IF THE FUTURE IS POST-MODERN,
HOW SHOULD DESIGN TEACHING CHANGE?

Chris Dowlen

Abstract

The paper is a speculative one. It starts off by examining processes of change, asking the questions about whether change results in progress or not. It also looks at the centrality of belief relative to action, confirming the importance of belief within a world view. It then describes specific elements that constitute the post-modernist philosophy and its basis of life, including a selection of isms: spiritualism, relativism, eclecticism of time and space and holism. These are then applied to the process of teaching design, as it stands at the moment, including the use of projects, the way that the isms can be incorporated and the way in which the visions and pictures that constitute the bases are utilised. The broader implications for the way in which design teaching is structured are discussed, including assessment, course development and use of facilities.

Keywords: *Design Education, Culture, Post-Modernism, Change, Belief systems*

1. Vision for the paper

The vision for the paper came not from a design culture, but from a lecture on the vision for the church to work in a post-modern world [1]. The cultural changes appear to be going on in society, and whether we be part of the church or design lecturers we need to communicate with people – some of whom may have a different outlook to ourselves. We need to understand and relate to that outlook.

A further lecture added fuel to the fire, when Perry King and Santiago Miranda gave a lecture at the RSA [2]. This largely demonstrated and illustrated the post-modern thinking described by the previous speaker. The lecture consisted of the two speakers, partners in the design consultancy based in Milan, who spoke from opposite sides of the room. A screen in the centre provided a visual backdrop consisting of a rolling picture-show of the consultancy's design work. It didn't illustrate the lecture, and wasn't meant to. The speakers took turns in describing portions of the story of Jason and the Golden Fleece, using it as an analogy of the way a design consultancy works. Each small portion of the lecture was based on a particular word from the story. From time to time a little light relief was provided by the rolling backdrop giving way to a short video with a cause and effect sequence. This was not relevant to either the Golden Fleece story or the design consultancy analogy, but there was no attempt to talk over the top of it. One might describe the experience of being in the lecture as interesting.

The Church has the task of seeking to change and develop beliefs in the congregation and to demonstrate relevance in the world. In a similar way to the Church, we teachers generally have the task of developing and changing our students' abilities, cultures and thinking process and of shaping them into the sort of people we wish to see them become. As design

teachers, we also have the task of ensuring that they are able to engage with the world through the artefacts that they design. We need to consciously understand and engage with the cultural thinking processes in the world so we can develop a robust critique and praxis of design and teaching as we seek to develop student culture around us, and as that culture develops into a professional culture and seeks to both relate to society and develop opinion and taste through the products that are designed and manufactured.

2. Change

Questions of change and progress have been around for a very long time. Although they were still around in agricultural communities, there was a certain sameness about the seasonal routine and the need to grow enough crops for eating, storing and selling. Different political regimes still made their influence felt, and different gods and perceptions of the way the world worked allowed for different ways of thinking to develop in different cultures. Change existed; people were born, grew up, developed skills in working, and did their bit to fit in with society. But change was not fundamental to the way that agricultural societies worked. This altered with the growth of merchant classes wherever that happened in the world, and the pursuit of progress and marching on of time became more important with the enlightenment, reformation and renaissance. We might debate at length whether the world is changing faster than it ever has been, but it is clear that in the past couple of hundred years society has moved from an agricultural society, through an industrial society to the information society. Now we are talking about the dream society. Whether that is a true shift or whether it is a virtual one will continue to be debated, probably beyond its sell-by date.

How we view the way changes take place depends on our personal views of progress – or the lack of it. Post-modernism seems to be related to this. For instance, within architecture, it appears to have developed from the public and also professional reaction to and rejection of the direction that brutalism appeared to be taking in the 1960s, with such architects as Charles Jencks and Robert Venturi taking a leading role.

2.1 Does change equal progress?

In product design and engineering the currency of post-modernism is much less clear. It also depends on one's definition of progress, whether producing a better product is termed progress, and whether, indeed, your newly-designed product is, in fact, better.

2.1.1 Change in car history

A simple illustration will help here. The car has been around for a little over a hundred years. In that period of time, cars have changed almost beyond all recognition.

