



PGCE:HIGHER EDUCATION  
TEACHING AND LEARNING

Module3:  
Supporting Student Learning

# HOW TECHNOCRATS HIJACKED ANTIPELAGOGY



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*These first years have, among other things, the advantage that one can use force and compulsion. With age children forget everything they encountered in their early childhood. Thus if one can take away children's will, they will not remember afterward that they had had a will. (Schulzer, 1748)*

*I never teach my pupils; I only attempt to provide the conditions in which they can learn. (quote attributed to Albert Einstein)*

*Please I need your help regarding the technology part of my current design project. My current tutors are not helping me with it the way I can understand and I was wondering if I could show you the project and discuss how to go about it when you are free. (student's email to author, 2013)*

## **Introduction – barking up the wrong authority**

Zygmunt Bauman (2007) in his book *Liquid Times: Living in an Age of Uncertainty* offers a deep insight into changes of the post-industrial, hyper capitalist, free-market culture. During the whole 20<sup>th</sup> century – as Bauman observed – we were afraid that the danger to our society lurks from one or another kind of authoritarian, totalitarian political system. During the century, the futurist visions envisaged this gloomy dystopian reality either in form of Orwellian *1984* world or in the shape of Huxleyan 'Brave New World'. According to Bauman, the present time is surprisingly different. Most of our problems, dangers and anxieties come unexpectedly from the opposite direction. None of the great totalitarian authorities of technologically-developed part of the world wants to take our freedom away; to the contrary, we have no choice but to take the freedom, which as Baumann notes, comes with a psychological burden. In consumerism, deregulated, laissez-faire, individualistic culture, it is not the case that public authorities want to invade our private lives but just opposite – the public sphere is invaded by the private sphere. We pay more attention to private lives of politicians, celebrities and even individuals in talk shows than global politics and social issues. Bauman calls it 'liquid modernity', where everything not necessarily 'wants to be' but 'has to be' incohesive, light, ever-changing, non-committed – liquid. Foucault's panopticon became too expensive – says Bauman – today no one wants to put us to any prison; instead we have to lock ourselves there, self-guard and pay for renting the prison cell. No one forces us in any direction, we have to self-direct. Yet the new world order, just like the old, operates beyond our reach. There is, however, an important twist: we cannot make demands because it has no return address; there are no offices, no one to talk to, it operates outside our borders, with only a logo, a passive email box and recorded phone messages.

Although Bauman did not discuss 'learning' as such, his argument could help us to understand the peculiar situation in which education theory found itself today.

Western pedagogical philosophy has gone a long way since the time of the so called black pedagogy of Sulzer (1784) quoted at the beginning of this essay to today's antiauthoritarian theories of critical pedagogy such as Illitch, Kincheloe or Paulo Freire. Something that was once subversive and revolutionary is today often applauded by the official bodies shaping educational policy which are more than happy to quote what is supposedly Einstein's thoughts about letting students free – 'not teaching them' but offering them 'conditions' instead of the knowledge. Isn't this a success of humanity over bureaucracy? It seems hard to argue against these ideas, but why is it that as a teacher much too often have I received emails like the third quotation opening this essay?

In the first part of this essay I would like to look at how the idea of 'renegotiating power in the classroom with students' developed historically. I would like to show that even if some of the current educational policies do indeed refer to this antiauthoritarian tradition which has been developing for over a hundred years, these ideas have been highjacked – they have been decontextualized from their initial intention, they now miss their crucial elements or were cherry picked to serve a different purpose altogether. Secondly – as Baumann pointed out – the antiauthoritarian theory started to be less relevant than anticipated and new problems of liquid times are waiting to be challenged by new theories and new practice.

In the second part of the essay, I will analyze the debate which is now present in architectural education between concerning intelligent base teaching (IBD) vs. narrative teaching. Fierce arguments from both sides show a situation where the authoritarian tradition, after becoming an established and accepted form of teaching establishment, now provokes doubts, discontent and pushes some groups of scholars towards alternative methods of teaching. This debate itself constitutes an interesting case study which shows a kind of crisis of antiauthoritarian thoughts, although it still does not show straightforward and convincing answers as to how to resolve the problem.

At the end of the essay I would like to outline some suggestions towards resolving the deadlock. The proposed strategy of ecological teaching will be based on personal experience in the course of architecture.

