

RGD ONTARIO

design **THINKERS** 2000

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Graphic Design and Business

EXPAND YOUR UNDERSTANDING OF THE CHANGES TAKING PLACE

THINK

8:30 • 8:30
AM PM

GRAPHIC MEMORY

BRUCE BROWN

Ladies and gentleman, I am honoured at having this opportunity to address such a distinguished audience in the venue offered by this magnificent city.

Having come all this way from the UK I would like to use the brief time available to discuss a condition that continues to intrigue me. It is the innocent observation, on my part, that large numbers of highly intelligent people continue, and will increasingly continue, to spend significant parts of their income on use-less goods or services whose consumption can, at times, be harmful to their well-being. But, for this talk, I am not taking a moral stance on such matters but, rather, pursuing an academic interest in trying to understand what causes some of these use-less products to become central in peoples' lives. So central that they must be acquired and owned—at any cost, even if the damage is to health though not wallet.

So, I would like to explore why the usefulness of things is less compelling to people than their meaning. And this tension between usefulness and meaningfulness is, I think, a crucial one. Indeed, the triumph of meaning over use is both intriguing and baffling. And, to express it another way, it is the triumph of brand over product. In the words of James Landor, "Products are made in the factory and brands are made in the mind". There are many, many, products that claim to make a useful input to our daily lives. For example, soap powders and detergents often harness dubious claims of being 'scientifically tested' to enhance their perceived position on the useful scale against similar competitive products.



Expand your understanding

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Often, too, advertisers will use persuasive imagery to transmit a physical sense of the irritation that may be experienced should a particular product's usefulness be ignored.



There are many other, more benign, domestic objects that are useful in our efforts to cope with daily life. For example, once our clothes have been properly washed, steam-irons are useful in helping to smooth the creased materials and iron freshly laundered garments.

But, in this advertisement, an iron seems to have caused some damage to the materials it supposedly serves to improve.

So its function as a useful object has been called into question by its visual representation. But why was the advertisement so successful — and what possible meaning, if any, caused this?

Well, in fact, this advertisement is not for steam-irons but for a brand of cigarettes called Silk Cut. It appeared in the mid 1980's not long after UK legislation was introduced to ensure all such advertisements carried a government health warning e.g. SMOKING CAN SERIOUSLY DAMAGE YOUR HEALTH or SMOKING CAN KILL.

So, at this point, advertisers were faced with the challenge of selling a product that was not simply use-less but had been branded as dangerous to health.

And, in response to this, at this point in the early 1980's, a massive shift occurred in advertisers' perception of their work—their focus jolting away from preoccupations with usefulness to explore the uncharted territories of meaningfulness— a shift from product to brand.

In this case, the challenge was to rebrand the product with a more engaging meaning. So from here on advertisers stopped being 'product sellers' and took on their new mantle as 'meaning makers'. From this point onwards the product would, itself, become increasingly insignificant — if not invisible — and branding strategies would gain importance and dominate.

In this advertisement for Silk Cut the product itself makes no appearance, it is invisible—indeed, the advertisement would not be credible if perceived to advocate a use-less product branded as harmful. Here the battle is over branding not product, which has now become invisible. So to express this shift between product and brand simply, it is the shift from usefulness to meaningfulness. A product is a thing claimed to be useful whereas a brand is a system of meaning that gives added value. For example, Nike is a brand it is not a shoe. Its system of meaning connects to the heroicism and supremacy of athleticism. Similarly, Tommy Hilfigger and Benetton are brands not garments that make no appearance in their advertisements. Coca-Cola is not a drink but a meaningful lifestyle.

Indeed, once such a system of meaning has been established it has the power to sell any product, even a harmful one like tobacco. So, why do these systems of meaning have the power to be branded in our minds and how are they constructed? To try and answer this question I would like to stick with these first attempts at advertising tobacco after the introduction of legislation requiring all to carry a government health warning. The nature of this problem is such that it provides good pointers that help us understand how powerful systems of meaning were evolved after the early 1980's. Here is one of the first tobacco advertisements emerging from this experiment at constructing brand identity. It was created for Benson & Hedges in the late 1970's and was highly successful. A key strategy, evident here, and right from the start, was to segregate