By about 1905 the car had settled into a specific format, with a four-cylinder engine situated at the front of the car under a bonnet and driving the rear wheels by shaft through a four-speed and reverse gearbox: with the driver sitting on one side directly behind the engine, using a steering wheel for direction control. There were four wheels fitted with pneumatic tyres situated at the corners of the car attached to beam axles that were both in turn suspended from a channel-section chassis frame by semi-elliptic leaf springs. That is how specific the format was. [3] Various additions such as doors, windows, roofs, mudguards, self-starters and electric lights came thick and fast through the next thirty years without changing the basic format. But by 1905 the car has to be described as being a mature product.

Was the 1905 incarnation of the car better than the earlier arrangements? It was certainly a more reliable form of transport and was now being used for actually getting places rather than as a rich man's toy. Is the car we now have a better means of transport than the 1920s car?

Cars are more reliable. They are expected to work every time they are needed.

Cars have better performance. Motorway journeys are commonplace and the maximum speeds are higher and acceleration times less.

Cars are more economical. They are expected to use less fuel.

Cars need less maintenance. Planned service schedules are expected to be less and less frequent, with less and less to do at each service.

Cars are safer. They are better at avoiding accidents. They are better at looking after their occupants and minimising injury and preventing death when accidents occur.

Cars are more comfortable. They have better weather protection, climate control and entertainment systems. Luggage does not have to generally have to be tied onto the outside.

Cars last longer. They do not corrode as quickly and bits do not drop off them so regularly.

Copies of classic cars exist, but they generally have modified features so they can be used more effectively in today's world. The Likamobile, for instance, which is a copy of the 1900 steam-powered Locomobile, is made of largely fireproof materials, has disc brakes for added safety and engine components made of modern materials. But it still steam powered and still looks like a 1900 Locomobile. Likamobiles are not designed for everyday transport, but are an expensive enthusiasts' toy for shows, exhibitions and just for fun.

Figure 1 1901 Left: Locomobile, 1901: Right: Likamobile, 1995

2.1.2 Evidence of post-modernism in car design

Contrasting this is the way in which several cars that have historical significance have had their character copied and embodied in more recent incarnations. Chief among these are the Volkswagen Beetle, where the new version has visual form characteristics of the old version grafted onto the mechanics of a Volkswagen Golf, and the Mini, with the new version having something of the visual form of the old but not the finesse of packaging that was the original *tour de force*. One can think of Model T-based hot rods and London taxis, and there are many

more examples. If they are not of complete cars they are of portions of cars so that something of the heritage of the original comes through to impart its perceived brand value on the present. This could demonstrate post-modernism in action in car design.

Figure 2: Old and new Volkswagen Beetles

2.2 Scientific progress?

Whilst speaking about science rather than engineering, technology or design, Jonathon Porritt perhaps sums up feelings about progress and, possibly, modernism, when he says:

> "I find myself inevitably locating modern science at the very heart of an inherently destructive model of progress, whilst simultaneously looking to science to provide the answers to the otherwise intractable (environmental and social) problems we face." [4]

Does scientific progress (or lack of it) equate to engineering, technology or design? Is the dilemma we face equal to the one that Jonathon Porritt faced in science?

On the other hand, those who investigate scientific phenomena do not sit happily with the tenets of post-modernism. The well-known faked academic paper published in the journal Social Text that used post-modernist quotations to challenge established scientific theories illustrates this [5].

3 A world view for designers

It is useful to develop an overview of the world for the designer [6]. This determines the ways in which designers see the world around them and the way in which they relate to both their chosen profession and life overall. The world view positions the design process within a framework.

3.1 Designers change the world

We are in the business of changing things. This applies to all people, but particularly to those of us who are designers, and even more particularly to those of us who are teachers – so it is doubly relevant to those who teach designers. The process of design is that which, roughly, takes ideas and ingenuity and translates these into a real-world manifestation in some way. This real-world manifestation takes raw material of some sort (it may not actually be very raw at all) and converts it into something new that fulfils the designer's ideas and vision. Designers change the world; they don't just try to understand it, and in some cases do not try

to understand it at all. Designers try to change the world and in doing so generally try to make it a better place, where they can influence it [6].