## ***Individualism as a remedy for antiauthoritarian state***

The antiauthoritarian pedagogical movement was initiated by people who lived in and opposed against strongly authoritarian states and societies. One of those states was 19th century Prussia – a state which on the one hand was proud of introducing a mandatory public education system which served as a model for educational reforms in a number of other countries, including Japan and the US (Groen 2008). On the other hand, this system made this education infamous by the fact that it was run mainly by war veterans instilling in pupils a sense of unquestionable duty towards the state – Prussia. Only one example of this authoritarianism could be illustrated by the oppression of people of different ethnicity. Prussia was occupying a great Polish territory, where the struggle to preserve pupils' own culture and language became famous thanks to incidents such as Września school strike of 1901 which ended up with atrocious physical and mental assault against children (Blejwas, 2001). It could seem that it was not the time of ideas of 'putting children in the center' or 'negotiating power and curriculum with students'. Yet, several Poles and Germans started to express their discontent, philosophically deeply rooted in ideas of the enlightenment. In April 1842 in *Rheinische Zeitung* Max Stirner –perceived today as the founder of German individualistic anarchism – wrote a pamphlet which set a milestone for alternative educational tradition. Its title was "*The False Principle of Our Education*" and in it Stirner claimed that education should be shaped around self-development and to allow individual students to develop themselves and not to be developed by somebody else. Stirner claimed that the problem with education as he saw it in mid 19<sup>th</sup> century was that it aimed to shape a man who is practical for the state but not necessarily a "wise man". Stirner called his educational theory 'personalism'. He called for 'will for free will' and believed that any 'full man' will naturally fight against authority. For many readers of contemporary educational theories in 21 century this old Prussian article today would sound strangely familiar. Interestingly however, Stirner claimed that if education is not carried out in the right way, it creates 'herd psychology', competitiveness and consumerism which controls an individual and which favours standardization. Stirner must have understood these terms differently over 150 years ago, yet it is worth noting this part of this theory today when individualism is perceived more as an idea serving consumerism and employment. Today's Bologna Declaration – which shape a wide range European directives and university policies – claimed that the aim of 'flexible student centered education' is not so much the creation of a 'full man' or encouraging 'will for free will' but shaping education which is "relevant to the European labour market " (The European Higher Education Area, 1999). In 2000, The European Council set a strategic goal for Europe for the next decade: "to become the most competitive and dynamic knowledge-based economy in the world" (Fontaine 2000). Even those of us who applaud this notion and agree with the European directive believing that the "student-centred learning and mobility will help students develop the competences they need in a changing labor market and will empower them to become active and responsible citizens" (The Bologna Process

2020) have to seriously doubt that this is what Max Steiner had in mind. This kind of economy driven education would most likely be repulsive for Stirner, whose article about education was only a prelude to his 1845 work which he is mainly associated with – *Der Einzige und sein Eigentum* (English version: *The Ego and His Own*) – which is a book-manifesto that gives priority to individual interest over authorities, governments and even societies. Stirner prized there the ‘Egoist’ who should in his opinion strive to self-creation even against the society: “you are your own creature; in this very ‘creature’ you do not wish to lose yourself, the creator. You are yourself a higher being than you are, and surpass yourself” (Stirner, 1995: 38).

In the same way the idea of individual freedom was developed in the 20th century as a way towards holistic human development by various intellectual movements, such as humanistic psychology, which had a profound influence on the humanistic perspective in the current education theory. Humanistic theoreticians shifted the emphasis to the potential towards individual growth of ‘the learner’. Despite all the differences from anarchist ideas, the similarities were profound – most notably the belief that people are inherently good and freedom helps them to satisfy the drive towards self-actualization and creativity. In this movement many educational theorists were combining theory of education with psychoanalysis. The author of the prolific *Freedom to Learn for the 80's* Carl Rogers – perceived as a founder of humanistic psychology – developed ‘person-centred therapy’ whose main elements were in many places identical to the ‘student centered learning’ which he had developed. The application of this tradition began in the late 1930s on an experimental level, but today it has become the main policy in many schools and universities (Cornelius-White; Harbaugh 2009; Kember, 2009). Universities are eager and proud to incorporate in their statements claims that teaching is based on “putting students at the heart of everything [the university] does” (University of Lincoln 2012d). But what does it mean in reality, and what is it driven by? Care about student development or competition between Universities to win new students-clients by creating an easy experience and not necessarily good quality teaching. The person-centred approach – definitely appropriate in psychoanalysis – could show undesirable side effects in education. In design faculties (which we will discuss in the second part) this approach could easily lead to indulging in careless self-centred design, bolstering students’ ego and encourage them to dedicate all their energy to creating merely eye-catching forms with little care about the surroundings. The idea of a star-architect promoted by many tutors could be the sign of it. This wrong interpretation of Rodger’s theory could produce narcissistic individuals creating interesting but student-centred not environment-centred design. Should this be the desirable result of students taking over the power of their own teaching? Probably very few of us would agree, but Baumann would say that exactly this kind of self-centred and image-obsessed individuals (produced by the contemporary educational system) fit in to the liquid modernity, where social cohesion was replaced by loose unattached egoistic people. The end result often does not serve human development but definitely serves the free

market. This very problem was spotted and addressed by Intelligence-Based Design (IBD) which will be discussed in the second part of this essay.

