

Making a drama out of a process: how television represents designing

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In recent years there has been a trend towards television programmes being specifically about design processes at both popular and documentary level. The Designs on Your... Bra/Loo/Car series of programmes, first broadcast in 1998 in the UK and featuring the design agency Seymour-Powell re-designing familiar products, provides an opportunity to look at the issue of how television represents designing. The paper provides quantitative and qualitative analyses of the programme contents to show the overall programme structure together with techniques of representation and characterisation. The paper concludes that although the programmes represent (and accentuate) designing in fairly traditional ways—and ways in which industrial design engineering is generally taught—they do carry an important, and perhaps implicit, subtext, illustrating the decision-making of other participants in the process. These conclusions concur with recent work in design theory challenging the idea of designers as 'individual geniuses'. © 2002 Elsevier Science Ltd. All rights reserved.

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But listen to the music, he's evil! Homer Simpson says to his wife Marge as they watch a television documentary about an alleged stalker (*The Simpsons*, episode 2F06). The quote reveals the often indeterminate relationship between 'truth' and televisual representation, the music being used to imply the nature of someone's character. With an increasing amount of designing on television the question of how the design process is constructed and represented in a programme becomes important when we consider the increased level of expectation that an inaccurate representation of designing can cause to both clients using designers and people thinking of a career in designing.

The rise of UK television programmes about design and designing in the



1980s has been documented by Paul Springer ¹. He describes how in the early eighties television reflected the 'boom' in design, but had no fixed format to follow (as did science, technology and arts programming). In case studies of three series—*Design Classics* (1983), *Design Matters* (1987), and *The BBC Design Awards 1987*—he describes the problems of finding a format to fit a theoretical approach to design, contrasting the 'everyone can design' approach used in *Design Matters* with the 'classic object' approach used in *Design Classics*.

In recent years the format of television programmes involving a design process has become more fixed, combining elements of 'real action', interviews with participants, and voice-over to contrive a dramatic commentary. Such a format has segmented into three general areas. Firstly, there has been a populist trend concentrating mainly on design in the domestic sphere. The British *Home Front*, *Changing Rooms* and *Ground Force* as well as the more recent *Inside-Out* (BBC) all contain some form of planning, collaboration, method, and individual and collective decision making. This is not only a British phenomenon however. The Dutch *In Holland Staat een Huis* (SBS6) and *TV Woon Magazine* (RTL4) are based on similar principles. The second trend is documentaries of major architectural and engineering projects, examples including: Kansai Airport (Channel 4, 1994), the Boeing 777 (Channel 4, 1997), London's Millennium Dome and Millennium Wheel (BBC, 1999), and most recently London's new Tate Gallery (Channel 4, 2000). Indeed it is fast becoming *de rigueur* for large public projects to be accompanied by a television series recording the design and manufacturing process.

Most interestingly for the design researcher have been programmes looking at smaller-scale product and architectural designing. In the UK, Channel 4's *Equinox* popular science series broadcast a programme titled *Designing Dream Machines* (1995), BBC2 had a series of programmes called *Public Property*, following well known architects involved in small architectural design projects (1996), and Channel 4 produced three programmes, titled *Designs on Your... Bra/Loo/Car* featuring the product designers Richard Seymour and Dick Powell (1998). In the US the product development firm IDEO took part in a 'deep-dive' project for ABC's *Nightline* programme, re-designing the shopping cart over an intense two day period (1999). More recently was a series of programmes, titled *Making it...* looking at the first 'real' projects of newly graduated design students (BBC World, 2000) and a second series featuring the Seymour-Powell partnership titled *Better by Design* (Channel 4, 2000).

With a relatively fixed format for programmes about designing it is now

1 Springer, P 'Framing design: "design or design?" What happened to design when it went through the television cameras in the 1980s' MA thesis, Royal College of Art, UK, 1991

possible to study how the content of particular programmes relates to the theory and practice of designing and to do this the paper focuses on the three *Designs on Your... Bra/Loo/Car* programmes mentioned above. This series of programmes, first transmitted in June and July 1998 on Channel 4 in the UK, have several features that make them attractive for analysis. Firstly, each programme contains one particular design process and a good deal of primary—‘fly on the wall’—source material. Secondly, they contain existing clients who are trying to develop actual products and that means there is an argument for them being considered as ‘real’ design processes. Thirdly, three separate design projects allows a controlled comparative analysis that is impossible in the programmes detailing larger design projects.

The rest of the paper is structured into four main parts. The first part gives a brief overview of the programmes for those unfamiliar with them. The second part details the method of data analysis and assumptions that constitute the research. The third part provides a quantitative analysis to look at structural aspects of the programmes. The fourth part uses a qualitative analysis to look at particular aspects of programme content and mechanisms of presentation. The paper concludes that the basic structure of the design process presented in the programmes concurs with standard teaching in design methodology, however the requirement of television to educate, inform, and entertain its audience reveals a rather more sophisticated portrayal of designing. More specifically the qualitative analysis reveals how television both represents designing and contradicts this representation in the same programme. While the designers are explicitly represented as bastions of rationality solving the world’s problems, the programme content illustrates the importance of, and also the designers’ reliance upon, other participants in the design process.

1 The designs on Your... programmes

In the first programme of the series, first broadcast 23 June 1998, the product designers Richard Seymour and Dick Powell focused their attention on re-designing the brassiere. The organisation that they worked with was Nottingham based lingerie company Charnos, who had asked them to design: ‘a bra that is far simpler in its concept, perhaps can be offered in fewer sizes, particularly suitable for bigger bust sizes... and [that] we can sell at a sensible price, and make a modest return’ [*Bra*, sequence 10, 7:35–8:22¹]. The designers consult experts on female anatomy at Nottingham University and materials at Adidas, look at the current market, prototype a series of ideas, and come up with their idea for a new concept in bras: ‘the Bioform’. This is a three dimensional structure that replaces the underwire of the traditional bra. The programme ends with all parties happy

about the way things have turned out. The design has now been patented, and a product was released late in 2000. This would seem to be the most successful collaboration of the three.