3.2 Designers develop themselves

Developing as a designer means developing thinking and imagining skills, developing ways to express these in ways that can see the dreams take shape in reality. This needs to be done whether a designer is taught formally or allowed to develop without formal teaching. So design can be seen as a way of seeing the world and a way of making the world change to fit in with your own ideas. But in the process of seeing the world in an individual way it is still essential that designers understand the way in which the world works – to understand something of a scientific world-view. It is this world that provides the raw material building blocks, the electronic behaviour and the physics of thermodynamics and, like it or not, a designer has to interface with this world when creating products. And the real world is not virtual.

3.3 Design is a vocation

It is something that people do as a profession and it is a way of earning a living. For a designer, design becomes not just a job, but also a way of thinking and living. Designerly thinking doesn't disappear when the designer is off duty or at the pub, although time pressures change and the design work is done on beer mats and paper napkins rather than on CAD.

4 Design Teaching

4.1 Teachers Change Students

As teachers and educators we are in the business of changing our students or at least aiding and abetting them in changing themselves. When we devise teaching schemes and programmes we have to have some idea of what those changes are going to be in our students and also in what way we are going to make or assist in making those changes happen. We determine educational aims and learning objectives, or whatever the current term is. With these we are attempting to determine the extent and nature of the changes we are inducing into the students. In this the students themselves are intended to be active co-operators. Whilst we are seeking to see them change, we are expecting them to own the changes and make them happen themselves, and it is clear that graduate products, when they leave us, are intended to be 'bettered' products, offering added value for the individuals themselves, their potential employers and other parts of society and the world that they come into contact with. From there, what we are hoping is that our graduates will be able to change the world and make it into a better place. This is a scary commission, but one we cannot shirk.

4.2 Building cognitive models

4.2.1 Students build cognitive models

In particular, we are involved in changing our students' minds. Not like a mind-altering drug or by brainwashing, but there are similarities. We need to build students' minds so that they are able to develop the cognitive models that help them change the world. It is clear that the basic description of the design process as being one where original thinking is embodied in changes made in the world means that students need cognitive models about the nature of the

thinking, the nature of the world and the nature of the intervention in it that they, as designers, are able to make. Students will develop their own models in any case, but it is part of our duty as design teachers to consciously help students develop models that are ones that help them function as designers rather than ones that are derived by default.

The advent of post-modernism into general culture has brought changes in the way people, particularly of our students' age, think and in the way they perceive the world. We have to start where the students are in their thinking and with the models that they have already developed, mostly unconsciously, building on them with whatever models we seek to implant and allowing students the freedom to develop their own models.
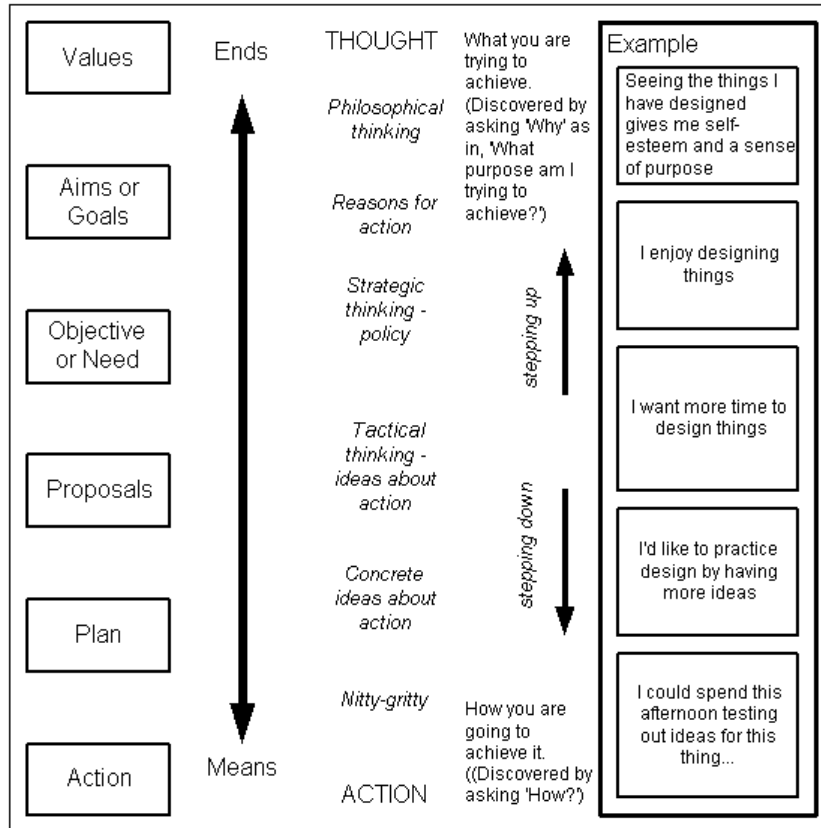