### ***Empowerment as a remedy for authoritarian culture***

The other important root of contemporary educational theories and political doctrines could be traced back to work of Lev Vygotsky proclaimed the 'Mozart of pedagogy'. It cannot be underestimated that his concepts of 'scaffolding' and the 'zone of proximal development' were developed in the context of totalitarian Soviet Russia as a stark contrast to the official at that time so-called "Marxist psychology". His core idea of "actual development... determined by independent problem solving ... under adult guidance or in collaboration with more capable peers," (Vygotsky 1978 p. 86) had little to do with the official indoctrination in Russian schools. These methods, which could be a remedy for the authoritarian culture at the time, are today referenced by most of the educational philosophers and governmental guidelines that promote independent self-regulatory self-directed learning and self-reliance, but the intensions and applications are often strongly reinterpreted. The Report "*Research Synthesis on Effective Teaching Principles and the Design of Quality Tools for Educators*" by Edwin S. Ellis and Lou Anne Worthington (1994), produced for the 'National Centre to Improve the Tools of Educators' offers a modern interpretation of Vygotsky's idea as official guidelines : "By incorporating effective teaching principles, presentation techniques, and implementing effective structures into their lessons, teachers can assist students in becoming independent and self-regulatory; a goal that will "empower" students to become self-sufficient, productive citizens. Thus, it is the goal of "empowerment" of all learners for which educators should strive." (Ellis, Worthington, 1994: 9). John Cowan (2006) in *On Becoming an Innovative University Teacher* developed Vygotsky's concept by calling for "empowering students to be more self-managed, self-directed and self-evaluated. Naturally, Vygotsky and many other teachers would agree with empowering students; however, the other important aspect of Vygotsky's theory, i.e. social perspective and responsibility, all too often fails to be mentioned in Universities' policies and guidelines. The slogan suggested by Ackoff and Greenberg "The Objective of Education Is Learning, Not Teaching" (2008: 5) was most probably suggested with the best intention to promote Vygotsky's idea of an environment where the teacher and the student could learn from each other, and students really take the power into their own hands. In reality, however, the same phrase is often used in a very different context and with a different hidden agenda. The motto "Less teaching more learning" for some managerial bodies could become a convenient excuse for limiting the teaching time and depriving students of quality teaching in the name of efficiency. "Less teaching more learning" could become the all too convenient "creative" answer to challenges expressed by The Higher Education Academy Strategic Plan 2012–2016: "such as satisfying greater expectations with less resource, flexible delivery" (The Higher Education Academy 2012). It is worth noting that while describing attitudes of a 'true facilitator of learning' Rodger has emphasised those attitudes of a teacher which are relatively time-consuming and require direct presence and attention such as (1) Realness – the instructor should be present, direct

and genuine, and engaged in direct personal encounters with the learner (2) Praising the learner – the instructor must be able to directly accept and address the fear, hesitation, apathy, and goals of the learner (3) Empathic understanding – the instructor can directly understand student's reactions from the inside. Also Ellis (n.d.) while writing about Effective Teaching Principles states: “Principle 4: Students achieve more in classes in which they spend much of their time being directly taught or supervised by their teacher.”

To demystify this overinterpretation of the smart-sounding slogan ‘less teaching more learning’ in the context of ‘power for the students’ we need only to ask students whether “they would choose to have less teaching or less contact with experts if they had a real choice and power”. It is hard to imagine a positive response to this kind of question.

However, in architectural education the approach of limiting teacher’s input became a widespread culture and Intelligence-Based Design (IBD) could be seen as a desperate reaction to this situation, which will be discussed further in the second part of this essay.

### ***Democracy and humanism as a remedy for authoritarian science***

The third root of contemporary educational teachings derives from combating other types of authority – not political but ideological created by neo-positivistic perception of mechanistic science. At the beginning of 20<sup>th</sup> century, in some educational circles, this authoritarian culture started to be identified in pedagogy with behaviourist perspective, skinnerism and ‘operant conditioning’ – learning that occurs merely through rewards and punishments. Certainly, from this perspective ‘negotiating power with students’ was a revolutionary and very much needed concept. Behaviourism was rightly attacked in pedagogy from the positions of the cognitive, humanistic and social perspectives alike. Thinkers and practitioners representing those schools of thought claimed that humans search not only for reward but also for meaning and larger participation in social affairs – an argument that very few scholars today would deny. One of the first scholars who started to formulate well constructed alternatives to mechanistic authoritarianism of behaviourism was John Dewey. Today it is worth remembering that next to his widely appreciated methodological concepts of self-reflection and problem-based learning, the core idea of his thoughts was democratisation. As Dewey himself stated in 1888, while still at the University of Michigan, “Democracy and the one, ultimate, ethical ideal of humanity are to my mind synonymous” Dewey (1993: 65). Both of those notions (self-reflections and democracy) could be found in many university policies and educational theories in 20<sup>th</sup> century. Kurt Levin strongly identified democracy as a remedy against autocracy which could lead to apathy amongst students: “*There have been few experiences for me as impressive as seeing the expression in children’s faces change during the first day of autocracy. The friendly, open, and co-operative group, full of life, became within a short half-hour a rather apathetic looking gathering without initiative. The change*

*from autocracy to democracy seemed to take somewhat more time than from democracy to autocracy. Autocracy is imposed upon the individual. Democracy he has to learn.*" (Levin 1948: 82)

Since Dewey and Levin – especially thanks to the cultural revolution of the 1960s – the empowerment became the main discourse of university policies. Those institutions certainly like to be perceived as subscribes of democratic ideas. Dewey's followers such as Ernest L. Boyer expanded the democratic notion towards a more holistic understanding of academic life, which promotes the engagement between scholarship, students and the public: "To fulfil the historical promise of the university as a progressive institution, the academy must become a more vigorous partner in the search for answers to our most pressing social, civic, economic and moral problems, and reaffirm its commitment to what I call the scholarship of engagement" (Boyer 1996, p. 11). A century after Dewey these words are quoted in policies of a number of academic institutions and constitute crucial parts of books encouraging a dialog even with those who struggle to articulate their opinion: *Democratic Dialogue in Education: Troubling Speech, Disturbing Silence* (Boler 2004). In some instances the idea of democratising the curriculum is taking very practical and encouraging forms such as creating the opportunity for students to act as producers. One example could be the University of Lincoln's policy of *Research-Engaged Teaching* (e.g. University of Lincoln (2012a). But even in these cases, the idea is hardly incorporated in university systems – leaving those institutions much less democratic than Dewey would like them to be.