In the second programme of the series, first broadcast 30 June 1998, the designers work with Shires, 'a traditional northern family firm' specialising in sanitary ware. They wish to produce a: 'modern classic [bathroom] suite with a hint of revival, a little bit of hybrid, not totally modern, but there has to be that little bit of classical style' [*Loo*, sequence 11, 7:05–9:18]. The designers again look at the current market, consult an expert ergonomist in the field, travel to Japan to view the 'state of the art', and suggest a number of improvements to the present toilet (the rest of the bathroom suite receives short shrift). The organisation, although finding the design suggestions interesting, feel them to require too much development work and there is then a series of meetings to preserve the 'purity' of the original design ideas. The programme ends at the product launch of the new 'Icon' bathroom suite. The organisation appear very happy with the results, although the designers are somewhat less enthusiastic. One designer comments: 'it hasn't moved forward in a way in which it could have done' [*Loo*, sequence 52, 48:12–48:48].

The final programme of the series, first broadcast 7 July 1998, looked at ways of improving the electric car. A Norwegian company—Pivco—provide a brief for the designers: 'to expand [the existing product] into a range of products in different niches, but basically having the core of the vehicle... the same, just dress it to different niches' [*Car*, sequence 14, 7:42–8:14]. From here the designers look at the infrastructural problems of producing electric cars, ask consumers what problems they have with existing cars, travel to Chrysler in Detroit to look at their recent developments in 'clean' fuel technology, before presenting a series of concepts to meet the original brief. The development team, who have only just completed the current product, are a little sceptical about the concepts and the structural changes to the car that they would require. The programme ends indefinitely with Pivco finding the concepts interesting: 'I think there are definitely several ideas that Richard and Dick have brought to the table that I think we would like seriously to look into' [*Car*, sequence 62, 47:52–48:49]. No products or even prototypes are produced.

2 Method

The three programmes, each lasting 50 min (3000 s) and broken into three parts by two advertisement breaks, were transcribed verbatim. *Bra* consisted of 8691 words, *Loo* consisted of 7830 words, and *Car* consisted of 9030 words. The programmes were then sub-divided into 'sequences', each

sequence consisting of a series of related camera shots, for example of a design meeting, an interview, a technical process, or some archive material. A sequence was judged to have come to an end when there was a definite move to a different subject and a corresponding change in the type of camera sequence. *Bra* comprised 60 sequences, *Loo* comprised 54 sequences, and *Car* comprised 62 sequences.

With the transcripts divided into sequences, a coding scheme was applied to reveal some basic statistics and distinctions. Each sequence was coded in a number of ways. The first classification determined the **type of camera sequence**. These were divided into *real-world* sequences, where some 'real' action to do with the design process was taking place; *talking-head* sequences, where a person talked to the camera; *illustrative* sequences, that demonstrated an aspect of what was being talked about, or showed something tangential to the design process; *archive* sequences, utilising, for example, old newsreel material or advertisements; and *mood* sequences, where the idea seemed to be to convey a general mood with, for example, a lingering sequence of dark night, or blue sky.

Real-world sequences were further coded in two ways. The first classification was the **phase in the design process** that was being shown: *information gathering*, *problem brief*, *idea*, *concept*, *prototype*, *testing*, *evaluation*, and *final product*. This series of phases follows what might be thought of as a 'conventional' taught industrial design engineering process^{2,3}. The second classification was of the **type of social arrangement** being shown: a formal *meeting*, an informal *discussion* including the designers and some other people, a conversation just between the designers ('*Richard and Dick*'), a conversation just featuring people from the participating organisation, and a sequence of a *technical process* featuring no people.

Talking-head sequences, containing mostly comment on the unfolding process, were further coded as to **who was talking**: both designers ('*Richard and Dick*'), *Richard Seymour*, *Dick Powell*, and, from the participating organisation, the *managing director*, the *design chief*, or a *manufacturing* representative.

The coding scheme is intended to provide some quantitative background to a number of issues. Occasionally sequences could fit two or more categories but fortunately most coding was relatively obvious. The assumption of this coding was that, in the television programmes time equates to value. That is to say that the longer or more frequently certain categories of sequences appear during the programme, the more valuable they are in saying what the programme makers wish to say.

2 Cross, N *Engineering design methods*, 2nd edn Wiley, Chichester (1994)

3 Roozenburg, N F M and Eekels, J *Product design: fundamentals and methods* Wiley, Chichester (1995)

Along with the quantitative analysis was a qualitative analysis. This started with a number of viewings of the programmes. During these viewings notes were taken unsystematically and later grouped into themes. There were no restrictions about what might count as a theme, or what it was the analysis might try to show. Instead groupings of themes began to emerge with repeated viewing. One method that was consciously used in this process of analysis was that of ‘disagreeing with the commentary’; that is looking for evidence that would contradict the over-dubbed commentary which, it was assumed, told the ‘official’ story. This proved a productive approach.

Together, the quantitative and qualitative methods of analysis share something in common with existing research methods. Segmenting and coding elements of video is broadly similar to the method of protocol analysis⁴, while the method of ‘disagreeing with the standard commentary’ is a favoured method of critical theorists^{5,6}. These are only similarities in approach, however, and both approaches had to be adapted due to the televisual nature of the data.

It remains to point out that it is impossible to make any inferences about the *actual* design processes the programmes were based on. It is only possible to make inferences from the content of the programme. One would hope that there was a reasonably close relationship between the two, but this cannot be assumed. It is impossible, then, to say whether one process was better, or more efficient than any other, it is only possible to say that they are represented *as if* one was better, or more efficient than another.

3 Quantitative results

3.1 Composition of programmes

The main part of all programmes, approximately 70%, is taken up with what has been termed ‘real-world’ material (see Figure 1). Following this ‘talking-head’ and illustrative sequences form the large part of the remainder. This might be what one would expect from a programme following one particular design process: three quarters containing sequences from the actual process and a quarter explaining, and illustrating this process. Illustrative sequences take up slightly more time in the *Bra* programme. This could have been because several specialist prototypes were constructed requiring additional clarification. One could speculate here that the policy of the programme makers seems to have been to let the ‘real-world’ material tell it’s own story, with background support where necessary. The commentary in the programmes does play a large role, however, cueing up and rounding off the ‘real-world’ sequences for the viewing audience.

