National College of Art and Design
Faculty of Design, Industrial Design department

The future of the television set

by Conor O' Riordan

Submitted to the Faculty of History of Art and Design and Complementary studies in Candidacy for the Degree of Bachelor of Industrial Design.

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Introduction:

The television is everywhere. It is difficult for many to imagine life without it and hard to believe that within less than fifty years of popular usage it has become without doubt one of the strongest mediums in the modern world. Through the course of this essay I shall explore the design process that has brought the television to its present appearance and function and ask the question 'where next for the television?' Has the television's design development reached it inevitable conclusion or are there further stages available for it to explore? This is not merely applicable to the design of the television but is relevant to the design development of almost all electronic products and as such is an extremely appropriate question to ask for today's electronics saturated society.

Chapter 1: Television and culture.

Before addressing the possibility of further stages in the development of the television it is important to understand the various factors which influence the design of television sets. In this section I shall mostly be referring to the developed world, as this is where television has precedence over all other media. At present in many developing countries such as India and many parts of Africa, it is the radio which has the most social significance. However it seems likely that as these countries develop and progress, in terms of technology and economics, the television will become an ever more important part of their existence.

In the developed world the television is undoubtedly the strongest medium generally available. More than half the world's televisions are concentrated in North America, Europe and Japan. It is highly unusual, in the modern world, for someone not to have access to a television. Television has infiltrated almost every area of life and is almost impossible to avoid. Televisions are placed in bars, cafes, shops, waiting rooms, clubs and of course, the home. This is, without a doubt, not due to the beauty of the television set as an object in itself, but rather the attractiveness of the medium. It is important, when discussing the television not to confuse these two separate areas. However, the two are not entirely unrelated either. The design of the television set itself is a reflection of its social and cultural implications. For instance, the majority of televisions sold today are matt black in colour, this is not simply another attempt by manufacturers to place futuristic imagery on the product (although, this is a factor), but rather a result of ergonomic reasoning. Watching the television is often a group, social activity. As a result of this social viewing of the television we tend to sit about 2 or 3 meters away from the screen. In order to avoid distracting the eye with the visual clutter of the television's environment (i.e. the surrounding furniture and ornaments often present in the home), the lights are generally dimmed. This means that a white, or similarly bright coloured television cabinet would draw ones attention away from the screen very easily, making matt black the logical choice of colour for such a product.

Television has had a huge social and cultural impact in the developed world. It has been and is, especially important in the area of news broadcast. The Vietnam War was one of

the first large-scale conflicts to be almost fully televised. Exposed to the real horrors of such a war on their television sets, many Americans and indeed Europeans were appalled by what they saw and began to protest the United States involvement in Vietnam. Although there were many other social factors involved in the causes of these protests, and it would be wrong to discount the power of newspaper reporting, it could be said that television was the medium that brought the reality of war, quite literally 'home' to most people.

fig.1. An image from the Vietnam war.

Television has gained great power over the years to such an extent that the coverage of an event on world news can ultimately effect the outcome of that event. A good example of this is the televised debates held between John F. Kennedy and Richard Nixon during the election campaign of 1960. The two candidates faced each other in four debates intended to help the public decide which would make the better president. At the time it was generally assumed that Kennedy was too young and inexperienced for the job. However his relaxed and comfortable manner contrasted sharply with the stiff presentations made by Nixon during the debates and many believed that it was these debates which won Kennedy the election.

fig.2. Nixon and Kennedy end their television debate with a handshake.

In more recent times television has even gained the power to reverse judicial decisions. Throughout the recent Louise Woodward murder trial the general public of America and Europe watched the case unfold day after day on television. The coverage of the case

was uncompromising, featuring close ups of the accused and her parents as well as those of the dead child. When the eventual verdict of guilty was given, the public outrage was considerable. It was this strong public reaction which many believe, swayed the judges verdict in favour of the accused being acquitted. It is unlikely that the public would have had such an intense interest in the case if it had it not being televised and broadcast so completely. It could also be speculated that televised coverage of public outrage prompted the Queen of England to make a (televised) speech denying an apathetic response to the death of Princess Diana.

So it can be seen that television is an extremely powerful medium, but how is this importance reflected in the design of the television set? Perhaps one of the major factors in the televisions design development has been the mediums (and thus, the products) poplarity. The huge number of televisions produced has, over the years resulted in a set that has become cheaper and easier to manufacture. Slowly but surely, wooden cabinets have been replaced with injection moulded plastic cabinets, metal speaker grills have become built-in plastic sections and cabinets are purposely designed so that they can be slotted together for easier transportation. Perhaps one of the most notable developments in the television, which has been directly affected by the medium itself, is the general usage of the remote control. The number of channels available to the television viewer nowadays is ever increasing, both on the 'terrestrial' front, and in the area of satellite and cable broadcasting. This increased amount of channels prompted, in the U.S at first, and later, all over the world, the need for a remote control to eliminate the need for the consumer to constantly get up to change the channel. In turn this has spawned a culture

whereby the attention span of the viewer is no longer set by his or her willingness to get up and change the channel. The modern television viewer can, at the flick of a switch, change to another program, avoid advertisement breaks, or as is becoming increasingly common, simply 'channel surf' from channel to channel, never fully watching anything. This naturally has prompted broadcasters and advertisers alike to make their programming as attention grabbing and exciting as possible. Thus the cycle has come full-circle; the medium prompted a change in the carrier, which in itself prompted a change in the medium.

Another development in the field of television design that has changed the way in which we watch television was the advent of the portable television. This has allowed the watching of television everywhere in the home.