It is worth mentioning that democratic ideas of teaching were a core pedagogical concept in a different part of the world. In 1920, Janusz Korczak – the Polish-Jewish educator, writer, publisher and director of an orphanage – set foundations for the Polish democratic tradition of pedagogy. He is perceived as a pioneer of moral education and the protagonist of the Children's Rights Movement. Apart from his writings, he became famous for creating a theory which took a practical shape in the form of a kind-of-a-republic for children with its own 'Small Parliament', 'Small Court', and a weekly Newspaper edited by Children – *Mały Przegląd* (Little Review) – where children expressed their own views. Taking children seriously was expressed in Korczak's writings where he firmly took the position that children should be liberated from the oppression of adults and should be taken seriously: "A hundred children, a hundred individuals who are people – not people-to-be, not people of tomorrow, but people now, right now – today" (Korczak, 1978). If Korczak managed to create a small civic society consisting of children, would it not be possible to create similar democratic processes among students? On the one hand, most of today's UK university policy makers would agree with this in all declarations, but on the other hand, the same universities do not have a democratic mechanism that would allow even their own staff (let alone students) to have a real say about the vision of education, leaving educators no real chance to democratically choose the managers, visions or policies for the university. The economic culture that creates a real fear of



losing one's job creates a situation where real changes of policies are openly discussed even less. If the culture of democracy is absent even between members of lower and middle rank academics, how can we expect that it could be influenced by students?

We cannot, however, underestimate areas where democratization proposed by Dewey, Korczak and others become the accepted and sanctioned day to day practice. Both of them – Korczak who heroically chose to die with the children he looked after in a Nazi concentration camp and Dewey who was marching for women's rights and was involved in the organization that eventually became the 'National Association for the Advancement of Colored People' – would be content with guidelines that encourage internationalization (Arkoudis 2006; Higher Education Academy 2012; University of Lincoln, 2013b; University of Lincoln's Commitment to Equality and Diversity, 2012) and regulations which secure inclusiveness of all students who want to learn by helping them to overcome limitation of their disability should they have some. (Equality Act 2010; Adams and Brown 2006; Matthews 2009; University of Lincoln 2013c).

Gadotti, M. (1998) suggested that Korczak could be perceived as a forerunner of Paulo Freire's *Pedagogy of the Oppressed* (1970) and the critical pedagogy movement. They both clearly share the views on democracy and the importance of a dialog in pedagogy, and fight the concept of a child being a 'tabula rasa' which Freire called a "banking model". They both fought against authoritarianism – Korczak's authoritarianism of adults and Freire's oppressed citizens in Brazil who were denied the right to a democratic vote because of being illiterate. Appreciating their struggle and work, it must also be acknowledged that today's situation of British universities creates very different challenges.

The democratization and inclusiveness in visions of educational thinkers requires a much more profound foundation and culture than merely legal regulations, which remind more of Skinner's mechanistic approach. The ideas of a humanistic and social perspective of pedagogy implied a wide social engagement, responsibility of the society and a wider perspective of the role of a learner in a civic society. These ideas are still alive, but unfortunately still outside of universities. Ivan Illich in his book *Deschooling Society* in a chapter entitled "Learning Webs" proposed that "A good educational system should have three purposes: it should provide all who want to learn with access to available resources at any time in their lives; empower all who want to share what they know to find those who want to learn it from them; and, finally, furnish all who want to present an issue to the public with the opportunity to make their challenge known" (Illich 1970). Some alternative schools like *Free Skool* in Santa Cruz (Free Skool 2013) or *Really Free School* in London (Really Free School, 2013) attempt to introduce these ideas into practice, with varying results.

In the second part of this essay, we will see how intelligence-based design (IBD) offers even less democratization than the usual mainstream universities of today. It

could be argued that this method of teaching prepares the future designer to take a responsible role in a democratic society, but does it really?

## Summary of the first part

For over a century, teaching theory has been fighting long and fierce battles against various types of authoritarianism – Prussian state, Communism and Fascism regime, authoritarianism of adults against children and the rich against the oppressed poor in colonial countries. These 150 years constitute the main discourse in education theory and have also managed to create a critical mass which today may not be ignored by governments, authorities (*nomen omen*) and regulatory bodies of teaching institutions. Many ideas which were primary adopted for primary teaching started to be adopted by mainstream education... or at least they appear to be so. On the one hand, students could and should be content that at least declaratively (which is not without its significance) many ideas relating to dignity or students' potential have been accepted. On the other hand, there are two issues which cast a shadow on this optimistic picture.

The first problem relates to way in which those ideas are applied in institutional policies. As discussed above, they are all too often cherry picked and isolated from the wider concept of the theory. The idea of individualism was separated from responsibilities and the social perspective; empowerment of an individual became isolated from the quality of teaching; the idea of 'less teaching, more learning' became an excuse for money saving; democratization is still an empty slogan which in fact barely exceeds the fulfilment of legal requirements of equality.

The second problem relates to the origin of the antiauthoritarian movement which primarily deals with young children at an early stage of education when socialization and individual attitude to knowledge is probably more relevant than specific skills and direct methods of acquiring particular expert knowledge. To what extent is it appropriate to adopt those methods to people who are in many senses developed, and whose main role will be to take responsibility for others and helping the society with their expertise?

The third problem of the antiauthoritarian tradition could be even more profound. Those ideas were conceived in times, circumstances and realities when the danger of various types of authoritarianism invading directly human growth was greater, seemed more immanent or at least was very different from what we experience today. If we agree with Bauman that the main danger and anxieties in our culture will not come from any specific authoritarian or totalitarian group of people that can easily be named, but from the new problems of liquid modernity, then an important part of the educational discourse should be changed. Many people in consumerism suffer not because they are not free in traditional sense, but because they do not have any choice but to be free. If today's students had a real power, would they concentrate on freeing from authority or perhaps on looking for authority... but in a very different sense?