Figure 4: Thought-action continuum (after Petty [7])

4.2.2 Teachers build cognitive models

Not only do students build cognitive models, but teachers and lecturers do the same. We are part of humanity and not removed from the same world as our students. Like them, it helps us to build our cognitive models consciously. Perhaps it is particularly important for us, as what we believe becomes part of the unwritten substance we unwittingly teach to our students. Getting our models to be those that work in the real world is important to us so we can function. Our design philosophies and professional ethics will guide these as will our human experience of how the world works.

6

5 Importance of post-modernism

Why is a change from modernism to post-modernism important? It is significant in that it is changes attitudes and thought processes that underlie reasons why people act. The thought-action continuum in Figure 4 shows that it is values and philosophies that determine subsequently actions. It is crucial that our plans and actions emanate from our thoughts and beliefs: if these are altered, then perforce our actions are altered. If the fundamental premises in life are altered then our actions become related to the new belief system that we hold. It is these actions with which we change the world. The belief values change with post-modernism, and hence the actions change. Thus it is important to engage with it.

5.1 The post-modern world

Post-modernism is not any one thing. That is the essence of its character. But there are things that characterise the post-modern set of beliefs, apart from their non-modernistic stance.

5.2 Basis of life

This is the critical difference between the modernist way of thinking and the post-modern. There are a number of characteristics that appear to be common.

5.3 Post-modernism is about believing: a philosophy.

In essence, post-modernist thinking is multiple, correlated and intermixed. The point about the basis of life is that there is not one way of thinking that is correct. This leads to multiple ways of doing things and multiple bases of life. This is a big canvas.

The most critical way of thinking is metaphorical. This finds something that can be likened to a basis of life. Because the thinking is metaphorical, the metaphor may come unstuck around the edges, and it is acceptable for it to be fiction and replaced conveniently when required.

We can have reliance upon dreams, visions, pictorial thinking, stories and myths: any of these or all of them. What is important is that it touches our heart and acts as a basis of life. In the lecture given by King and Miranda [2], the Greek myth of Jason and the Golden Fleece stood in for the way the design profession works. Hardly the real basis for the design profession's way of working, it was convenient to use this metaphor.

Figure 5: Powered surfboard advertising

The simpler the picture, vision, or story the better, as it can then be grasped more easily. The more graphic and emotional the better, too. It should also be rooted in daily life, in the way that parables and fairy stories are. Take the fantastic as representational.

For instance, advertising shows a vision, not a product: a fantasy in contrast to the product.

5.4 Isms

This is probably the easiest way of describing a whole raft of post-modern philosophies. They could also be termed aspect of post-modernism.

5.4.1 Spiritualism

There is more to life than the material, scientific world. What we see is not all there is: being scientific is not the only worldview that is acceptable or true. Spiritual cause and effect are as real as material and more relevant; they relate to the basis of life. Normal scientific cause and effect logic may be ignored and that a smorgasbord of belief systems has been built up.

5.4.2 Relativism

Other modes of thinking are as legitimate as yours. Deep thinking processes are different in individuals, particularly from different cultures. Each person's thinking is different [8].

5.4.3 Eclecticism of time and space

If other people's thinking and views are as relevant as ours, why not discover what they are, and select your own from whatever age and culture you wish. The questioning of progress results from this, as does conscious selection of styles.

5.4.4 Holism

The spiritual takes on importance, and this leads to holism, with all parts of life touched by each other. It becomes impossible to buttonhole bits and put them into boxes – they are all related to the spiritual. The corollary is that we must deal with complexity, particularly with interrelationships between separate boxes.