4 Cross, N, Dorst, K and Christians, H *Analysing design activity* Wiley, Chichester (1995)

5 Barthes, R *Mythologies* Jonathan Cape, London (1972)

6 Macherey, P *A theory of literary production* Routledge, London (1978)

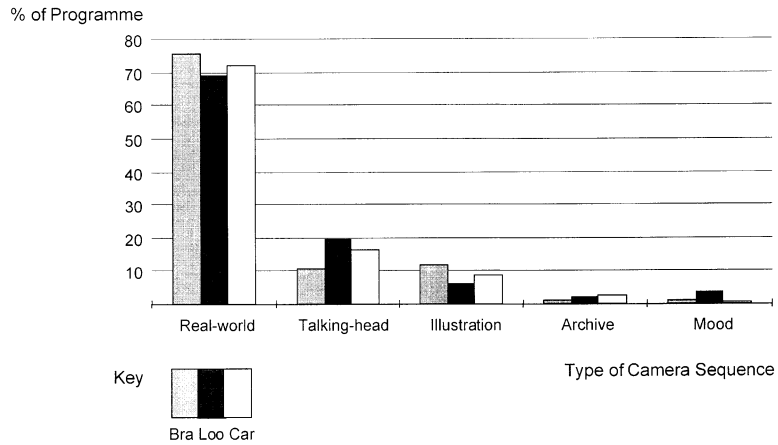


Figure 1 Composition of total programme by type of camera sequence

The ‘real-world’ material comes pre-packaged then, so it is impossible to look at the real-world material in its entirety as the reality of what happened. What we can do is to look at individual real-world sequences and, ignoring the commentary, try and make valid inferences about the reality of the design process. Figure 2 groups the real-world sequences by the stage in the design process that the designers had reached.

3.2 Sequence of design activity

Information gathering is the longest phase of each design process (see Figure 2). This again might reflect the concern of the programme as a whole to educate a non-specialist audience about background issues to the particular problem. In *Car* for example the designers visit a prototype electric ‘fuel’ station which has only peripheral significance for the following concepts. This is not to say that such an issue was insignificant, it is rather that such an issue might not have been investigated quite as thoroughly.

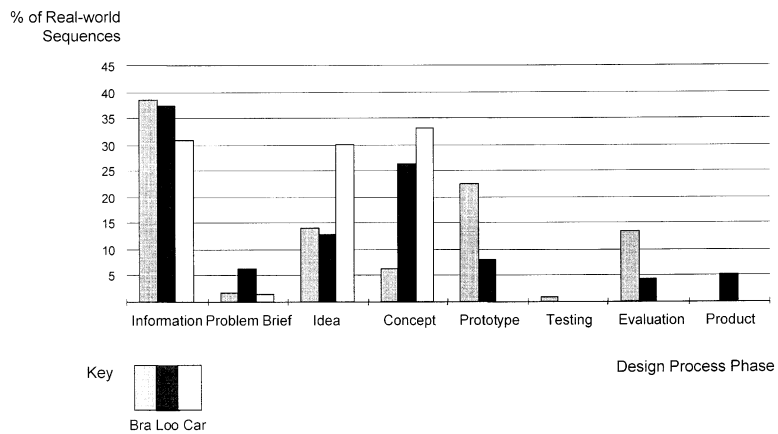


Figure 2 Classification of real-world sequences by design process phase

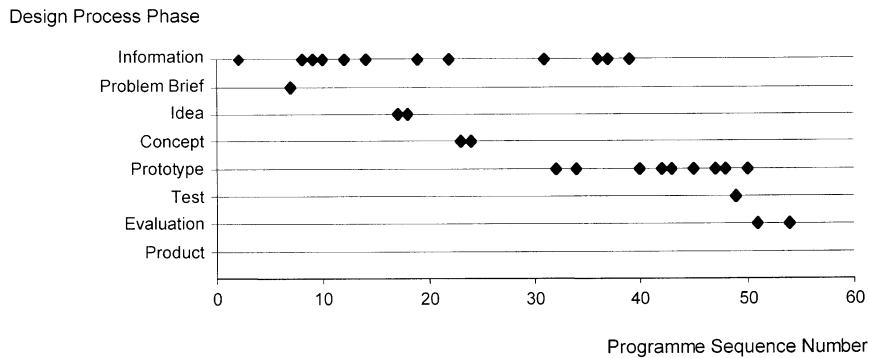


Figure 3 *Designs on Your... Bra*: design phase by time

The sequence does, however, serve to illustrate the problem facing designers of electric-powered cars *in general*. This is an interesting point about television programmes such as this. Although they concentrate on something quite specific, there are often general issues implied. It is in these implications that the *Designs on Your...* programmes drift away from representing the design process, towards attempting to say something about wider issues in society. In all three programmes it is possible to identify social, maybe even political, narratives: environmental concerns in *Car*, hygiene in *Loo*, and the suppression of women in *Bra*. Adrian Forty in his book *Objects of Desire*⁷ makes the point that many designers unconsciously enact these discourses in the designs they produce. If this is the case then the ‘specific to general’ construction of the programmes during the information gathering phase could be said to be implying something rather fundamental about the *process* of design, namely that designers, although often concentrating on very specific problems, are also contributing to much larger social problems which they might (or might not) be aware of. The programmes could be said to be offering an indication of what it is designers *don't know* during the process of design and hence showing us the limits of modern designing.

Figures 3–5 show the time order of the real-world sequences classified by design phase within the programmes. In all processes the information gathering phase is constant well into each programme, while other phases progress broadly according to prescribed design method^{2,3}. The long information gathering phase can again be explained by the programmes follow up of issues peripheral to the design but interesting to the viewer as an overview of a particular industry. In general the time order of the real-world sequences seem to reveal a structured and ordered design process.