### **Contemporary directives and tendencies:**

This part will concentrate on a very specific debate in architectural education which could exemplify the crisis of antiauthoritarian theory in higher education described above. On the one hand, we will see that narrative education which has been growing from antiauthoritarian tradition raises discontent from the perspective of educators who criticize self-centred, image-centred, uneducated students. On the other hand, we will see that the alternative could hardly be considered the ultimate solution for producing the architect of the future. In the conclusion, an alternative teaching paradigm will be suggested which will be grounded in ecological science and psychology as proposed by Erich Fromm.

The role of creativity in education and particularly the present-day guidelines for teaching architecture are shaped by the European Union and the Bologna Declaration (1999), which promote the idea of mobility, transferable knowledge, and life long learning. The so-called Bologna Process with documents like *Charter for Architectural Education* (UNESCO/UIA 2005) and *Directive 2005/36/EC* of The European Parliament encourage seeing the process of architectural education as a way of shaping a polymath literate in a whole range of technical, humanist and environmental issues. This concept, close to the Renaissance man, was widened even more to embrace social awareness and most notably sustainability. On the other hand, creativity is perceived as a means to economic success which is often reflected in international directives and studies: “Creativity and innovation can play an important role in the knowledge society, as the fruitful interdisciplinary debate presented in this report demonstrates. Creativity is conceptualised as a skill for all” (Ferrari, Cachia and Punie 2009).

There is, however, one more fundamental and crucial dimension of education relating to the architects’ responsibility towards the society and the environment. Academics and researchers, e.g. Susannah Hagan (2003, pp: 4-11), argue that lack of knowledge is a current obstacle in ‘Environmental Design’, which urgently needs to become the core of contemporary architectural teaching. The two methods will be compared here from the perspective of ecology in order to investigate the potential in stimulating and developing environmental awareness among today’s students and tomorrow’s designers.

### **Intelligence based design vs. narrative teaching**

From that perspective, the old educational discourse of antiauthoritarian teaching has to be perceived in very new light. The need to introduce eco-teaching seems to be as much philosophical as a practical question. How to introduce eco-teaching on the first year seems to be another highly fundamental question in recent architectural debate.

This context could be illustrated by the fierce debate between two opposite philosophies of teaching architecture

While searching for an eco-model of teaching, it is important to relate its principles and methods to the contemporary heated dispute of two antagonistic schools of thought related to teaching. One called itself 'intelligence-based teaching', whereas the other could be called 'narrative design'.

### ***Narrative Design Teaching***

The Narrative Design teaching is currently the dominant teaching method in architectural schools in the UK. This technique rooted in the antiauthoritarian tradition expects from student to develop their own narrative without much direction from tutors. Students are expected to be very much involved in self-directed research. At the end, the consistency of the narrative and visual results play a dominant role in assessing the project.

**Method:** Teaching based on promoting creativity based merely on individual narrative is probably an approach most criticised by IBD theorists. Deamer (2005) the author of *First year: the fictions of studio design* presents a radically different approach to first year students. The main aim for her is to produce students who are aware of the main public and cultural discourse – “people who are creative will put their design out in the world publicly, with vigilance and intelligence relate to social and philosophical issues – people who will be able to argue their own case and whose work will be noticed”. In order to achieve this aim, Deamer suggests encouraging students to develop a strong consistent narrative. The vehicle for this type of teaching should be open briefs; open questions which would require open answers and which would hopefully also create an open mind. The way of achieving this goal is to organise a creative environment where students would be able to reach their own ideas through the process of discussion and “**Deluzian folding**”. What is crucial for a successful project in this narrative tradition would be not only a strong persuasive story but also an appropriately striking presentation. Deamer (2005) suggests techniques such as defamiliarisation as an effective strategy to this aim. Using the language of Russian Formalists, a good project should have a **good story** (function and/or concept), but also a **strong plot** (form and poetic license).

Many teachers following the narrative tradition understand that the end success for a good project is a presentation that would appeal to the client, which could at the end secure work for future architects. These are the skills which they are dedicated to develop.

**The first danger** of this approach could come from not recognising the specific character and the uniqueness of first year students, who have just entered the school of architecture with good intentions and idealism, but not enough skills and knowledge. The pressure on form would introduce **favouritism of students who already have good presentation skills** and demoralising students with more idealistic approach whose first year design attempts are bound not to be perfect or well presented. This approach favours an eloquent speaker but not sensitive thinkers or potentially good students who will need some time to understand the complexity of architecture. There is a real danger of creating an environment steeped in an atmosphere of cynicism in which students would learn that it is not the research or hard work that is important, but eye-washing presentation and clever talking.

**The second danger** relates to the briefs themselves and their complexity. Definitely from a tutor's point of view, it is more interesting for a tutor to talk and teach about complex social and philosophical topics than about basic and obvious foundations of architecture. However, in student-centred education the teacher should not be seduced by things that seem stimulating for the teacher himself but are not useful for students. The first year could be particularly crucial in this respect providing a step by step education which builds a solid foundation of knowledge but also of confidence. It is a good thing to show to architectural students that you need to build the foundation first, before the construction of walls and the roof. On the later years, many tutors would expect students to know the foundations and there will be enough time to dwell on sophisticated philosophical disputes, but one could doubt whether there will be time to learn the basics. From the point of view of employability (which is definitely a concern for many students), it is the knowledge of basics not philosophical awareness that could secure a job. Most practices will offer students a job based on their knowledge of detailing, and not on a narrative based on Heidegger, Deleuze or Derrida. This does not mean that the knowledge and the idea of an architect-polymath is not important, but on the other hand, the University has to be fair to students who pay for education hoping that the course will equip them in skills that may secure employment.