6. Applications to design teaching

It is clear that post-modernism is already having an effect: post-modern thinking in design is in print [9]. It has begun to creep into our courses, probably without consciously doing so. The project method is central to our developments of students as complete, rounded individuals and to our relationship to them as design masters, teachers or equals.

We could argue that we are in a post-modern culture and that post-modernism is the way that our students think, either consciously or unconsciously. It might be the direction that we ourselves wish to pursue in our thinking and hence our life, work and action. Alternatively, we could recognise that as designers and as lecturers we have a privileged view and subject that gives us an inherently different outlook on our beliefs and hence our lives and actions – and that this is a model that we wish to develop within our students' minds, lives and actions. There may be justification for this in terms of our training and experience, but surely in no other regard. It is interesting to note, in passing, that architects have a tendency to regard the architectural profession as inscrutable, whereas product designers tend to try to make their designs accessible to as many people as possible and to demystify the design process.

We need to develop the ways our students believe things so they will be able to act, particularly in respect to how they develop products. We also need to develop our own beliefs so that out of this will come our ways of seeing the world and acting as design teachers.

6.1 Bases of life for the designer and design teaching

The key is to develop our dreams, visions and other bases of life so that they can be passed on to the students. These may vary and may be couched in pictures, stories, or whatever. Once these are in place they must be translated into the students' own dreams and visions to allow them to develop visionary products. The key is to get something that is easy to comprehend, realistic to buy into, and easy to pass on with enthusiasm.

We ourselves live dreams and have visions; we have spiritual and practical sides to ourselves, and need to explore this, define it and develop it as a 'seeing', visionary capacity. They also relate to our views of reality. We need to demonstrate our love of being a designer; of not stopping when we go 'off duty', and of infusing this as part of life, our vision and our dream. We describe design as world changing: we must demonstrate we enjoy changing the world.

The challenge is to transfer this to the students. Although we need to start off by understanding what they get thrilled by and finding out how they tick, it is more fundamental that we reach their hearts and are alongside them as they develop their personal goals and visions. They need to be allowed to dream dreams, to develop their own ways of being. We need to get the students to reach their hearts with their design work and to have our hearts tugged by it. In some cases group visions and thinking will develop.

Figure 6: Design an animal. Creative thinking development

In product design courses we start off developing students' abilities to see. We need to include the abilities for vision in a wider context – that of seeing bigger pictures and overall perceptions and using these as metaphors on which to base their thinking. It means that we have to be able to provide a selection of ways of thinking in this expansive manner early on in the courses, providing them with what are perhaps perceived as somewhat zany procedures and 'different' projects so that this thinking style can be encapsulated and that they will be encouraged to think outside of their earlier perceived realms. Projects such as the 'design an animal' one carried out during the first year at London South Bank University [10] may be used. Figure 6 shows a few of the outcomes of this project.

Brice Dyer may have been on to part of the process when he recommended the adoption of sports training principles into design teaching [11]. What he realised is that in training designers we train not just the student at the time of the class contact period or even during the working day, but the whole person and the way they live as people. This entails being involved in such things as the selection of diet, the provision of relaxation facilities and the whole of the environment. To develop the quality of student life so that they can perform at their best as designers for a lifetime. Such a process becomes extremely attractive in the context of post-modernism.
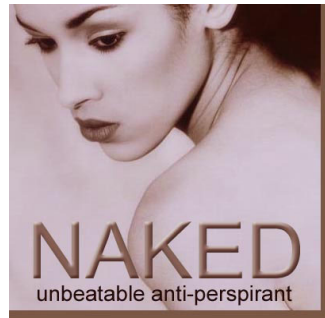
Figure 7: Anti-perspirant advertising

In terms of products, we need to be aware that we can't just use the word to describe them. When we look at TV advertising and try to discover exactly what they are selling, we see that it is the dream, the vision, lifestyle. For instance, an anti-perspirant deodorant, which happens to be just a gel or a liquid, becomes sexy by what it does – there is a stress on humanity, on individuality, on spirituality – the deodorant fulfils a dream. We need to get the students to develop product lifestyles, not just function.

