in Britain and the US, its excesses are resulting in many undesirable effects, which are starting to be questioned. [7] TE must address three major problems associated with the ideal of self-learning,. The first of these is how to incentivize the individual and group, so that students will leave the formal schooling system with a love of learning that will carry them through life.

The second problem of self-learning concerns the ambiguous role of the teacher, who is ideally envisioned as no more than a facilitator and certainly not as an authority or a

handing down of facts, even when facts are required. This ambiguity, often ignored in progressive theory, becomes acute in TE, since the teacher must exercise a strong steering function. He or she must be assumed to have the vision, but must also find ways to help the group discover it for themselves. The teacher must be a midwife in the Socratic sense and yet inspire the group.

The third problem arises from the fact that the vision of a new kind of human inspires those who have seen it or, more accurately, have been grasped by it, and teaching may be seen as a process through which their enthusiasm radiates outwards, so to speak. This has important implications for teacher training, for would-be teachers of TE (in the evolutionary sense here assumed) cannot take on board the new without at the same time deliberately abandoning the old. TE cannot just be bolted on to existing educational systems and to the extent that it is new, and not just a passing fad, it will call for dedicated training structures. The history of education gives ample illustration of the need to teach the teachers. In this respect, Froebel and Montessori spring immediately to mind.

### **The Need for a New Narrative**

TE cannot spring into life with a universal vision agreed in all details, but a start can be made in deciding on an agreed narrative which will in effect recount man's evolutionary journey to date before projecting a path into the future. Education in every context and in every age takes place against the background of a common narrative, a selective history of man and the tribe or nation which acts as a frame within which all fact and experience is interpreted. The Egyptians, Jews, Greeks and Romans had their own quite different narratives, but without doubt the most formative of Western culture has been the Christian story of a saviour god-man. On this great myth European civilization was built, but with the rise of science and the Enlightenment its dynamic has now been lost and it is now counter-functional. We need now to work out a theory of the world on a transtribal hypothesis in story form and raise up story tellers to communicate it. In a word, a global family needs a global narrative, and construction of this must be a prime task of TE. Critical help will come from the new science of cosmology, which tells of a universe that came into existence some fourteen billion years ago and contains potential insight that is continually emerging of a universe still in process of creation.

### **The Role of Information Technology**

How the story of cosmic and human evolution is to be told most effectively is the greatest challenge of education today, and the role of IT in all this is ambiguous in the extreme. The invention of the personal computer, broadband, the Internet and the smart phone following rapidly on each other over a period of some thirty years is already affecting human consciousness in noticeable ways. A generation of young people is emerging in the West whose lives increasingly revolve around the ability of the hand-held computer to access almost unlimited information at will and maintain an almost continual chatter with groups not only of friends and acquaintances but with people they have never met. The long term effects of this development is uncertain but ominous, as the quotation above from Baroness Greenfield has exemplified. One certain consequence is that the new modes of communication will work towards breaking down traditional structures. What actually defines a society is now becoming unclear and a vacuum is appearing where once there was a clear sense of national or religious identity. On this vital question of identity more below.

A second and important aspect of IT is that it is heavily biased towards the visual and cinematic, so much so that it has almost created a new mode of communication. Reading and writing on which almost all education has depended since the invention of the printing press are now increasingly neglected. Print has given way to the moving picture

and to animation. Many quite intelligent young people are so unused to reading that they struggle to understand long sentences. However, as well as the widely recognized negatives that go with the IT revolution, there are huge positives. In the first place, there is instant access to information of all kinds. Less widely realized is the fact that cinematic communication enables the serious learner to painlessly absorb huge amounts of background information. Through video presentations of history, politics, natural science and many other things, not least serious drama, we can convert some part of genuine learning into enjoyment. Thus IT can be harnessed in the cause of transmitting non-detailed and, as it were, low density information and slowly building up a background consciousness. When followed by discussion, IT can thus be a most powerful agent for raising consciousness. The same topic when treated in two or three films will automatically stimulate a kind of stereoscopic awareness

A unique gift of IT on a wider scale arises from the global reach it achieves through satellite communication. In combination with the World Wide Web and innovations such as teleconferencing, IT is constructing a global brain and thus giving reality to Teilhard de Chardin's concept of the noosphere. We are only at the start of understanding what role this new global brain can or should play in human evolution. It functions at the same time as a plug-in memory and an encyclopaedia and plays an essential role in education the individual to feel that he or she is a member of a global family. Things are not so simple as this, however, for IT is eroding traditional identities faster than it is helping to create a trans-tribal identity, and this opens up another aspect of the vital importance of IT for transformative education.