**The third danger** relates to the ambition of eco-teaching itself. Certainly, according to the narrative-teaching, while discussing current movements, ideas and philosophies students will have to come across the issues of ecology, at least because it is presently extensively discussed. However, good eco-teaching should not only make sure that students understand eco issues intellectually, but also emotionally engage with the problem. This cannot be solved barely by intellectual sparring on the discussion or presentation level during 'crits', seminars or presentations.

What is more, one could argue that many of today's ecological problems have their roots in the seductive power of purely narrative design which is present in advertising or fashion without proper care, compassion and ethical background. The ecological

approach suffered greatly because of the irresponsible sophistic disputes. Attractive and seductive presentation does not have to be, but could be seen as a great introduction to irresponsible market environment where the main paradigm is selling a product with the most profit and in the highest quantity. Indeed, this mode of image-based culture has ethical implications and could be questioned in schools which try to keep the ecological ethos (Mehaffy, 2008). Planned obsolescence, disposable products and fashion are strongly connected with superficial image design serving the disposable-throw-away culture whose waste production is in obvious contradiction with the ethos of eco-design.

### ***Intelligence-Based Design Teaching***

Intelligence-Based Design (IBD) has grown out of discontent of a group of scholars with the antiauthoritarian tradition which they often associated with narrative teaching. In their opinion, the mainstream architectural education leads to shallow and superficial approach unsubstantiated with knowledge and respect to the environment. As an alternative, they suggest particularly in the first years a very directed system of study, and a limited choice of literature and projects, which, however, should be studied thoroughly and in-depth.

**The method:** Intelligence-based design claims to “combine design thinking and techniques that use human intelligence to create adaptive environments”. Advocates of this teaching philosophy suggest that from the first year architectural students should be exposed to holistic teaching relating to a variety of aspects of architecture, and project briefs should be based in reality. Deep grounded ecology seems to be in the core of the Intelligence-Based Design Teaching. Its promoters claim that the ultimate aim of this method is reinforcing ‘biophilia’ – the love of life or the bond between human beings and other living systems, as defined by Edward Wilson and before him by Erich Fromm. Salingaros and Masden (2008: 176) portray this method as a reaction against teaching “architecture for architecture’s sake”, against “Machine-Age Design” teaching which “detached itself from any higher order in human existence, turning away from both nature and from the sacred”. In the opinion of supporters of Intelligence-Based Design, contemporary teaching is unfortunately mainly based on an image-based paradigm (p.153) and cultural imperialism (aesthetic hegemony) of the industrial world and is corrupt by competing for recognition through the manufacture and manipulation of eye-catching forms” (p. 134). For the supporters of Intelligence-Based design, the remedy is knowledge-based education grounded on thorough research of psychology, human emotions, vernacular architecture and human interactions, but also economy, geometry related to nature and classical architectural history. They are opposed to “open-ended questions, in which students are told to proceed without any direct instruction”.

The promoters of intelligence-based teaching propose methodology based on theories developed by one particular architectural theorist – Christopher Alexander, who, as Salingaros and Masden suggest, should be the main reference author for the first

years of the course. In their opinion, the progression of the study should start from basic tasks based on relationship to nature and tradition. The most preferable briefs would be those which require large scale projects and rough drawing which, as they argue “represent an informational complexity that connects with our deeper perceptual and cognitive systems.”

## Potential

From the “eco-teaching” point of view, it must be appreciated that the stress lays on the importance of the **holistic approach**. From this stand, a natural step forward will be the introduction of issues such as life time cycle, embodied energy or interaction. The principle of **biophilic design** seems like a **good introduction to the principle of eco sensitivity** and a principle whereby every architect’s action has to be constantly evaluated in relationship to the wellbeing of both humans and other living beings. Encouraging knowledge could be an effective way of **encouraging students to search for inspiration in the surrounding** world instead of their own introspection and individual tastes and opinions. This type of teaching could send a clear signal that more well-organized knowledge could be inspiring and could help in individual studies. This teaching could **turn students’ attention towards more scrutinized knowledge** which all too often becomes a victim of popular quasi-theories with little scientific justification, which in the postmodern time could be used manipulatively against ecology. Last but not least, promotion of large scale models seems to be a good method which could go arm in arm with the ethos of **designing for real world**.