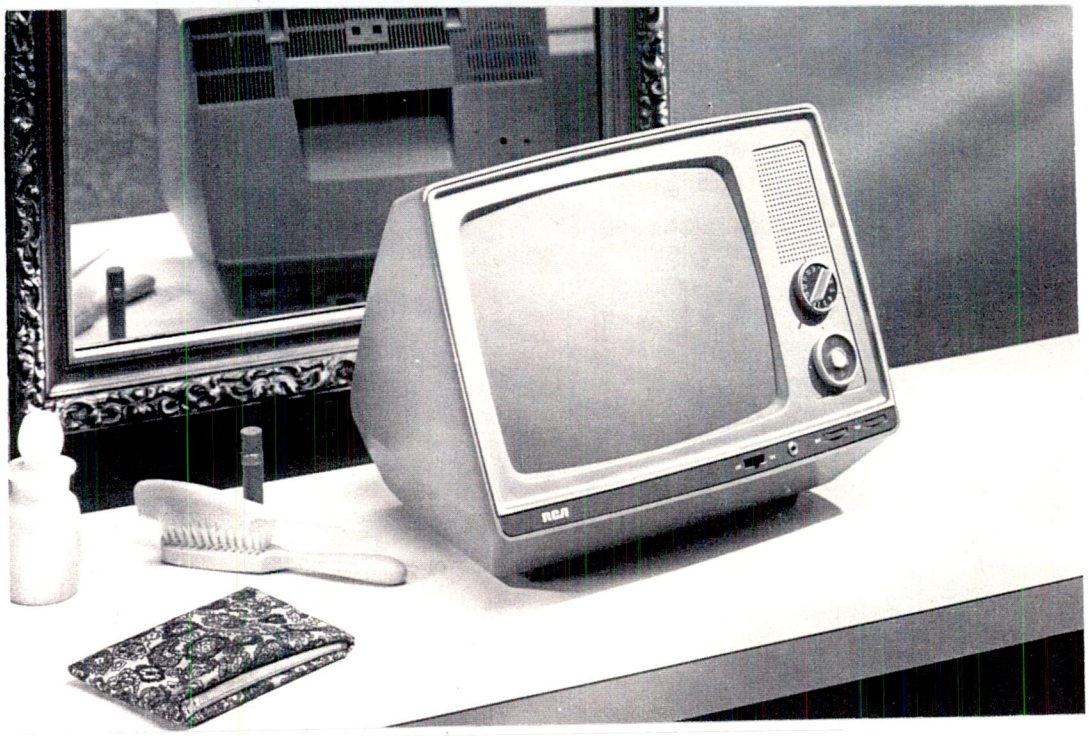


fig.3. A portable television in the bedroom.

Once made portable, the television that was once purely for sitting down to watch in the living room of a house, could be moved to any location (provided there was a plug socket available). This in turn changed the fundamental nature of television watching, it could now be watched as a secondary task to a separate primary task. A good example of this would be a portable television placed in the kitchen, which can be 'watched' in a distracted manner, whilst preparing a meal. Although so-called portable televisions are in fact rarely moved from their primary position, their compact design allowed them to be placed in any part of the home. Philips are presently even considering a television designed for the bathroom.

An extreme example of a culture affecting design, although in this instance a radio can be drawn from history. The 'Volksempfanger VE 301' radio which was produced between the years of 1928 and 1933 was in essence, the Nazi radio.

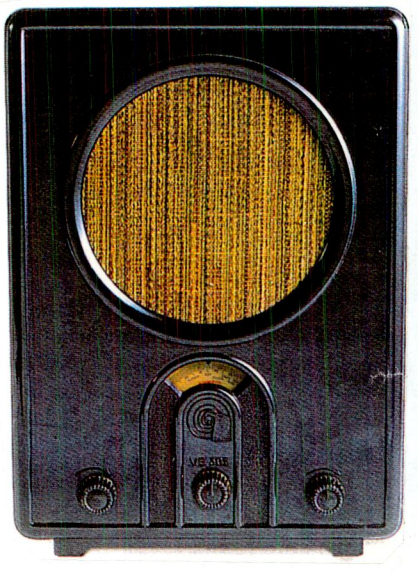


fig.4. The 'Voksempfanger' radio.

Like the Volkswagen Beetle, the Volksempfanger or 'peoples radio' was endorsed by Adolf Hitler himself. The design of the set is in a very clean modernist style of simplicity. The only concession to ornament is the inclusion of a Third Reich symbol positioned just below the tuning dial. The most sinister design detail of this radio, however is the fact that the set was incapable of picking up transmissions other than those of the German government This is an exceptional but nonetheless valid example of design being influenced by cultural and also in this case, political factors.

Television designs are also greatly influenced by the culture for which they are designed, but how is this expressed in the market. Are televisions affected by the culture from which they originate? It is my opinion that often, they are. Increasingly this is less true as companies aim for 'globalised' designs, which will appeal to a world-wide market, but in cases whereby a television is designed in a completely different social and economic environment than another, differences can be seen quite distinctly.

In order to illustrate this point I shall compare two television sets designed in two contrasting cultures at around the same time. The first of these is the 'Nature Jim' portable television, designed for Saba, a French company by Philippe Stark in 1993. This television is held widely as an example of how sensible use of materials technology and resources can produce a product, which is not only environmentally friendly but also aesthetically pleasing. The television cabinet is made of wood pulp resin, which gives it a very natural cork-like appearance. This is combined with the use of an army-green plastic frame and exposed fixings, which lend the television a very relaxed elegance.