6.2 Let students dream dreams

The majority of product design courses include a major final year project. This is seen as an opportunity for a student to demonstrate their overall design abilities and competence as well as their project management skills. But it also needs to be seen as a means of allowing students to dream their best dreams and demonstrate their overall vision for design of the future. Far too often students are sucked into doing projects that relate to a narrow field of view and are encouraged in this by the need to develop practicality and to demonstrate the completeness of the design process in something that can be seen from the start as realisable. But we need to give students the techniques and abilities to think outside of the box and to dream their own visions for the world of the future. The design heroes that they investigated in their earlier mini-projects certainly demonstrated some vision for the future, and they should be aiming to emulate not the stylistic vision but the futurism that they demonstrated – although it has to be said that many of the design heroes were living in a period that saw

human progress as being realised through design and technology rather than the post-modern vision where this is not necessarily the case. And this vision needs to include such area as the spiritual basis for the product. Perhaps we focus too much on the marketing requirements of final year project outcomes and not enough on the more eclectic and diverse outcomes – after all, in many cases it is the only opportunity that a student may have to demonstrate an outcome without the commercial pressure to achieve a successful financial return.

6.3 Isms for design teaching

Having developed the big picture, we need to address the isms.

6.3.1 Spiritualism

This means that we assert that we have both spiritual and practical sides to ourselves. We must no longer ignore the spiritual side of ourselves – it's part of us, whether we're Christians or Hedonists (or both?), and we need to communicate this to the students, in spite of trying to avoid doing this for many years. We ourselves are not just designers – not just doing design. We need to assert who we are as well as what we do. We also need to develop 'seeing' beyond the material, and a visionary capacity for ourselves.

In terms of passing things on to students, there needs to be space and time for their own personal design experiences: they need to be exhorted to reflect, meditate, think – even pray.

Viktor Papanek in his book The Green Imperative [9] has included a chapter on design in the spiritual – about sensing a product. Students need to go beyond Product Design Specifications and develop some other way of determining product visions.

6.3.2 Relativism

Students will already have varying design experiences. These are equally valid as our own, and we need to affirm this. We need to allow and encourage them to develop personal structures, goals and visions, but expect they will not be congruent to ours. This may challenge us on our view of professionalism. We should also expect them to do their thing within the class as well as outside it, and this may mean convoluted commitment patterns: they may expect nurture at odd times and in odd places, and we should be able to care for them as people, not those who just need to learn techniques. Flexibility in course structures is perhaps the key here – concentrating more on 'ways of being' will imply this broader flexibility and this must be catered for.

For products, this means a lack of emphasis on provability: the assessment must be more on feeling, sensuousness, and emotions rather than sensibility and function.

6.3.3 Eclecticism of time and space

Firstly, we need to demonstrate our own evidence of choices and preferences. We should be those who are consciously aware of our choices and why we select particular lifestyles and products. Similarly, we will want to develop individualism and eclecticism in students: although we may yearn that they develop a sense of discernment similar to ours, that is obviously not essential. We should deliberately demonstrate the mishmash arrangements that exist around us and cultivate culture in them. It should be clear that we don't know all the right answers: what they do may be much better than our own ideas.

In terms of course content, there needs to be significantly more emphasis on the non-design elements of the courses – about the cultural and contextual aspects of design across cultures

and history, which should ideally not just include European design history, although that might well be the easiest option. Students should consciously try to get under the skin of the different eclectic thinking going on in the different cultures, and it could well be advantageous to ask them to deliberately investigate styles and incorporate them into their own work.

6.3.4 Holism

This means that we are not just teachers or even designers for our students. We are holistic people who have a whole life. It is as this that students will be able not just to do as we say but also to use us as role models. We become fellow experiencers and explorers of life, not just preachers. What we need to communicate is our love of being a designer and of not stopping being a designer when we are off duty – in fact there is no off duty for us in some senses.

In return, we should be expecting students to communicate their whole-life experiences to us and ask them to talk about their loves and experiences, and should allow time for this to happen. We should mix project and topic time with talk about themselves and ourselves.