**Limitations and dangers:** Certainly, the above arguments could be seen as one of the many voices critical of contemporary visual culture which is strongly linked with advertisement, celebrity culture and fashion – and which makes architecture follow market rather than ethical values and forces architecture to participate in vain postmodernist discourse, where many parallel ‘truths’ could coexist. In contrast, IBD proposed a descriptive way of teaching, which many could accuse of being didactic and over prescriptive. Leaving these concerns aside, there are still certain reservations and potential dangers connected with IBD methods:

**The first danger** relates to **not enough stress being put into motivation techniques**. This danger could be paradoxically explained by referring to the very notion of **biophilia** itself. The definition coined by Erich Fromm (1964) played a central role in his theory of human character. His research as a social critic and psychoanalyst proved that a strong and healthy relationship with the world could lead to biophilia only if it is accompanied by two other elements: **freedom** and **creativity**. According to Fromm, those are natural needs which are immanent in human existence. Freedom is an opportunity for developing one’s own potential. Creativity is a need for interacting actively with the surroundings. Intelligence-based educator cannot forget that apart from promoting knowledge, it is equally important to motivate, inspire and encourage students to actively engage with the environment. It is not claimed here that IBD denies the value of motivation, but it should be stressed that

**biophilia** according to Fromm will require knowledge, motivation and freedom at the same level. The most recent research – *Drive: The Surprising Truth About What Motivates* by Daniel Pink (2010) seems to give evidence proving Fromm's theory by showing the importance of the three elements of **Motivation: autonomy** (developing something according to one's own skills and interest), **mastery** (developing something that makes one better and better), and **purpose** (working on something that is bigger than the person him/herself). Pedagogical theory and practice also shows that one way of activating students' energy and potential is to reinforce their passion and interests, while simultaneously steering them towards a better understanding of the subject. To do so, students should be able to work in a **secure environment** which would allow this investigation, experiments and mistakes. Students' passion and energy could be the main drive and the greatest asset. The motto "architecture is more than a job – it is an adventure" could be the most motivating and the most remembered drive for many students (BD, 2012).

**The second danger** relates to the risk of a lack of confrontation with other concepts and ideas. The reading list and theory suggested by IBD is concentrated very strongly around the work of Christopher Alexander and classical tradition. Even if one highly respects the work of Alexander, there is a doubt as to whether such a limitation of the reading list might bring other types of dangers.

This could happen while pursuing only one very specific theory. Even if the theory is right, very well grounded and useful, the student has the right to know that it is only one of many theories. The **requirement of transparency** and honesty will allow students to be aware and informed of the context of theory. In the same way how the idea of free speech laid a firm foundation for science, exposing students to various concepts should hopefully allow them to make an informed design decision. This does not mean that teachers should promote theoretical relativism. Just the opposite – teachers' knowledge should be grounded so much that through confrontation, a rational argument should prevail. Censoring and not discussing certain ideas might make students even more vulnerable outside the university walls when they will be exposed to discourse which was absent in the Academia.

**The third danger** is that although IBD criticizes the new so-called formalism as "obscure philosophy", "mindless conformity", "image-based paradigm", at the same time it seems to create its own image-based paradigm, this time relating to its own preferences. The danger is particularly evident in the strong criticism of the whole tradition of Bauhaus and Critical Theory. Even if it is easy to accuse modernism of house-machine ideas, standardization, glorification of anonymity etc., it would be misleading for architectural students if teachers failed to mention the deeply humanistic ideas of modernism like public health, social justice and indeed dedication to science and intelligence driven design. It cannot be denied that these ideas (even if often twisted and perverted) sprung from the humanist tradition of enlightenment and could surely have their continuation in Intelligence-Based Design. University education has a great debt to those ideas and on the first year students should be aware of the



tradition which they became part of the very moment they enrolled onto the architectural course. Similarly, the strong criticism against Frankfurt School expressed by Salingaros and Masden does not appreciate the humanistic importance of those thinkers. The oversimplification is particularly striking because of the fact that the very notion of biophilia was conceived and described by Erich Fromm, who was one of the most influential and important figures of the Frankfurt School.

### ***Juxtaposition of teaching methods***

The juxtaposition of two seemingly contradictory teaching techniques shows that the aspirations of eco-teaching have many points in common with the IBD method, but have to be open to the motivation component involving a narrative and discussion which should take place between a student and the teacher within a secure environment. Discussion is so important not because it denies the principle of IBD, but because it extends the notion of intelligence to emotional, social, self-conscious and problem-solving intelligence.

	<b>Intelligence-Based Design</b>	<b>Narrative Teaching</b>
Educational goal: who do we want to educate?	<i>HOLISTIC &amp; KNOWLEDGABLE DESIGNERS: People who can relate their design to human existence, perception, values and beliefs and can improve mental and physical health through design. (Architecture is extension of biology)</i>	CREATIVE & AWARE DESIGNERS: people who are creative and will put their design out in the world publicly, with vigilance and intelligence, and are able to relate to social and philosophical issues. People who will be able to argue their own case and whose work will be noticed.
Design questions promoted	BIOPHILIC DESIGN: “how to generate a space in which a man feels the most alive?”	CREATIVE DESIGN: “how to creatively design objects that are culturally and socially relevant?”
Briefs & tasks	SPECIFIC: avoiding open questions (Guided organised teaching)	<i>OPEN END: comprehensive and open-ended questions and answers expected</i>
Methods of acquiring skills	KNOWLEDGE BASED on learning practically and theoretically in order to be aware of how to apply different tools to different tasks	CREATIVITY BASED on a search for poetic tropes, <i>contrivances</i> and not straight answers and program (developing the <i>story – function and/or concept</i> and <i>plot-form and poetic license</i> )
INSPIRATION (where to draw inspiration from?)	<i>Holistically, from vernacular, traditional architecture, nature, economical relationships, neuroscience (emotional and social health), construction (cost, program, social relevance), natural geometrical qualities.</i>	Contemporary relevant issues: modern civic society, philosophy, contemporary social issues, modern representation.
Techniques promoted	CONTEXTUALISATION: Connected with nature and tradition	<b><u>DEFAMILIARISATION:</u></b> to simulate the viewer