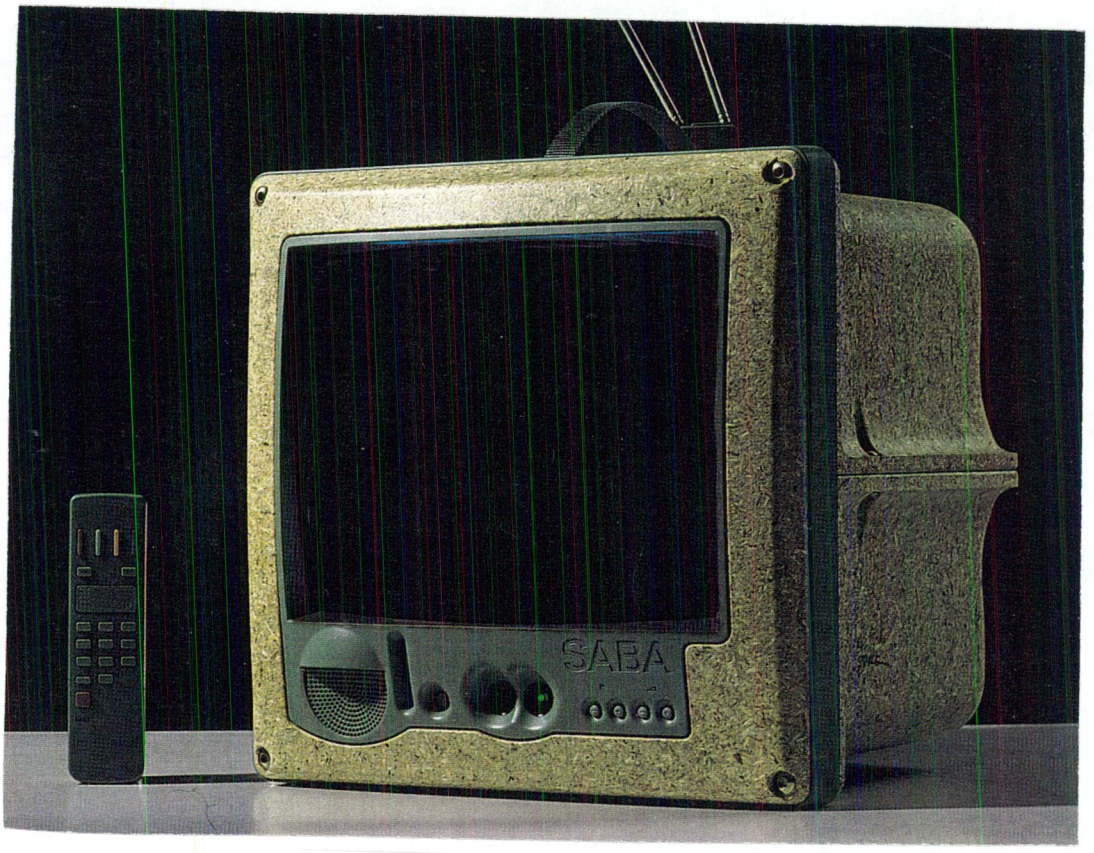


fig.5. The 'Nature Jim' television.

The set somehow looks as though it could be used for viewing any sort of programming, from serious news broadcasts to light hearted sit-coms. The portable, lightweight look of the set is accentuated by the inclusion of a very functional looking carry handle. The 'Jim Nature' achieves its goals well, in that it looks environmentally friendly and reflects the 'green' trend that was in vogue in western countries at the time of its production.

In sharp contrast to this set is the Russian 'Structura' television, designed by Studio Azrikan in 1991. Although it was designed during a time of westernisation in the Soviet Union it still bears many of the hallmarks of Russian design, which are almost certainly determined by historical and cultural factors. In many ways it appears to be a western

set, but its 1980s styling (mimicking that of older western sets) and reliance on an extremely inorganic architectural aesthetic reveals the fact that it is an Eastern bloc set. The use of large flat surfaces and angled edges gives this television a severe and almost military form. Many of its components and features are strongly reminiscent of engineering based forms, such as engine parts and cooling radiators.

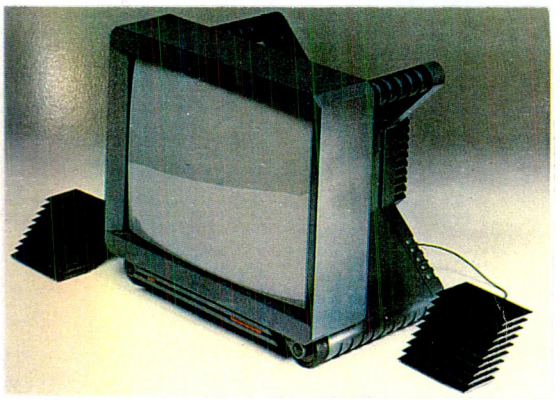


fig.6. The 'Structura' television.

This harsh styling is evident in a lot of contemporary Russian designs. The use of machine-like forms is almost certainly a reflection of the very industrial approach to design and commerce in the former USSR. The appearance of the television suggests that it is a serious piece of equipment even if, in reality, it too is used to view many different types of programming.

Chapter 2: The development of electronic products.

In order to properly understand the development of the television it is necessary to compare it to the development of a similar product. In this case the most suitable item is

naturally, the radio. Radio's introduction into the home revolutionised the way people lived and even, some would argue, the way people thought. In terms of entertainment value the radio was exceptionally successful. At first listeners were encouraged to sit in a darkened room when using their 'wireless' set, in order to appreciate the experience fully. It is difficult to imagine in today's media-rich world, but many found it utterly terrifying, with disembodied voices seemingly coming from nowhere. Gradually, however, the radio became a part of everyday life with the novelty value lessening as the public realised the full potential of the invention. This is also true of television but in order to explore the future development of the television, we must establish whether or not there is a definite pattern of stages evident in both the development of the television and the development of electronic entertainment in general. During the course of this chapter I shall attempt to define and clarify these stages using examples of both televisions and radios to illustrate my point.

Stage 1: Discovery and invention

In this stage, the product is 'invented', or at least made basically functional. There is generally no attempt made to design the 'look' of the product or to style it in any way. A classic example of this is the breadboard radio of 1919 (see fig 7). The radio itself is nothing more than a collection of electrical components and circuitry attached to a wooden board.

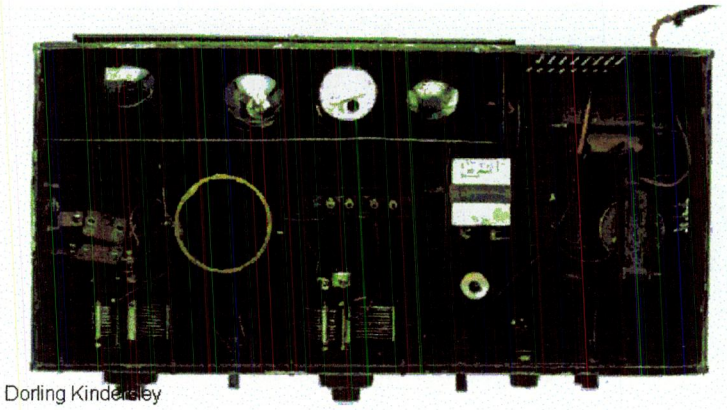
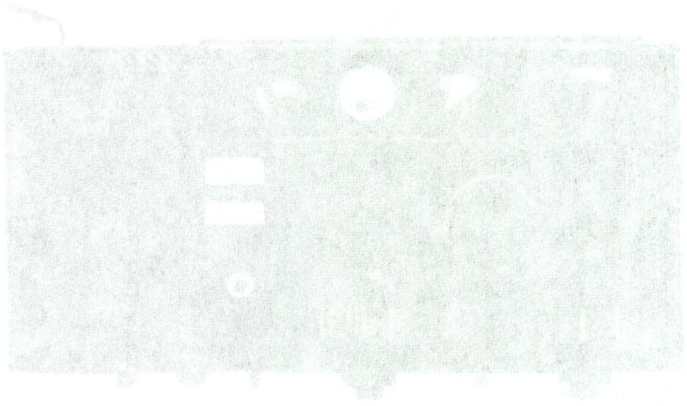


fig.7. A typical 'breadboard' radio.