In terms of the course, the non-design elements get bigger and should be allowed to expand into daily life and the non-taught aspects.

The Total design philosophy assists us in terms of the product. Knowing that this is not just something that is designed in a backroom is essential. And that needs to expand out so that we are talking about the overall service, not just the product. This must include the specific vision, the spiritual, the picture, before the design work can be done in the backroom.

In specific terms, this may mean the inclusion of project work that is deliberately designed to be of a multidisciplinary and interdisciplinary character, with students from a variety of courses taking part in joint exercises. Inevitably these will be of a group nature and designed to increase students' abilities in non-design areas. These projects will also necessarily be somewhat vague in their definition. It doesn't mean that the eventual outcome will be vague, but simply that a student group will need to be able to develop the brief themselves as well as the outcome. Interdisciplinary project work is notoriously difficult to timetable, and it may be possible to invent some sort of timescale that avoids or even circumvents the timetable process to enable it to be carried out successfully.

7. Implications

As post-modernism is a change that affects belief systems, the implications are fundamental. If we are going to pay more than lip service to this philosophy, then we should be taking the implications seriously and realise that they can alter the fabric of life. The philosophy will affect not just the way we teach our courses, but there are implications for our own lives, the way we develop the courses, and the sorts of facilities that we use for design teaching.

We need to realise that a mutual life-changing process is going on. We change students' lives; they change ours. Different experiences are equally valid, including those of our students. We are not the authority any more: we are no longer the only teachers in the group. We assist students in developing their individual goals. We shift from being the fount of all wisdom to the personal development consultant. Together we change the world through design. How much we are prepared to take on board within our personal life-vision is quite another thing, and how much we believe that improvement, and hence progress, is possible, is yet a third. Our own lives need to show less division between lecture, tutorial, research,

administration and more space and time to be people, perhaps particularly so where students are present. We should not shirk our humanity and in particular should not be afraid to demonstrate to students that we are of the same clay that they are, and that we have a selection of failings, some of which will impinge onto the way we interact with them.

In terms of our courses, the implications are that, despite the protestations of the management, we need more time, more flexibility, more contact, more personal space and less committed timetable. However, the time still needs to be filled with something, so that the students are able to develop their visions around being part of the course and establishment. The courses need to be more integrated, less unitised and more individual and personal – difficult in the current climate with its insistence on transferability, value for money and added value. Development of spiritual and individual values needs to be possible within the course structures.

There are problems associated with the assessment processes. In particular, how do we (who are set up and paid as the experts) assess those who have different design experiences? How do we judge their validity? Different assessment processes need to be in place, perhaps with mutually agreed student outcomes rather than somewhat secretive procedures to do with marks. This implies that formative assessment, not summative, becomes a more substantial element of the assessment process and that the emphasis is no longer on the marks but is on developing ways of achieving the vision of the future. What the final outcome may be, how it will be determined and what its currency is will be based upon an individual expression on the part of each student and on the manner in which it is communicated. Pieces of paper and transcripts will need to become things of the past – but this seems contrary to current thinking.

The implications for our facilities are that as the design process goes on in conjunction with daily life, the workspaces need to turn into life-spaces, with less division between lecture room, workshop, computer facility, home, meal table, canteen: people must be allowed to eat in university facilities and bring in their relaxations such as music, space decoration, plants, prayer spaces and so on. Our facilities must become more homely, lively and more conducive to whatever goes on, whether it be work or anything else. Shades of Churchill's bed in his office would not perhaps go amiss! Students are currently not trusted with being responsible – rooms are locked up, security systems prevent unwanted access at the wrong times, computers are not available when required. The centre of London is probably the most problematical area of the country for this: students live and work miles apart and the University has few living-in facilities. We know all this needs to change!

8. Implementation

How are we doing at realising the dream? Unlike some other topics, design is perceived as being a vocation. It brings a unique and special way of being, of seeing and of understanding the world. This makes it much easier for us to see the big picture and to define the vision.