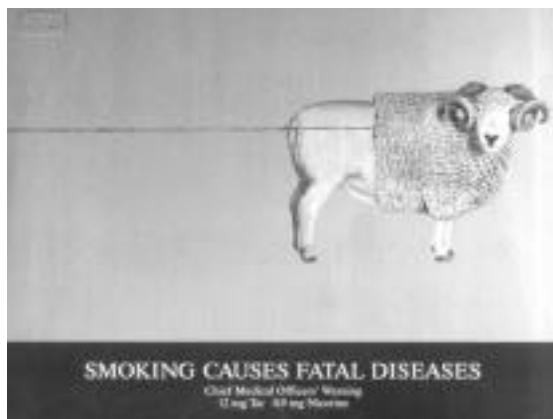


word and image—each seems to brand the product with opposing messages. One being negative (the word) and the other affirmative (the image). And this forces a simple question — which has the greatest power over us — the word or the image?

We, in the UK, have been brought up in the land of Shakespeare with an education founded on literacy. Our principal channel of communication is the written and spoken word. We are all experts at decoding the information carried by these abstract signs representing sounds. But, as a direct consequence of this education, we are no longer expert at decoding images as containers of meaning. This was not always so for humankind, but is an historical condition affecting our times. It was first articulated by Marshall McLuhan in the late 1960's, when he said in 'Understanding Media' that...

"Highly literate people cannot cope with the nonverbal art of the pictorial. The unconscious depth-messages of ads are never attacked by the literate, because of their incapacity to notice or discuss nonverbal forms of arrangement and meaning. The fact that typography is itself mainly subliminal in effect and that pictures are, as well, is a secret that is safe from the book-oriented community."

Well, we are the book-orientated community referred to here. And to give you some idea of our non-visual condition here is another, more recent, Benson & Hedges advertisement twenty years on from



the first. The irony, though, is that it is precisely our lost ability to handle visual images like this that, in fact, gives them the power over us. So, to try and tease out an understanding of this condition I would like to take a broad historical sweep over changes that the rise of literacy has brought to our handling of visual language.

Words and images are simply two different systems of signs we have invented to represent our memories. And here, I think, lies the key to understanding our contemporary condition. It rests in the fundamental role that memory has played in our lives and the signs we have invented to handle it. Indeed, our ability to perceive something rests in a coded scheme of the world that has been lodged somewhere in our memory. But we now seem to take our ability to remember things for granted — that is unless we forget something. Without the ability to store things in memory we would in fact perceive no more than each disjointed second of our isolated existences; we would have no history, no language and no culture to share. But this has not always been so. In earlier cultures the design and handling of memory, especially visual memory, was the most prized skill of all.

So, puzzling advertising images like these stimulate us to trawl our memory for stories and images that will help to construct meaning and make sense of the thing. Stories such as that of the Golden Fleece. And, more self-referentially to a famous epigram by Thomas Aquinas who was known to have stored in his memory the entire texts of manuscripts seen in libraries which he said were pulled back out of his memory like — "a seamless golden chain".

And it is this unconscious stimulation of our memory system in order to construct meaning for things that holds the key to power. Like a beacon it is continually searching the landscape of memory for material to project meaning onto the objects we encounter in the world around us.

A famous painting by the Belgian artist Rene Magritte is called 'The Great War.' Why? Well, try to consciously search your memory for a story about someone who placed an apple on their head and then replay the narrative you have remembered according to this image.



Perhaps it is the underlying story of William Tell that gives this image its mystery and, more importantly, its credibility. It is not simply an absurd image but a believable one. And it is our unconscious memory search that gives it a power.

In the following image by Meret Oppenheim, though, the memory search is deeper and more primitive. It also eludes all attempts at conscious articulation—maybe being connected to buried memories of hunting animals and drinking blood.

Whatever, though, everyone who encounters this object experiences a memory trigger that is uneasy and cannot be described.



Indeed Magritte and Oppenheim were just two of many artists influenced by the ideas of French Philosopher Henri Bergson. His book "Matter and Memory" was first published in 1920 and exerted profound influence on some of the major art movements of the 20th century's last hundred years—from the Cubists, Dadaists, Surrealists, Futurists and Vorticists down to the thoughts of Marshall

McLuhan, all were profoundly influenced by his ideas. In "Matter and Memory" Bergson wrote:

"...there is no perception which is not full of memories. With the immediate and present data of our senses we mingle a thousand details out of our past experience. In most cases these memories supplant our actual perceptions, of which we then retain only a few hints, thus using them merely as 'signs' that recall to us former images. The convenience and the rapidity of perception are bought at this price; but hence also springs every kind of illusion."