⁷ Forty, A *Objects of desire*
Thames and Hudson, London
(1986)

It is interesting to note that *Loo* was the only process that ended in a

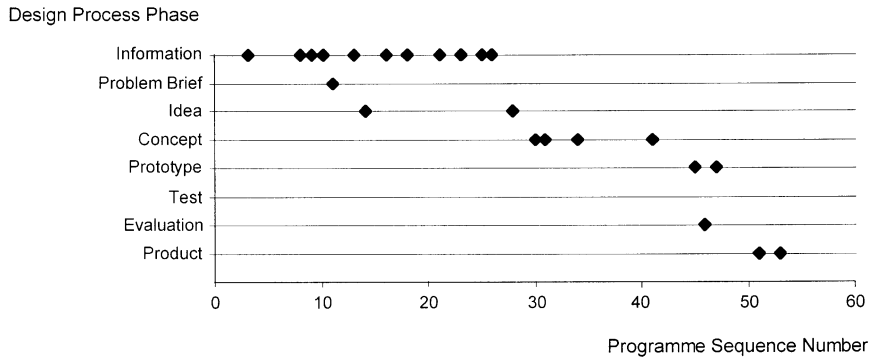


Figure 4 *Designs on Your... Loo*: design phase by time

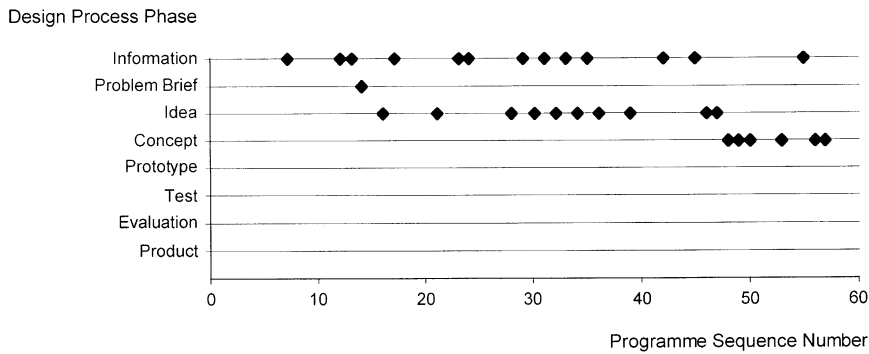


Figure 5 *Designs on Your... Car*: design phase by time

product (though one that the designers were not happy with) which might account for the large proportion of concept design sequences. *Bra*, arguably the most successful of the three processes, contains relatively little concept activity, but a large amount of prototyping, and corresponding evaluative activity. *Car*, as Figure 5 indicates, never really got off the drawing board. This might suggest that the processes considered successful by the designers tend to be not the ones with large conceptual design phases, but rather processes that involve the designers in prototyping work. An explanation for this might be that the prototype phase could be characterised as one of active collaboration, experimentation, and above all learning (not only about the product but about the other people involved). In many ways this is a more democratic phase than, say, conceptual design where the designers are expected to come up with solutions *fiat lux*.

3.3 Social composition of 'real-world' sequences

The social composition of the real-world sequences (see Figure 6) illustrates the amount of conversation that takes place. There were hardly any

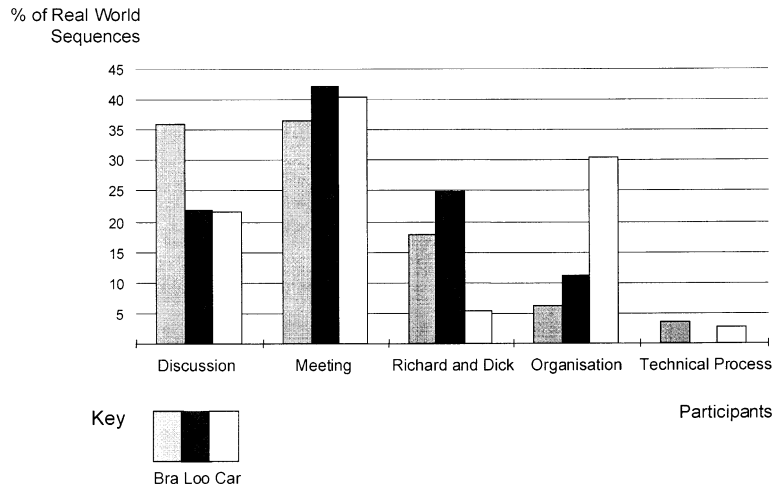


Figure 6 Classification of real-world sequences by participants

sequences of people carrying out tasks alone. This might reflect the social and discursive nature of the design process⁸⁻¹² but it might also reflect the need to develop character and action for entertainment purposes. Again the programme representation seems to be going in two directions at once, and again it seems to reveal an interesting question. Is character, discussion, and conflict essential for the design process? The process considered successful by the designers, *Bra*, contains significantly more discussion than the other two.

If one is to push the point further, on average in the programmes design meetings are clearly where the work gets done. Meeting sequences took up the most time in all programmes. Again this might be due more to an ‘entertainment’ requirement—after all meetings usually involve some form of collective humour or disagreement—than any primacy for designing reasons. One could also argue that meetings take up a significantly smaller proportion of time in any ‘real’ design process, so the figures of Fig. 3 might look a little disproportionate. Nevertheless, it is a common view that key decisions do get made in design meetings so, minute for minute, meetings probably do represent the most valuable time.

3.4 Talking-head sequences

The talking-head sequences (see Figure 7) were mostly either comments about the product, and problems associated with the product, or comments about the ongoing process itself. There were no comments about other design processes, or suggestions as to how other designers might tackle the problem. There were also no talking-head sequences referring to any of the other programmes. This might seem a little odd, given that it serves

8 Lloyd, P and Busby, J S ‘Softening up the facts: engineers in design meetings’ *Design Issues* Vol 17 (2001) 67–82

9 Bucciarelli, L L *Designing engineers* MIT Press, Cambridge, MA (1994)

10 Lloyd, P ‘Storytelling and the development of discourse in the engineering design process’ *Design Studies* Vol 24 (2000) 357–373

11 Medway, P ‘From words to bricks: writing in an architectural practice’, in P Dias (ed.) *Worlds apart: acting and writing in academic and workplace contexts*. Lawrence Erlbaum Associates, London (1999) pp 151–182