The only consideration given to the user of the radio is the inclusion of a set of earphones through which the listener could receive broadcasts. In the same way, early televisions made few provisions to their users or environments, but rather the attention was focused on the 'function' of the device, with the goal being that the television received signals rather than the manner or style in which it did so. Both early examples of radio and television were primarily home-made devices fashioned by electronics enthusiasts or produced in very limited amounts for a specialist market which had no interest in the aesthetic of the products. Because of the limited market in this early area of development it seems that electronic products do not need to work as hard, in design terms, as their later incarnations must do in order to overcome the competitiveness of a saturated market. This was soon to change, however. As the demand for the products increased the first tentative steps were made towards the second stage of electronic product development.



The second stage: Disguise

A major technical advance in the development of the radio had been made by 1925, in the form of a horn to amplify the sound. This not only made the use of the radio a more comfortable experience but also allowed the possibility of multiple users. Listening to the radio became a social activity. Such an advance, naturally enough, had design connotations also. The radio was now an item that would be seen and used in a thoroughly domestic environment. As such, it must fit in with its surroundings or at the very least disguise its internal workings in a way that it would not frighten the less technically minded of its users. The radio was encased in a box, as is illustrated by the Gecophone of 1925 (see fig. 8).

fig.8. The 'Gecophone'.

The horn section of the radio is kept separate from the receiver that is neatly built into a plain wooden box, the only embellishment being a lip at the base and the name of the model. The box gives no clue as to the internal workings of the product and thus has effectively disguised the product as an inoffensive piece of equipment. This basic style of design is consistent with the development of technological products, from radios to computers. It is only when a product becomes accepted as an everyday item that a true design process can be initiated.

> "Only when systems are no longer novel can they consciously be 'designed'" (Bayley, 1979, p.99).

There were further, more exaggerated examples of this disguising of the radio to come. By the late 1920s the majority of radios available for the domestic market had taken on the appearance of furniture. This was a concerted effort by manufacturers to introduce the radio to the home and in order to do this the radio had to be compatible with the furniture to be placed around it. In many cases, the radio was quite literally disguised as something else, often as a drinks cabinet or even incorporated into actual pieces of furniture. The reduction of the physical size of the radio's components did nothing to discourage this trend, with few manufacturers willing to abandon hitherto successful design methods for more modern styling which could appear alien to the (by now, all important) consumer.

Again, this stage of the radios development is mirrored by the development of the television, although obviously several years later. By the late forties the television was lowering in price. Although still very expensive, it was coming into the reach of the

general public and as such began to have the same importance in the home as radios had previously, and to some extent maintained. Due to their sheer size these sets became a dominant feature in any room they were placed in. Inevitably many sets were encased in furniture style cabinets, often with doors, which opened when one wanted to watch the television.

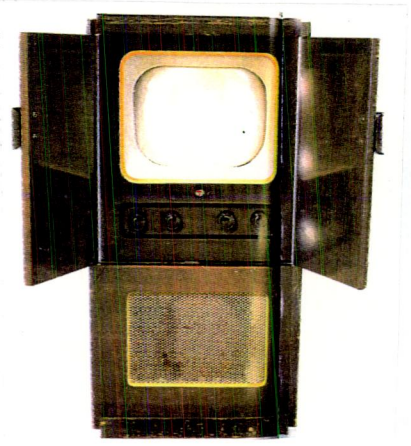


fig.9. The 'Mullard' television

A good example of this is the Mullard television of 1950 (fig. 9); the set is extremely large in size despite the relatively small screen. This would seem to indicate the importance that television was gaining in the home at this time. The large doors were closed over the screen of the set as a means of both disguising the set and protecting the screen. However the large speaker grille to the bottom of the cabinet doors is left exposed indicating that even in this early example of the concealment stage of development, television was already moving on to its third stage. Television did not spend as long a period in this, the second stage. Conceivably, this was due to the new

spirit of modernity that was to be felt throughout the 1950's. It is perhaps more likely; however, that by the time television had reached this stage of development, the early groundwork in initiating the public as to the aesthetic of electronic products had been done. It is important to remember that this was a period where more and more mechanised and electric devices were making there way into the homes and lives of consumers. This influx of 'labour saving' devices promoted a situation whereby people were beginning to have more and more free time and more wealth than ever before. 'Quality of life' was becoming a serious consideration for many people, as an affluent society, which expected an increasing amount of leisure time and of course, money began to emerge.

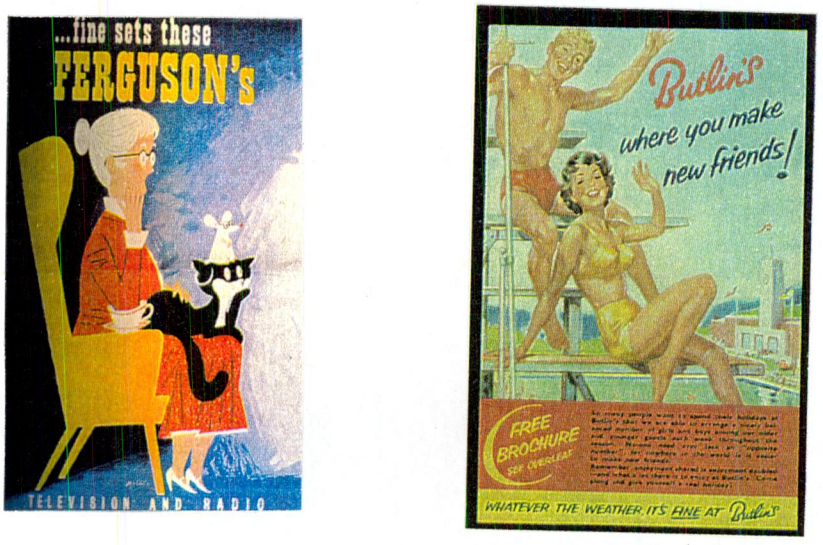


fig.10. Advertisements from the 1950s.

The general public was already familiar with the styling of technological devices such as the radio and thus more willing to accept the forward-looking television designs into their homes. Indeed, it could be said that although the television was quickly encased in

modern, 'futuristic' cabinets upon it's introduction to the domestic market it was still 'in disguise' as a radio!

The third stage: 'Utopianism'

It is generally accepted that radio reached the third stage of development through the efforts of three companies in the pre-war years. Ferranti, ECU, and Murphy began to design cabinets that had little if any stylistic references to previously available products. The radio was no longer, just another piece of furniture. New materials and finishes such as Bakelite and chrome plating were embraced in order to give the radios a futuristic appeal, which reflected the relatively new technology, which lay within the cabinets. This stage of development is often known as the 'utopian' stage as manufacturers and designers used futuristic imagery and symbolism to give their wireless sets an appearance of modernity. This aesthetic was intended to convey the message that the product was part of a new, better, society.