The way we teach design also has particular significance. We normally use a project method. Design problems rarely have one right answer and projects give no opportunity for students to copy things out rote-fashion. They develop resourcefulness and can make assessment difficult for staff, particularly when they pass outside our understanding of the world or dip into specialist areas where we have no or little knowledge (as they frequently seem to do). They are also only rarely limited to specific topic areas, have deliberately ill-defined briefs, and this may spark off individual research by students into areas that impinge on a broader

spectrum of life than they were intended to in the first place. They also develop discrimination and discernment.

Figure 8: Radio design from a historical perspective

We can take up the challenge and deliberately include project assignments that investigate, say, areas of eclecticism and across traditional subject boundaries. A further example of this can be seen in Figure 8, where a radio has been designed, deliberately using styles and thinking from a historical era, although admittedly not very far removed from the present.

But we are still constrained by subjects, subject boundaries and categories. We are also significantly constrained by our assessment criteria – we still judge students.

On the broader front, it is clear that current University funding arrangements militate significantly against such an approach being taken. This reflects in the staffing arrangements and the course timetabling arrangements that will not currently allow anything like the sort of content required – not to mention that our students need to keep body and soul together with a little bit of funding from some source.

9. Conclusion

It is obvious that, whether we like it or not and whether we agree with it or not, our design teaching will be influenced by post-modernism. We could either ignore it and hope it will go away, in which case we will find ourselves unable to communicate with our students, or we could consciously include aspects of it in our teaching and our relationship with our students.

It is not going to leave us untouched: we need clarity of belief and understanding of change, progress and perceptions: plus a determination to actually produce actions in line with our own, consciously developed belief system in our teaching.

In some senses the post-modern view has been determined to be correct: people in other cultures and times could be no less intelligent and their ways of thinking are certainly no less valid than our own. But in other senses it is difficult for us as designers to take on the complete picture. We don't necessarily have the breadth of cultural experience to do so [8].

The paper started with looking at aspects of change, and in particular whether this could be argued as being progress or otherwise. We need to change. We probably would like to think we progress. As designers, we need to try to make this change happen for the better. This

means that we may not be able to take on board some aspects of being post-modern. The places and products we have around us have not changed as a result of randomness, but we have deliberately chosen, to some extent, to be in the midst of a society that is perceived to be better than a stone-age culture.

On the other hand, there may be a story, but it is a story of deliberate and sustained progress. There is a vision of something better, and that vision can be reached by transformation, helped by us (and our students) as designers.

Nevertheless, this will take a considerable effort on our part and lead us down some paths that are contrary to the establishment views.

References
1.   Dunberg, L., *Vision for god's church in a post-modern world*. 2001, Global Action: London.

2.   King, P. and S. Miranda, *Jason and the golden fleece: An integrative approach to design*. 2001, RSA.

3.   Dowlen, C. *The evolution of the car: An investigation into product history. Similarities, contrasts and questions*. In *Design and Nature*. 2002. Udine, Italy: Wessex Institute of Technology.

4.   Grove-White, R., *Testing times*. RSA Journal, 2000. **4**(4).

5.   Sokal, A.D., *Transgressing the boundaries: Toward a transformative hermeneutics of quantum gravity*. Social Text, 1996. **46/47**: p. 217 - 52.

6.   Dowlen, C. and M. Atherton, *What is design?*, in *Nature and design*, M.W. Collins, M. Atherton, and J.A. Bryant, Editors. 2005, WIT Press: Southampton. p. 1 - 16.

7.   Petty, G., *How to be better at ... Creativity*. 1997, London: Kogan Page.

8.   Lakoff, G., *Women, fire and dangerous things*. Paperback ed. 1990, Chicago: Chicago Press.

9.   Papanek, V., *The green imperative: Ecology and ethics in design and architecture*. 1995: Thames & Hudson.

10.   Dowlen, C. *Design an animal. Analogies for the development of creativity*. In *International Conference on Engineering Design*. 2005. Melbourne: The Design Society.

11.   Dyer, B. *Citius, altius, fortius - integrating competitive principles into the designers world*. In *IE&PDE 2003*. 2003. Bournemouth: Professional Engineering Publications.

Chris Dowlen,
Department of Architecture and Design, London South Bank University
Borough Road, London SE1 0AA, UK
+44-(0)20-7815-7609 Fax +44(0)20-7815-6134 email: chris.dowlen@lsbu.ac.uk