12 Medway, P ‘Language, learning and communication in an architects’ office’ *English in Education* Vol 28 (1994) 3–13

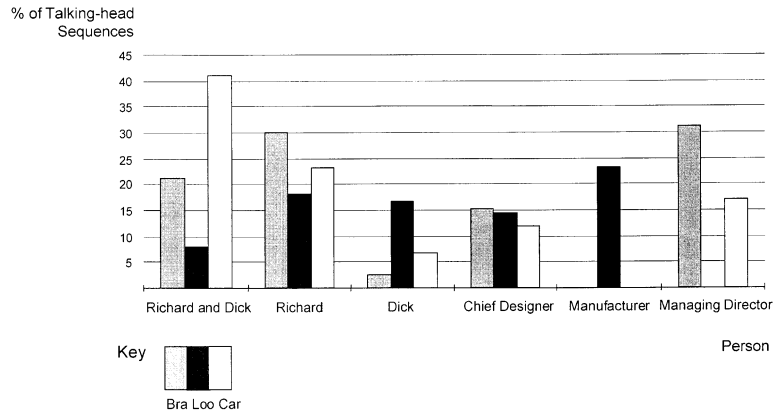


Figure 7 Classification of talking-head sequences by person

to reinforce the impression that design—and especially concept design (see Figure 2)—happens in a sort of vacuum, independent of other engineering and design history. It does however serve to increase the rationality of the designers, portraying them as people able to take on any problem, impartially survey the facts, and come up with the solution providing the most consumer benefit. In de-emphasising the similarities between the three processes, the programmes again appear to be drifting away from being about the design process in general, towards presenting a particular ‘rational’ view of designing. This is ironic because, as we noted before, the programmes with a high level of conceptual design activity seem to have resulted in an inferior product for the designers.

It is interesting to note the talking-head sequences of the people working for the manufacturing organisation. There appears to be one major character, and one minor character. Although, of course, anyone could have given their opinion, it seems to work in favour of the ‘programmes as entertainment’ argument that only two characters are shown, both with very particular roles (described further in section 4.2). It is also of note that clearly Richard Seymour, arguably the more entertaining and expressive of the two designers, is given more ‘airtime’ than his perhaps more rational partner Dick Powell. This would of course count against the ‘rational representation of designers’ argument.

4 Qualitative results

4.1 Re-presenting the process

The raw material that has been shot for the programmes (called ‘the rushes’) has to be edited². This means that decisions have to be made about how much material to show, what kind of material to show, and in what sequence to show it. These decisions determine what the programme is

ostensibly about—however indeterminate *that* might be. In telling the three design stories, the programmes adhere to a roughly chronological sequence. *Bra* does this overtly with five captions throughout the programme, starting with September 1997 (3:33) and ending with June 1998 (45:11).

Against this, however, some sequences are clearly not edited in a chronological order. The most striking example of this occurs in *Bra* [17(rw), 14:36–18:05]. Having generated several ideas for the new product the two designers return to bra manufacturers Charnos to present their ideas and ask about new problems they've come across. In a 22 s sequence of images the camera tracks from one designer talking, to some drawings on a table, and then back up to the Charnos design chief talking. During the sequence the conversation is constant, suggesting that the sequence is a 'real' slice of action. This is not the case. A careful viewing reveals that when the first designer is talking he is doing so in front of a window. Outside it is clearly broad daylight. As the camera tracks back up again from the table, day has clearly turned to night. This happens within 22 s and along with a seamless flow of conversation! In fact throughout the 106 s sequence the sky outside the offices switches between light and dark. It would seem the programme editors are attempting to polarise the process, keeping the viewer focused on 'important' aspects of the design rather than jump from aspect to aspect.

The problem runs deeper. In deciding whether a scene is important enough to make the final cut the editor is informed by the endpoint of the design process—or at least the point at which the cameras ceased to film. Now this is a very different situation than the designers themselves are in, giving the sense that the design process is being understood 'backwards'. That is to say that comments early in the process become valuable or 'important' when they make direct reference to the (then unknown) endpoint. So, for example, in *Car* [38(th), 19:27–19:56], the Pivco design chief, Jonathan Etherington, reveals that the car structure:

...has taken hundreds of hours on very expensive computers [to develop], it looks very simple but it is actually a very complicated piece of engineering to make sure that structure there absorbs all the energy in the crash test, and at the moment it's working successfully and we really hope we don't have to change that.

Of course that is exactly what the designers suggest they do do, and in doing so the comment above portends what is to come. A slightly different example of this occurs in *Bra*. In trying to think of possible materials for a new bra one of the designers remembers the Aerobie: 'it was like a

frisbee... a polycarbonate structure' [*Bra*, 17(rw), 12:50–14:36]. This insight contributes to the development of a prototype. However, the sequence before this (*Bra*, 16(i), 12:20–12:50) pre-figures sequence 17. It shows two young boys, standing on either side of an advertising hoarding for 'Wonderbra', throwing an aerobicie to each other.

Here we have a scene that portends a future state of affairs in the design process, but a wholly invented scene. It is highly unlikely that the two boys 'just happened' to be caught on camera throwing an aerobicie to each other in front of a bra advertisement. Instead the programme makers have decided that the 'aerobie' idea forms an important part of the design process and have chosen to accentuate it. Again the endpoint informs the content of earlier sequences, and an implicit 'theory' about design is presented.

It is also informative to look at the mood that the programmes attempt to create. Specific mood sequences accounted, on average, for less than 2% of the total programme time yet, as one documentary maker has pointed out: 'our primary response is to a mood'¹³. These sequences contain images from a train of night rushing by [*Bra*, 26(m), 26:29–26:34], clear blue sky [*Bra*, 52(m), 44:39–44:57], or a panorama of a town at night with a dog barking in the distance [*Loo*, 38(m), 34:30–35:07]. These scenes work in several ways. Firstly they create a feeling of space in the programme, a pause in the action that allows the narrator a quick summary. They give the sense that there are quiet, reflective, moments in the design process, as well as intense discussion—a point made by Bryan Lawson in his book 'Design in Mind'¹⁴. More obviously though, they create associations. Night turning into day makes us think that the danger is past, while blue sky is associated with opportunity and exploration.

Some associations are created less subtly. In all three programmes music plays a significant part. An average of 13 sequences per programme had a musical backing. Indeed the music was specially commissioned for the programmes. Again it is tempting to think: what has music got to do with designing? Music, however, is an effective vehicle with which to transmit mood. Adding music provides the viewer with a better indication of how things went. Fast music gives the sense of things happening quickly, slow music that things not turning out quite right. Pop music gives a sense of new, constantly changing things, while classical music a sense of stability and even conservatism.