> "The use of imagery to make products appear 'ahead of their time' has been a recurrent and at times thoroughly monotonous feature of twentieth century design." (Forty,1986,p 206)

One of the first manufacturers to successfully accomplish this goal was E.K Cole Ltd. who sold radio receivers under the name of Ecko. In 1930 Ecko began to use Bakelite in the production of their cabinets. The first sets designed in this material were little more than imitation wood cabinets. Unsatisfied, Ecko employed the services of the architect Serge Chermayeff who was well known for his modern furniture designs. The resulting

resulting AC64 radio was altogether more satisfactory an attempt at modernisation of the radio cabinet. Better was to come however, as Wells Coates's design for the Ecko AD 65, just one year later, illustrates. The cabinet is different from that of previous radio designs, in that it bears absolutely no resemblance to household furniture.

fig.11. The 'Ecko AD65'.

Wells Coates's use of Bakelite as a material in its own right, rather than a mock wood gives the radio a very modern aesthetic. This uncompromising styling, combined with the use of chrome plating and noticeable dials gives the set a futuristic appeal that belied the fact that, internally, it was identical to the previous Ecko sets. This elevation of styling's importance in the design of a product, whereby it had even superseded functionality is a good illustration of the consumer's newfound importance in the design process. Manufacturers had realised that in order to sell a product they must make the product desirable to the consumer by whatever means necessary. They discovered that a previously out-of-date technology could be sold to the public if it appeared modern and that even the most modern and exciting of technologies could not be sold in bulk if they were not visually pleasing to the consumer.

As mentioned, the television was altogether quicker in establishing this new style of modernity for itself. The technical advances regarding materials and production techniques necessary were already in place due to many manufacturers previous experience with radio. The development of the Radio had progressed at a meteoric rate with new transistor technology enabling the production of lightweight and compact portable sets such as the Pam 710 by the year 1956.

fig.12. The 'Pam 710'.

This same technology was quickly used in the development of portable televisions. The Sony TV8-301 was the first all-transistor television set. The large plastic carry handle along the top illustrates the fact that it was a portable set. Sony developed this set using parts, which they had created for their new pocket transistor radios.

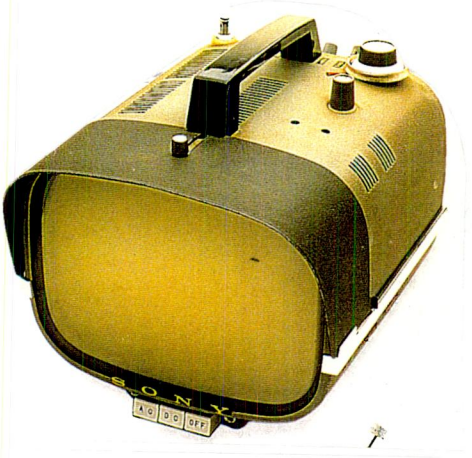


fig.13. The Sony 'TV8-301'.

However, not only is this television set technically advanced it is also stylistically progressive. It's futuristic, almost sci-fi aesthetic and its use of a metal outer 'cabinet' makes it a clear example of the utopian stage of television development. At around the same time, other less technically advanced sets were adopting a similar look. Often this futuristic imagery verged on the ridiculous as is illustrated by the aptly named 'Jetsons' television set, which took its styling from the 1950's cartoon of the same name.

fig.14. The 'Jetsons set'.

Another good example of the utopian television set is the JVC Videosphere of 1970. The moon landing of 1969 (watched by 600 million T.V viewers) had prompted an unprecedented interest in all thing 'space-age' as this extremely distinctive set shows.

fig.15. The JVC 'Videosphere'.

The use of plastic casing and an extremely modern form lends this set an image of futuristic living which consumers of the time were craving, not just in television sets but also in other, less technically advanced products such as vacuum cleaners and toasters. Of course, more traditional sets were still in production, with teak cabinets remaining popular right until the early 1980's. However as early as the 1960's it seemed certain that television had developed it's own identity within the home and was no longer to be disguised or hidden away.

So it can be seen that television has, like so many other electronic products (especially the radio), followed a path consisting of three main stages. Of course, it would be foolish to expect these stages to be clearly defined in a chronological sense. Televisions and radios belonging to the 'disguise' stages were still being produced and sold long after the progression into the utopian level of development. Indeed, many people still like to place their television sets in specially designed cabinets, extremely reminiscent of those early 1950's models with cabinet doors. However it is obvious that these stages do exist and that they have been followed by most electronic products including the television. The question that we must now address is what next? Television's development has, naturally not ground to a halt, but is it still immersed in the utopian stage of development? In order to discover if this is the case we must define exactly what is meant by the term 'utopian'. A utopia is defined as an ideal or perfect community, so utopian forms are forms that somehow reflect this faultless world. In the past utopias have being conceived as an ideal vision of the future or as an ideal vision of the past, as in the case of the arts and crafts movement. However, in the case of electronic products it is more relevant to deal with the former. A good example of a futuristic 'utopian' design ideal is that of 'Purism' whose primary exponent was the architect known as 'Le Corbusier'. Purists or 'Modernists' (as they became known), believed that products had 'ideal forms', a functional and aesthetic perfection which, once attained, could not be bettered. So, they set about attempting to discover these 'ideal forms' using a minimalist aesthetic, which they considered to be both futuristic and forward looking.

> "Those objects which most completely satisfied human needs were designated 'type objects', the culmination of a process of functional perfection and standardisation."
> (Heskett, 1980, p.94-95)

In many ways the modernist's designs are extremely utopian, in that they were designed for a better society than that which they were conceived in. Of course, many of their 'futuristic' designs, when seen in retrospect may not be utopian to us, the cold, harsh forms and materials seem emotionless and uninviting. This is perhaps due to the fact, that a society's vision of the future is based only on it's own experience and values, much as an individual's view of the world is shaped by their lifetime. So it follows that there is perhaps no definable form or shape that a utopian design must take, but rather that it is of a forward looking nature to its own society.