Progress of education	From basic to complex	From overview to detail
Suggested process and techniques to develop students' skills	DARWINIAN PROCESS: developing options from which the wrong ones would be eliminated Step by step -Investigation	-Delusian Folding Strategy -Ideological Combat with Tutors (the student is taught how to <u>fight for a position</u> ) - <i>Developing a convincing story</i>
Role of the teacher	Guide, show the path and present knowledge	-to establish <u>a position in the architectural community</u> -to make the projects look a certain way ( <u>style</u> )
Promoted type of presentation	<u>Near REAL or ACTUAL scale.</u>  rough sketches	Good presentation model should be regarded as an object itself.  Giving evidence that actual physical artefacts (models, drawings) are in students' control.
What is criticised	IBD STANDS AGAINST: -architecture for architecture's sake detached itself from higher human existence -fashionable images -artificially generated worldview obscures philosophy Misleading open questions -industrial style - <i>image-based paradigm.</i> - cultural imperialism (aesthetic hegemony) of the industrial world - manipulation of eye-catching forms cognitive detachment from reality -briefs leading away from reality  ANTI-MOTTO: Creative thinking in itself is not sufficient and does not necessarily lead to good architecture.	NARRATIVE TEACHING STANDS AGAINST: -a story without persuasiveness or persuasiveness without a story are equally shallow (story – function and/or concept; plot- form and poetic license) - operational strategies (straightforward answers) which would not guarantee anything meaningful, valuable or persuasive -Formula approach to design. -Limitation of the notion of architecture to material elements -Notion of tabula rasa of architectural language  ANTI-MOTTO: We, as teachers, need to see ourselves not just as those with knowledge teaching those without knowledge, but as models for how these individuals should engage with the outside world, be it other people, the built landscape or society at large

### Eco-teaching:

The dispute between narrative teaching and IBD exemplifies a kind of crisis of antiauthoritarian pedagogy tradition. On the one hand, student-centred education is criticized for being careless and self-indulgent. On the other hand, IBD offers an alternative in the form of very directed teaching. How to find the way out of the

deadlock? What is the methodological answer in terms of ‘negotiating power with students’?

One answer could be very straightforward and relate to different stages of education. One could say that while earlier years should be more directed and follow the IBD strategy, the more advanced students should be more engaged with exercises that would follow the narrative teaching. This could be true in some cases and in a certain sense, and it follows the idea of Vigotzky’s scaffolding which should be gradually disassembled when students progress.

These two schools of thought, however, rather than telling about stages of education, in fact illustrate the state of mind relating to freedom, creativity and the relationship between students and the social and natural environment. The main problem seems to be the definition of these terms.

Erich Fromm dedicated his whole book *Fear of Freedom* (2005) to distinguishing between ‘freedom from’ – which liberates an individual from all dependencies without giving any sense of direction or purpose – and ‘freedom to’ which offers a space where an individual may pursue his or her individual destiny. The scary conclusion is that offering the society only ‘freedom from’ leads to social distress, anxieties and wars. When discussing ‘Liquid modernity’ Baumann gives his own account of today’s ‘freedom from’ which leads to the new ‘age of uncertainty’. Following both these thinkers, freedom itself cannot be a sufficient answer. Translating this thought into pedagogy, it can be concluded that merely offering students the freedom from authority or merely ‘renegotiating power’ could be insufficient to create a successful educational environment.

Fromm (1964, 1995) give us a sense of what those missing elements could be – ‘creativity’ in the sense of being active and ‘love’ understood as a mutual relationship with other people and the environment. All of these ingredients – freedom, creativity and love – need to interact and be present in human growth. Freedom without love leads to loss of meaning and direction as well as anxiety, love without freedom to overprotectiveness, creativity without freedom to passive workaholicism, and without love – to indulgence.

In this sense, ecological paradigms and ethos seem to offer to education a very right balance of all these ingredients and should be particularly explored. Eco-learning is not only about what students learn but also about how they learn. This type of teaching will be capable of assimilating elements from both – antiauthoritarian tradition in terms of developing a sense of identity of students, but also from IBD in terms of creating a sense of context to which students should relate. Knowledge about the environment and exercises that make students investigate their relationship with the environment should play a crucial role in this way of teaching.

Eco-ethos of teaching architecture should start from recalling the meaning or the original definition of ecology coined by Ernst Haeckel (1866: 286) as “science about the

relationship between an organism and its environment". This definition stresses not so much the product but most importantly the process – the process which a relationship is. The notion of architecture as being predominantly visual art could be a serious problem. The implementation of the agenda of the 'Environmental design teaching' is by no means straightforward. Mehaffy (2008) points out a range of problems. One of most important obstructions seems to be the hard dying vision of architecture as design-centred profession preoccupied with seeking originality and novelty. Mehaffy advocates interdisciplinary approach to designing architecture in a wider urban context, promoting meta-skills like cooperation, and the promotion of 'evidence-based design' (EBD) instead of 'individual expression'.

If architectural education should concentrate on the process, the relationship and further compassion, empathy, cooperation and eco-consciousness, it would be necessary to oppose the narcissism of architects and find a model of teaching that would not be *self-centred but environment-centred; not object-centred but process-centred, not image-centred but intelligence-centred. The last, however, we should relate not only to knowledge, but to the whole spectrum of various types of intelligence – cognitive, social, emotional, self-awareness* – the direction which the antiauthoritarian tradition has pursued for almost two centuries – a project which has not yet been completed.

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