Coding the musical sequences in two classifications: *type*—classical, jazz, pop; and *tempo*—fast, medium, slow; revealed some interesting results.

13 Vaughan, D 'The space between shots', in B Nichols (ed.) *Movies and methods II*. University of California Press, Los Angeles, CA (1985)

14 Lawson, B *Design in mind* Butterworth Architecture, Oxford (1994)

Bra, the most successful process for the designers, starts at a slow tempo and ends at a fast one, with pop being the most frequent choice of music. *Loo*, a disappointment for the designers, starts at a quick tempo and ends slowly, with classical being the most frequent choice of music. *Car*, a process that never gets past the concept stage, starts at medium tempo and slows slightly. These are obviously crude distinctions but do seem to catch the general thrust of a sequence or programme.

A particularly obvious use of music is in the sequences that show the two designers, mainly at the beginning of the programmes. The commentary characterises them as ‘men with a mission’ [*Loo*, 1(i), 0:00–0:35], and ‘driven by passion’ [*Bra*, 2(rw), 0:57–1:57]. To accentuate this idea the music that often accompanies them in the sequence works on the association of private detectives and secret agents, fighting for justice and the good of mankind to make the world a better place. We get dramatic Mission Impossible type music in *Loo* [1(i), 0:00–0:35 and 12(m), 9:18–9:25] and James Bond type music in *Bra* [18(rw), 18:05–20:19]. There is a humorous element at work here, but again it appears that the decision to include music into the programmes was not one taken lightly. It performs a vital function for the viewer, but a function that tends towards ‘making sense’ of the design process for the viewer and by over-simplifying character.

4.2 Characterisation

In two of the programmes, *Loo* and *Car*, are two people who, at least in the programmes, share the characteristics of the ‘bad guy’. These are the people working for the participating organisations responsible for the design content of the new product. The design chief in *Loo* speaks 1047 words (13% of the total words spoken in the programme), while the design chief in *Car* speaks 835 words (9%). It is what they say that reveals them as ‘bad guys’. Early on both start off with a warning. In *Loo* the design chief says: ‘head turning is no use, this is a commercially realistic brief...’ [*Loo*, 11(rw), 7:05–9:18] while the design chief in *Car* says: ‘we really hope we don’t have to change [the car structure]’ [*Car*, 38(th), 19:27–19:56]. This gives the impression that they are people who already have their minds made up about what they expect to see.

Progressively through both programmes they become the characters who question the concepts of the designers. In *Loo* the design chief comments after seeing some of the designers’ ideas: ‘the self-cleaning toilet and self-cleaning basin, yes there’s possibilities [but] I don’t think people are prepared to pay for it’ [*Loo*, 18(rw), 16:21–18:29] later on he says of the concepts: ‘I think there are some positive ideas here... but I think it’s

really a case of time' [*Loo*, 28(rw), 25:49–27:38] and at another meeting: 'we actually think that some of these are good ideas but technically, at this moment in time, I think they're fraught with danger' [*Loo*, 34(rw), 30:56–33:21]. In *Car* the design chief comments to his managing director while looking at the designers' concept drawings: 'I think what [the designers] have done is they've actually exaggerated the dullness of the existing [car] and made this [new concept] look even better' [*Car*, 56(rw), 42:19–44:10] and later on in a meeting with the designers 'what I'd like to do is just to point out one or two of the details that we actually think are..., give us a concern with your design' [*Car*, 57(rw), 44:10–46:25].

The impression one gets is that these characters—'bad guys'—are holding up the creative process. Not only that, but in doing so they are preventing the designers from achieving their professed aims of: 'making things desirable by making them better' [*Loo*, 4 (th), 2:05–2:36] and providing 'benefit to the consumer' [*Loo*, 28(rw), 25:49–27:38]. The implication is that these characters are preventing some sort of self-evident progress and stopping us all from having better lives (hence the 'bad guy' tag). The idea that the designers are portrayed as the 'good guys' is evidenced in a number of ways. Earlier it was mentioned that in several places 'men on a mission' type music accompanied some of the sequences featuring the designers, suggesting men struggling for the good of mankind. There is a mood sequence that shows the designers driving past the camera on large motorbikes [*Loo*, 12(m), 9:18–9:25] again implying both individuality, freedom, and power. And in various places there is reference to the designers meeting a challenge: '[design] is about confronting an obstacle and finding a way through it, around it, over the top of it, and so that is a challenge' [*Loo*, 19(th), 18:29–19:17], and fighting battles: 'design needs to fight the battle that makes the product as good as it can be for the people for whom it was intended' [*Car*, 58(th), 46:25–47:23].

The designers also describe their process in these programmes as: 'starting with a relatively clean sheet of paper' which gives them: 'an opportunity to re-think' [*Car*, 27(th), 15:05–16:06] existing designs. This is necessary because, as one of the designers says in *Bra*: 'the overwhelming feeling I've got is "what a stupid product"' [*Bra*, 15(th), 11:53–12:20]. The idea here is that using reason to 're-think' existing products, providing consumers with 'clear benefits', means that the 'challenges' can be met, and therefore the 'battles' fought with the organisations currently producing 'irrational' products. The image is of the traditional enlightenment genius, cutting through swathes of irrationality with the sword of truth. The programme commentary accentuates this view. The designers are described

as ‘top’ and ‘award-winning’ [*Loo*, 1(a), 0:00–0:35], ‘ground-breaking’ [*Bra*, 2(i), 0:57–1:57], and ‘most influential’ [*Car*, 2(th), 0:27–1:26].

The representation of designers as ‘geniuses’, solely responsible for making the world a better place is receiving a growing amount of criticism. Richard Coyne has written, from a hermeneutic point of view, about the mistakes of viewing designers in this way^{15–17}. But the programmes go further than merely representing the designers in this way, they actually show (perhaps unwittingly) how this view cannot be sustained in any coherent way.