Chapter 3:The Modern Television

Now that we have examined the effect culture and society has on the design of the television set it seems unlikely that the development of the television has halted in the third, utopian stage, or does it? If we consider today's televisions we can see that they too are looking forward to the future. The new aesthetic in televisions does look to the future, although not in the naïve and simplistic way that the 'Jetsons' television did. Flat screens and bold sharp lines are beginning to be used in more upmarket models as well as more 'futuristic' metallic colours. These changes which are slowly creeping into the modern television's aesthetic are reflecting the new changes in television broadcasting

systems. More and more houses are accommodating cable or satellite systems, and we are constantly been told of the day when we will all have an extraordinary number of channels. The message given by designers seems to be that we are always on the threshold of a new era in television. However it does seem probable that within the utopian stage there are real developments to be made. A significant part of these developments is the introduction of 'combination style' products. This is, of course, not strictly speaking a new development in terms of general design practice. As early as the 1930's record players were being combined with radio receivers.

However, it does seem a logical step that televisions should begin to be combined with other products. A good example of this is the development of the television/ video recorder. It is only natural that these two pieces of equipment should be combined, as they are wholly linked in their functionality. It has taken a long time in terms of the television's development, for these two to be linked, at least in a commercially successful way. The real problem, in this area is the inability of manufacturers to replace moulds and other machine elements in the production of the television set. Many companies have spent so long manufacturing televisions and video recorders in separate production lines or even separate factories that it takes a real economic commitment by the company to change the production lines to those of a T.V/ V.C.R combination product. In order for the company to wish to begin producing such a product there has to be a sufficient market to justify the cost of the changeover, often a company will choose to create a market for the product through advertising and 'hype'.

Apart from the simple introduction of the video recorder into the cabinet of the television, there are several other combination units beginning to enter the market. At present these tend to be rather expensive for the average television buyer, but as we have seen with many other electronic products, such as compact disc players and indeed the television itself, it can only be a matter of time before these prices begin to fall. An example of this is the Philips CD-I (Compact Disc-Interactive) television which was produced in 1994. This was essentially a television with a built-in video recorder and games console, although at the time, Philips advertised its educational possibilities rather heavily. The main problem with producing a games console television aside from its prohibitively expensive price tag was that almost as soon as the television was produced, the games technology had moved on. This left many of the applications intended for the CD-I a little outdated, which in a competitive market like that of the computer industry is commercial suicide.

Another, perhaps more commercially viable product in a similar vein, is the 'Beocenter' entertainment unit currently being produced by Bang and Olufsen. Bang and Olufsen have a deserved reputation for stylish, technically excellent and innovative products in the field of home entertainment. It would appear only natural, therefore, that they should be among the first to produce entertainment 'centres' for the domestic market with this, the Beocenter being their latest offering. Basically, the unit comprises of a 25-inch television, a CD player, FM radio and a set of powerful speakers. The centre is, in true Bang and Olufsen style presented in a slimline casing, which is surprisingly retro in styling whilst still being extremely forward looking. This fusion of retro and modern

styling is achieved through the company's trademark use of clean functional forms and luxurious modern materials, which combine to give the Beocenter a slick timeless quality. One of the Beocenter's main selling points is its lack of cables and wiring, this is a distinct advantage for many people who find the bewildering array of plugs and jacks usually located at the back of such electronic appliances extremely intimidating. It is this use of design to overcome the problems of technology based products that will, in many designers opinions, lead to the future of electronic products such as the television, and ultimately produce a successful technology-based society.

One such designer is Stephano Marzano, an architect and designer at Milan's Domus academy and the senior design director at Philips since 1992. Philips is a company whose recent designs and concepts for technological products have placed them at the forefront of the industry. Marzano believes that the way forward in the production of electronic goods is the use of good design to banish what he terms 'techno-anxiety'. He advocates the use of design to create an emotional attachment between the product and its user.

> "He (Marzano) wants to build in meaning by simplifying interfaces, and making TVs, for instance, more substantial, lasting and valued products, carrying an emotional significance for their owners – much as wireless sets had for families in the twenties and thirties." (Evamy, 1994, p.17)

Marzano's views on design and the future of design are, in a way very controversial. He calls for a reverse of many design philosophies, including Philips' previous product developments whereby electronic products were made to seem more technological than

they already were. This previous philosophy can clearly be seen in Philip's past advertisements (see fig. 16).

fig.16. Philips Advertisement from the 1980's.

He also places great importance on the value of materials technology and research. New, more durable materials must be found with which to produce products of lasting value claims Marzano. He suggests that, even where products have a high degree of obsolescence, new materials that are more easily recyclable should be used. He also

places a lot of responsibility on major manufacturing corporations. At a conference in 1992 he stated:

> "'By virtue of the enormous number of products they put onto the market, large companies play a major role in determining the quality of our lives. Such corporations should therefore shoulder their responsibility and become conscious of their power.'" (Evamy, 1994, p.17)

Philips, as much as any other company should be aware of this; they put an average of 3,000 products onto the market each year. In light of this, Philips have attempted to redefine their role, and in a recent showpiece catalogue entitled 'Visions of the Future' displayed a range of new concepts, which may or may not go into production. This 'catalogue' was created in order to show people Philips ideas for the future, in the form of realistic object and the context in which they would be used and thus provide Philips with feedback as to the validity of these ideas. Perhaps more than anything else, this idealism projected by Philips and the very name 'Visions of the future' proves that they are very much working to a utopian ideal in their product design.

As a market leader in the world of electronic products Philips are certainly an important factor in the development of the television and with a design philosophy headed by Stephano Marzano they should continue to be. One of the projects undertaken by Philips at the moment is the integration of furniture and technological home entertainment systems. This is not as retrospective as it sounds. Unlike those early attempts to disguise electronic products as other pieces of furniture, this design project attempts to produce entertainment systems combining television, hi-fi and other components which are

acceptable within the home as furniture in their own right. This is a remarkable departure for a company such as Philips, in that it has taken the technology aspect out of, what would be a particularly sophisticated product, and replaced it with a more down-to-earth principle of comfort and familiarity.