### **Creating a New Human Identity**

Even from the brief remarks above it can be appreciated that IT is bringing about a change in the individual sense of identity, and thus silently "reinventing the species". Our human identity, once taken almost entirely for granted, is now entering into a critical state, as inherited political, religious, economic and even scientific structures break down. Building up a sense of identity is vitally important in education because it tells us who we are and, less obviously, what is the point and purpose of being human. Given the fact that IT is so rapidly eroding conventional self-identity and creating at the same time a global brain, there is surprisingly little discussion of this fundamental issue in the sociological literature dealing with IT.

One notable exception is Sherry Turkle's *Life on the Screen: Identity in the Age of the Internet*, [8 but her conclusions throw into stark relief the contrary assumptions of this paper. Where TE approaches IT as a means towards creating a common identity as a member of a global family, Turkle sees IT as an opportunity for the individual to invent and enjoy multiple identities. In simplified form her argument is that since we are relatively anonymous in any online group we may choose to join, we are free to project any image of our self and, having invented it to add to, subtract from or delete it, as one deletes with a computer keystroke. This whole concept of multiple identities calls for extended analysis and evaluation and cannot be treated adequately here, but it clearly has an alarmingly narcissistic element and runs the risk of making the individual's mental life a hall of mirrors.

We are here on the edge of a great debate about the difference between being normally human and being fully human or transhuman, and TE is opening our eyes to these great issues. If it is to be more than a trendy subject for academic musings, it must engage in this debate. There is a great danger that the disjunction towards which TL must move may be missed, simply because the steps towards it must inevitably be incremental, but if the most basic premise of this paper be accepted - that TL is education for evolutionary change - there must come a decision point when it dawns on the learner that he or she

must leave the old, the familiar and comfortable behind and step out into the unknown without the support of society at large. That fact alone ensures that transformational learning is something profoundly new in the long history of educational theory and praxis.

Come to the edge.  
We might fall.  
Come to the edge.  
It's too high.  
COME TO THE EDGE!  
And they came,  
and we pushed,  
And they flew.

Christopher Logue  
*Come to the Edge*, 1968

## References

1. Freire's passion for social justice and his call for a revolution in education are to be praised, but in some ways it can be said that he pushed the pendulum too far. The most urgent task that he saw was liberation from capitalist oppression, and this leads to certain gaps, inconsistencies and, I think it fair to say, wordiness and non-sequiturs in what he presented as a universal philosophy of education. He sees education essentially as part of a greater struggle. Typically, "The radical individual ... does not consider himself or herself the liberator of the oppressed; but he or she does commit himself or herself, within history, to fight at their side." *Pedagogy of the Oppressed* (London: Penguin, 1996 [1970]), p. 90 and *passim*.
2. In a talk given at Sherborne College, Baroness Greenfield noted that the average child between the age of ten and eleven spent almost 2,000 hours looking at a screen, often resulting in "high arousal ... activating the addiction and reward system of the brain [and] shorter attention spans. Reported in the *Bournemouth Echo* (15.10.2011).
3. From a lecture to the Royal Institute, reported in *Nature* 65:326-331, 1902.
4. See, e.g., his foreword to Edmund O'Sullivan's influential *Transformational Learning*. Univ. of Toronto Press, 1999.
5. Paul Kennedy, *Preparing for the Twenty-First Century*. London: Harper, 1993. p. 339.
6. In *The Structure of Scientific Revolutions*, University of Chicago Press, 1962.
7. See, e.g., Daisy Christodoulou, *Seven Myths about Education*. London: Routledge, 2014.
8. Sherry Turkle, *Life on the Screen: Identity in the Age of the Internet*. NY: Simon and Schuster, 1995. See also her later work *The Second Self: Computers and the Human Spirit*. Cambridge MA: MIT Press, 2005. Turkle is Professor of Social Studies of Science and Technology at MIT.