4.3 *The managing director and the designer*

The managing directors of the organisations participating with the designers all figure to a small degree in the programmes. In *Bra* the managing director says 496 words (5.5%), in *Loo* the managing director says only 90 words (1%), and in *Car* the managing director says 329 words (3.5%). The content of what they say tends to be fairly neutral, canvassing opinion and making practical suggestions rather than getting involved in discussions. In *Bra* the managing director asks those at a meeting ‘are we defending an idea that we are less enthusiastic about progressively?’ [*Bra*, 51(rw), 42:48–44:39]. In *Loo* the managing director inquires, again in a meeting: ‘so what do our friends think?’ [*Loo*, 41(rw), 35:47–39:30]. In *Car* the managing director suggests a future plan: ‘if we can, in a way, try to move in this direction and combine it with the present frame, then we are very close to a product’ [*Car*, 49(rw), 32:37–34:02]. In each meeting they remain calm, even while there are disagreements between others.

The managing directors have responsibilities, however, and this is what distinguishes them from the designers in the programmes. They clearly have to think about the product in commercial terms—that is in terms of risk and cost in relation to benefit—and not just in terms of benefit (making the world a better place). In fact if, as the designers suggest at various points, their concepts will obviously benefit consumers, it is the managing directors who ‘allow’ it to happen. In other words it is the managing directors who ultimately ‘make the world a better place’, not the designers. The power the managing directors possess is illustrated in *Bra* when the managing director delivers his decision about the sequence of prototypes developed through the programme: ‘I have discussed it with the chairman and the group chief executive, we’re all on board with wanting to take this further...’ [*Bra*, 54(rw), 45:11–48:07]. In the other two programmes, such a clear decision is not presented. In *Loo*, the original concepts are slowly altered, frustrating the designers, while in *Car* the managing director plays down the designers’ significance: ‘I think there are definitely several ideas that Richard and Dick [have] brought to the table that I think we would

15 Coyne, R D and Snodgrass, A ‘Co-operation and individualism in design’ *Environment and Planning B: Planning and Design* Vol 20 (1993) 163–174

16 Coyne, R and Snodgrass, A ‘Problem setting within prevalent metaphors of design’ *Design Issues* Vol 11 (1995) 31–61

17 Coyne, R ‘Creativity as commonplace’ *Design Studies* Vol 18 (1997) 135–141

like to seriously look into' [*Car*, 60(th), 47:52–48:49]. In all programmes, although the designers put a strong case for their designs forward, they are ultimately reliant on the decision of the managing director.

This is, again, a point made convincingly by Adrian Forty in the last chapter of his book *Objects of Desire*⁷. He contends that it is mostly entrepreneurs who determine which consumer products are allowed into society. He writes that: 'although designers prepare designs, the responsibility for carrying them out rests with the entrepreneur' (p 241). It is *their* decision that results in a design becoming exposed to the public consciousness. Certainly there are more complex elements at work in the three programmes. In a way the designers are side stepping this rickety route to a world of better design through entrepreneurs, by directly appealing to the viewing audience. The programme remains as a more general illustration of the relative powerlessness of designers.

4.4 Making the design argument

The designers are far from passive however. In looking at how the designers make their various arguments to design chiefs and managing directors (and the viewing audience) the series of programmes show how it is possible to present a relatively coherent sounding message, yet contradict this message with some of the content.

As was stated before the designers' professed aim in designing was of: 'making things desirable by making them better' [*Loo*, 4(th), 2:05–2:36]. Invariably, in the programmes, this meant making the products easier to use. In *Loo* the designers are asked what they see as the difference between 'gimmicky and design' [*Loo*, 28(rw), 25:49–27:38] 'that's easy' one of the designers replies 'if it's a benefit to the consumer then it's not a gimmick'. However several seconds before, the other designer, explaining one of the concepts, had said: 'Very slim across this axis here, maybe quite broad across the back, we called this the Mackintosh chair when we were sketching it because of this very, very long slim form'. Now it is less obvious that a toilet looking like a Mackintosh chair will provide an obvious benefit to the consumer.

For these designers the aesthetic argument is second to the ergonomic argument. But not by much. In *Bra*, all that is needed is the ergonomic argument. The managing director, initially sceptical, reflects on the process half way through the programme: 'I think the scepticism has eased back because we think ... this idea actually fulfils a need and is an improvement in the fit of the bra' [*Bra*, 24(th), 25:58–26:29]. At the end of the programme the model comments: 'it's very comfortable' [*Bra*, 53(rw), 45:11–

48:07]. In the other two programmes the ‘obvious benefits’ aren’t quite as obvious to the participating organisations. In *Car*, after suggesting various concepts to make the electric car easier to use, the designers suggest that it needs ‘attitude’. One of the designers summarises half-way through the programme: ‘what’s becoming clear is that we’re not going to get this beautiful vehicle with attitude, with this slightly jaunty, perky shape...’ [*Car*, 50(rw), 34:02–36:38]. The organisation are not convinced and the design goes no further. In *Loo*, after scepticism from the organisation about the benefits of their proposals, the designers try a more aesthetic approach. They compare their foam models with the organisation’s foam models, themselves modified versions of the designer’s original concepts:

‘The other thing to watch for ... is the simplification of the form, its become more elegant but there’s less on it, there’s less curlicue, less twisty turny... yet it’s proportionally purer, you notice that straight away, actually, if you look from one to the other, especially around these rear sections. It’s immediately apparent.’ [*Loo*, 41(rw), 35:47–39:30].

If the ‘benefit argument’—that the world will be a better place—fails to convince then the ‘aesthetic argument’—at least the world will be a more beautiful place—rapidly takes its place. Although this seems to partially succeed in *Loo*, it is bolstered by a reference to the television programme itself. During a meeting in which the design concepts have politely been put to one side, one of the designers, making a last attempt at persuasion says: ‘there is just one other factor, by the time this TV programme goes out, anybody watching the programme will know this idea’ [*Loo*, 34(rw), 30:56–33:21]. Using the television programme to convince the organisation that they should adopt their concepts is certainly logical if the designers, as they consistently seem to, believe that benefit is self evident. Yet if this is true why can’t the organisation see these benefits for themselves?