Chapter 4: The future of television

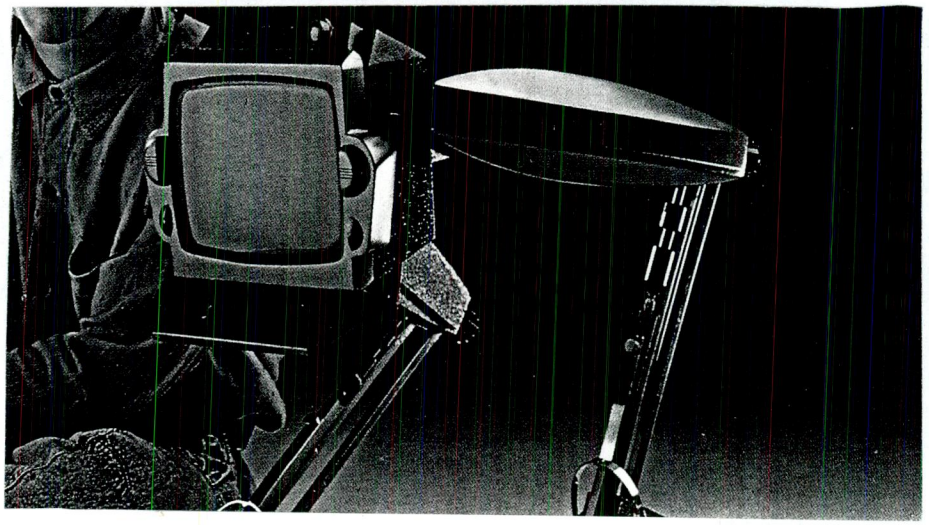


fig.17. The 'Animan' robotic family pet.

How will the television look in times to come? Will we live in a time when the science fiction fantasies of the past become our day to day reality or will we search for more practical and sensible design solutions for the evolving television? There are many issues facing the design development of the television for the future. Competing strongly with the need to make the electronic product's technology more user friendly is the influx of new ideas and technologies which seem likely to engulf the telecommunications industry. Arguably the most important of these technological changes is the introduction of the Internet into the home. There is already an Internet capable television system on the

market known as webTV. This consists of a black box not dissimilar to a video recorder, which sits atop a television set making it a monitor for access to the world-wide-web, a hand held remote control device is used by the 'viewer' to work his or her way around the internet. This style of product is reflecting the growing belief that television and the Internet are soon to become inseparable companions. In an article produced for the Cable and Wireless web site (a company which provides television services), Andy Grove the director of one of the largest computer firms in the world, Intel, is quoted as being among the supporters of what he describes as the 'Morphing PC' theory:

> "Why, he argues, would anyone buy a TV when a powerful new multimedia computer offers television as well as CD-ROM, the Internet, and all that intelligence in the same box?" (Anon, www.cwcom.co.uk, 1997)

Naturally it is in Intel's best interests to support the sale of more PCs but there is a lot of truth in what he says. It is worth noting that in the U.S the percentage of homes owning a PC has reached a 'ceiling' of around 40%, the rest of the population either cannot afford or does not want a P.C. It is unlikely that such a large percentage of the population should be left out of participation on the Internet and its growing number of services. The answer seems to lie with the television, the fine-tuning of the webTV service and product could create a situation whereby 'surfing the net' could be undertaken at the same time as watching the television creating new improved services and interactivity for the television viewer. There are, of course, underlying problems in this merging of technologies.

One of the chief problems which needs to be tackled, if the T.V/P.C scenario is to become a reality is the anti-social nature of the Internet. Many people regard watching the television as an anti-social activity, which has replaced the traditional 'hearth' situation in the home, whereby family members would indulge in conversation and story telling. Indeed, television is often referred to as being instrumental in killing the art of conversation. However, although television watching may not be as social a pursuit as that of conversation, it is not, in my opinion, an entirely anti social activity. An aspect of televisions 'sociability' is evident in the fact that to watch a television program in the company of others is far more satisfying than to do so alone. Group television or video watching places us in a social gathering that reacts to the broadcast or video in a similar way as we react. A good example of this is in the area of comedy programmes. When watching an amusing program on the television people are far more likely to laugh if they are placed in a group situation, prompted and spurred on by the laughs of the other viewers. This is a phenomenon not lost on the programme makers, who often place recordings of laughter ('canned laughter') over the original soundtrack in order to give the home viewer cues as to when to laugh. Many programmes proudly announce as the closing credits roll past that they were 'filmed in front of a live studio audience', although this may be a slightly more honest way of achieving laughter, the intention is the same; to prompt the viewer at home into laughter.

Although it is, in many ways a social activity in the 'virtual' sense, the Internet generally involves the use of a PC or at least, a PC style interface, which is not as sociable an activity as watching the television. The passive nature of television watching makes it

ideal for group-viewing, however the use of an interface such as those available on the Internet requires interaction and concentration on the part of the user which makes it entirely unsuitable for group viewing. Perhaps some as yet undeveloped group interface will allow the participation of more than one person in the future PC/TV combination, or perhaps it may be easier to provide everyone with their own personal monitor on which to view the various web pages and internet based programming.

The introduction of LCD technology into the realm of television screen and computer monitor design is a set to become a major factor in the development of the television (Spollen, see appendix 1). LCDs or Liquid Crystal Displays make the traditional arrangement of cathode ray tube and curved glass screen unnecessary, and so a screen's depth can be reduced to a fraction of its previous size. Indeed, LCD monitors can provide screen depths of less than a centimetre, as can be seen in modern 'laptop' computers. The technology required to give LCD screens the same resolution and picture-quality as the traditional television screen is already available. In many cases, these factors can be improved upon as LCD gives superior quality, brighter images on a completely flat screen which, suprisingly is cheaper, easier to manufacture and more power efficient than conventional displays. This development would, naturally have a huge impact on the design and indeed, the placement of television sets. Instead of placing a television set on a table, stand or cabinet as is common nowadays, the set could be hung on a wall. Yet another development in this area, is the current research and exploration into the production of LEP's (Light Emitting Polymers) by various groups including Cambridge Display Technology and the Massachusetts Institute of technology

(Makimoto, 1997, p.158). These polymers (plastics) have the ability to produce light of varying colours and intensities across their surface. This material, which would act as a display would have an added advantage: it could be rolled or folded quite easily. This being made possible by the fact that the technology required to control the display appearing on the plastic could easily be contained in a few wafer thin silicon chips. This would provide designers with a method of displaying information that can be stored very effectively when not in use. The production of such a material would be of immeasurable value to designers working in the field of electronic communications.

> 'Plastic fold up or roll up displays are one of the key products for the electronics industry, simply because it's such a convenient technology' (Makimoto, 1997, p.158)

The traditional concerns of the television designer would disappear. Without the need for bulky cabinets and cases to contain the technology of the television, designer's attentions would perhaps turn elsewhere. One direction in which this attention could be channelled is towards the ever-growing field of remote-control design. It seems inevitable that as one removes the controls from the main body of the television, the role of the remote controller becomes ever more important. This importance is increased when one considers the implications of Internet televisions; in this case a remote control would become central to the viewers experience of the television, as they use it to navigate their way about and interact with the various channels, web-sites and programs available.

The introduction of digital television, which looks likely to take place within the next few years, is another factor that may increase the importance of the remote control.

> "Digital television looks set to replace the present analogue system within the next ten years. Its advantage is that, where one signal is possible with analogue, six or seven can be transmitted with digital. It also offers higher picture and sound quality with high definition and wide-screen transmission."(Foley, 1998, p.8)

Digital television receivers and broadcasts will significantly increase the number of channels available to the television viewer. It also opens up a whole new area of development for the television, in the field of interaction. Through digital television, viewers will be allowed a whole new range of viewing options and preferences. 'Video on demand', whereby the user can watch a movie or program broadcast whenever they choose to watch it is already becoming a reality thanks to digital broadcasting. However, this is only one of digital television's implications. There are many other more complex services already being tested and advertised at present, perhaps most notably by the British broadcasting firm 'Cable and Wireless'. In their consumer questionnaire they ask what services the participant feels are of most value to the viewer. Amongst the services offered are interactive gameshows, whereby the home-viewer can participate in a televised gameshow and 'selective camera', whereby the viewer can choose which camera angle they wish to view particular programmes through (this could be used, for example, to choose a particular drivers-eye view of a formula one race, or choose a particular viewing angle with which to see an action replay of a goal). This increase in user-interaction and processes may create an extremely complex user-television interaction which, without the aid of well designed navigation tools (i.e. remote controls)

user-interaction and processes may create an extremely complex user-television interaction which, without the aid of well designed navigation tools (i.e. remote controls) may be extremely daunting to its users, especially those people who consider themselves 'technophobes'. Remote controls, no matter how well designed and produced may not be the entire answer to this problem, however. One of the most exciting areas of development for the television designer and indeed for product designers in general, is that of 'on-screen interface'.

The role of interface design is becoming more and more important in the design of television sets. Present screen based television interfaces consist usually of 2 or 3 colour representations of simple graphic components, such as volume and brightness symbols. Within the next few years we will see the introduction of full colour interfaces. This shift away from actual 'mechanical' controls on the front of the television set (or even on a remote control) to 'virtual' controls represented on the screen of the set is yet another challenge for the future television designer.

Whilst it is obvious that new technologies are of great importance in the designing of electronic products in general, it is worth considering at this point whether these developments are effecting the 'design' development of the television. One way of looking at it is that the transition from 'actual' to 'virtual' controls and the introduction of flat or even roll-up screens will change the very nature of television design, giving designers new areas and concepts to design around. Perhaps one could say that the development of the television in design terms will nonetheless remain static; designers

will present us with graphic interfaces reflecting the future, much as they have given and continue to give us 'utopian' cabinets. Perhaps with the introduction of roll-up screens we will see a return to the start of the design cycle whereby roll-up technology will exist, at first as a specialist technology and move through the disguise-stage (it could for example, take the form of a roller blind or projection screen) until it takes it's own 'utopian' form?

One could look upon these technological changes as having a negative effect on the design development of the television. Could it be said, for example, that the introduction of a roll-up screen is a step down the evolutionary ladder towards the old notion of disguise whereby one's television is hidden away while not in use? Another development in the field of television production is a return to batch production and 'one-offs'. Manufacturers such as L.G (Lucky Goldstar) are beginning to use so many standard parts in the construction of their television sets that in order to provide the consumer with a sense of individuality they may have to turn to the use of varying colours and surface finishes. Malachy Spollen, one of the head designers at L.G's Irish department feels that this batch production of 'tailor made' televisions is a definite step forward for the consumer as they can choose a surface finish and colour which will compliment their home. In terms of design however, should this be viewed as a step forward or a step backwards? If the television is soon to become an item which the consumer themselves can 'design' does that mean that it will no longer make use of futuristic forms and finishes? In my opinion, this shall not be the case. The options

given to us in terms of surface finishes will undoubtedly be those that seem advanced and indeed 'utopian' with manufacturers competing to produce the most 'advanced' options.

Conclusion:

It seems reasonable to assume that despite all these technological innovations, and perhaps even because of them, the television is set to remain in the utopian state for quite some time. However, it is also my belief that by remaining in the utopian state the television's design need not stagnate. As previously mentioned, a society's interpretation of the utopian ideal changes and evolves along with that society. In this way, I believe that television's utopian form will evolve along with any advances in technology and sociological changes that the future may hold. Indeed, the utopian philosophy that guides much of today's product design is perhaps the best way of achieving true innovation and quality in the field of design.

Appendix 1:

Transcript of recorded interview with Malachy Spollen (henceforth referred to as M.S) carried out by Conor O' Riordan (henceforth referred to as C.O.R) On 2nd of November 1997.

C.O.R: Are there any particular developments in television design that you feel will

influence the development of the television greatly?

M.S: The main developments that I see influencing television are digital television, LCD technology, on screen controls and more flexible manufacturing processes. Digital television will give us more and more channels so remote controls and interfaces will have to improve. On screen controls with more options and better graphics will probably develop as a result of this.

C.O.R: What does 'flexible manufacturing' mean?

M.S: Basically, it means that you can produce batch lots of a mass producable product with slight variations from the norm, like different colours, surface finishes. Maybe even materials.

C.O.R: Do you feel that technology will influence the development of the television greatly?

M.S: Certainly, the design of the set has to respond to the technological changes that arise. The Internet is a good example. An Internet/ TV hybrid is definitely on the cards. LCD screens will affect the placement and styling of TVs as they get thinner and lighter. They're more power efficient and cheaper to make too so people will have more of them. Video-on-demand, or almost on demand will be available with digital TV and this may turn into simply 'media on demand'.

C.O.R: When designing television sets what factors is given precedence (e.g. styling, colour, function)?

M.S: Currently, a TV's function and safety are most important. They have to pass all safety standards in every country they are sold in. As a result there is lots of standardisation of parts. The screen has to be big, flat and bright, or at least it has to look that way. There's a cycle of styling whereby a model only lasts 2 years but its successor is introduced 1 year before it is withdrawn.

C.O.R: Do you think that televisions and PCs are set to merge?
M.S: Yes but it is only one of the features that will converge. Many formats will be available depending on demand and none of them have to be either a TV or a PC. After all, television is just radio with pictures. So it might not be called a 'television'.

C.O.R: Do you think that the 'entertainment centre' style T.V is going to be a standard or not?

M.S: It could be a standard but I think that for some markets people may wish to keep their systems apart and have, say, their TV in one room and their CD player in another, so yes and no really.

C.O.R: Okay, thank you.

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