There is a further level of argument. The ‘story’ developed through *Loo*, pitching the good-guys (the designers) against the bad-guy (the chief design representative), centres mainly on the bad-guy telling the designers what people will, or won’t buy. Little evidence is shown in the programmes for his view. At several points during the programme the design representative dismisses the design concepts because: ‘I don’t think people are prepared to pay for it’ [*Loo*, 18(rw), 16:21–18:29]. It is a bald statement, and one that is difficult to argue against when it is based on an intuitive understanding of the market—as the programme seems to suggest—rather than a set of more objective figures. However, in the final sequence of the programme one of the designers uses this line of argument: ‘I actually believe... that

consumers actually do want a better loo, they would buy it, it would be more successful' [*Loo*, 54(th), 49:02–49:20].

The argument for the design concepts slips from benefit, to aesthetics, to television's role, to finally an intuitive understanding of the market. The designers, represented in the programmes as making the world a better place for us, begin to look a little more opportunistic. This may have been intended by the programme makers and, if so, is a subtle point well made. It highlights something about designing that is often not taught in design schools, at least not explicitly. And that is the importance of effective rhetoric.

5 *Concluding remarks*

This paper has looked at how three television programmes about designing have represented the design process. It has done so using both a quantitative and qualitative method. Quantitative analysis provided some idea of programme structure and composition indicating that the design process represented was typically that prescribed by standard design methodology texts. Quantitative analysis also showed that television sequences showing meetings taking place were most highly valued in terms of 'airtime', perhaps illustrating the importance of social interaction in the design process.

Qualitative analysis revealed how, by using allusive images and mood music, television can alter and accentuate 'reality' in order to reinforce a particular message. In the case of these programmes this message seemed to be about design as a 'rational' and reasoned process resulting in a better world for all. This 'tidying up' of reality, although providing a digestible message for the viewer can, as one commentator put it 'conspire with the well-turned commentary to rob [the programme] of that penumbra of incomprehensibility which would preserve its link with reality and encourage the viewer to grant it further thought'¹³. However, even given the programmes tendency to convey a 'message', it was shown how the actual programme content—in 'real-life' scenes—*can* contradict this message. So, although the designers were characterised as purveyors of reason in a world of irrationality, solely responsible for making the world a better place, if anyone is responsible for making the world a better place, the content points towards the managing directors. It is they who decide whether a concept will become a saleable, and hence a consumable, product. Qualitative analysis also showed how easily a seemingly 'water-tight', rational design argument can slip into a more rhetorical argument when attempting to convince organisations to take on and develop product concepts.

The qualitative analysis attempted to 'read' the three *Designs on Your...*

programmes against the grain of common assumptions about designing revealed in the commentary. In doing so it has focused on issues of detail that would certainly be missed in one viewing, and may seem of minor relevance. Why not ask the programme makers what they meant? Or ask the designers whether they were satisfied with the programmes' representation of reality? The point here is that, although everyone involved in making the programmes would have a view about the final result, as a researcher what does one do in cases of disagreement? Who has the 'real' version of events or the 'real' reasons for a certain decision being made? It quickly becomes apparent that the meaning of the programmes is determined by the critical viewing audience, independent of the programme makers. Furthermore this meaning is largely dependent on the content of the programmes, certainly not on the original 'reality', and hardly on the opinions of people close to the project. It might also be argued most viewers will view these programmes only once, they will not pick up on subtle points of editing or allusiveness; they simply do not watch in this detailed way. Here it should be pointed out that it is not necessary that everyone watch critically because as long as one person is, the key issues for discussion will be brought to attention.

There is no doubt that popular television programmes can have a considerable impact on a discipline. In the field of psychology a series of fictional programmes about a criminal psychologist (*Cracker*, Granada Television, 1993–1996) sparked renewed interest in the subject, with increased levels of applications to university psychology departments. Similarly Prince Charles' thoughts on architecture in the programme *A Vision of Britain* (BBC, 1988) supposedly increased applications to schools of Architecture. One could argue that the same effect could occur for industrial design engineering which is fine if the programmes provide an accurate view of the profession, but would seem a mistake if levels of expectation are being increased inappropriately. This applies as much to clients wishing to use design firms as it does for future design students. A false representation of industrial design engineering creates expectations that just cannot be met. In effect this means that we should take television seriously as a medium of representation and not underestimate its influence. During the course of this analysis it has been instructive to find out just how complex and well thought out a 'product' a television programme has to be, and how many decisions must be made in fighting for precious seconds of airtime.

What these three television programmes can provide—and indeed other programmes like them—is an opportunity to discuss key issues for designing in both design research and design education. For design research the analysis of television programmes shares something in common with the

Delft protocol workshops⁴, both in the method used—something resembling protocol analysis—and in the fact that television is ‘shared data’ and readily available. Essentially this means that an analysis can provide a properly critical account of the designing without being beholden to the demands of any participating organisation. A critical account is also important from an educational standpoint, providing rich, though sometimes unpalatable, themes for discussion that are simply not available in one continuous viewing. Integrating television programmes into design courses can provide valuable lessons for students but should be done with a clear explanation of just what aspect of designing is being illustrated. Because although we are used to *watching* television, we are not so used to *reading* it.

Notes

1 A note on terminology. The paper makes extensive use of quotation from the original programmes. Each quotation is followed by a reference in square brackets. This comprises three variables. The first is the programme, abbreviated to bra, loo, or car. The second is the sequence number together with type of camera shot, either ‘real-world’ (rw), or ‘talking-head’ (th) (see Section 2 for explanations of what constitutes a sequence and the different types of camera shot). The third variable is the beginning and end time of the sequence. So [Bra, 44 (rw), 40:12–40:53] refers to sequence 44 of the programme ‘Designs on Your... Bra’, which is a ‘real-world’ sequence beginning at 40 min 12 s and ending at 40 min 53 s into the programme. Timings are taken from the beginning of the first sequence after the initial title sequence and exclude advertisement breaks. Quotations are contained within single quotes. Three dots ... indicate that a passage of text has been left out while words contained in square brackets indicate the subject implied by, though not actually said in, the text.

2 According to an interview from Springer¹ the material that makes the final cut represents about one twelfth of the total raw footage recorded. Other documentary makers report using even less raw footage—one thirty sixth of the raw footage¹⁸.

18 Watson, P ‘A wedding in the family’ *The Observer* 2 April (2000)