Just as the characters of the alphabet are meaningless signs for meaningless sounds, it is only through the miracle of memory that links are permanently forged between them and meaning born. The same is also true of all graphic images from motorway signs to the icons of popular culture which, if we were not able to construct permanent memories for them, would simply continue as meaningless signs.

The poster on the left was produced by John Heartfield in the 1940's and that on the left in the late 1980's.

The visual memory of a hand has persisted and been transferred from one generation to another.

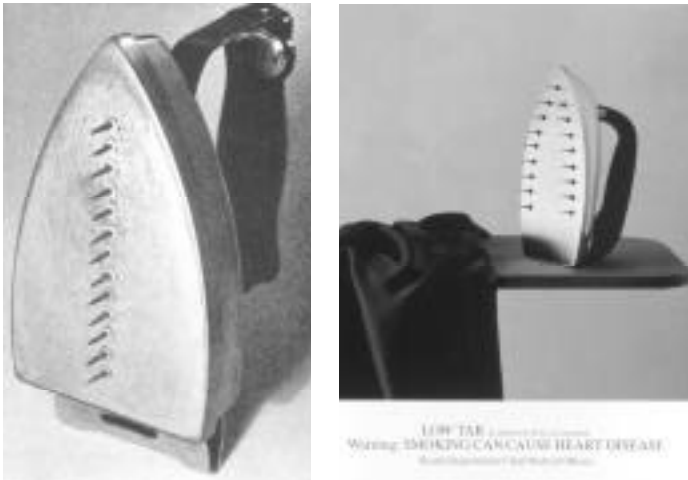
On the following page an image of Man Ray's iron has also persisted as a visual memory to be used in Silk Cut advertisements.



There are, in fact two forms of human visual memory important to our discussion—which are:

natural memory
and
artificial memory

Expand your understanding



In the first instance, natural memory can be characterised as a human quality tied to each person's biological makeup—that is, some people, quite simply, have better natural memories than others; so, biological memory is a given quality that is part of our individual genetic makeup. And as you will see in a moment all the very earliest cultures constructed cultural and social conditions through their use of natural visual memory.

Artificial memory, though, may be characterised as the enhancement through techniques or technologies of a memory's natural capacity—that is, a poor memory can be improved and a good one further enhanced; so, artificial memory is not a given but can be trained and refined (learning the alphabet being but one example of this).

Artificial memory is itself of two kinds. The first relies on techniques for the design of virtual space within the individual memory so that a volume of knowledge much greater than its natural capacity can be stored permanently and retrieved at will. Specific strategies for doing this have a well documented history in the West and were probably invented in many cultures at different times—the memory theatres of Giordano Bruno or Robert Fludd and the pictorial spaces of Piero De La Francesca or of Rene Magritte are examples.

The second type of artificial memory relies on technologies external to the human mind and upon which our memories can be inscribed—examples of some of these are papyrus, wax-tablet, paper, videotape and CD-Rom. Together, such techniques and technologies constitute a virtual world of artificial memory.

Sadly, today, we not only take our memories for granted but also how they function within our technological world. Each day we manipulate technologies external to ourselves in order to enhance our biological memory system (eg. dictaphones, diaries, cameras, videorecorders, powerbooks and computers)—and this process of manipulation does change the way we use our memories.

I would like to explain the evolutionary relationship of natural biological memory to artificial memory techniques and technologies through a closer look at three ages in our cultural evolution. My names for these are shown below along with key figures in each.

The Folk Age	<<<<BC - 1500AD	Socrates
The Machine Age	1500AD - 2000AD	Gutenberg
The Digital Age	2000AD - >>>>>	McLuhan

The theme running through these three ages charts a social shift from individuals, to tribes, then to cities and nations. That is, how people began to externalise and share their memories within increasingly large and dispersed communities—how mass communication and collective memory were created. And with this how we have invented technologies to externalise, multiply and transport our memories in order to achieve this.

The Folk Age is a period of time stretching back to the dawn of humanity and ending in 1500, with the spread of literacy through invention of printing from movable type. The following Machine Age is a very short period of only 500 years that started in 1500 with the invention of printing from movable type, and ended at the close of the last millennium. And the Digital Age stretches from today off into the future. Our experience of cultural conditioning has been derived from this 500 year period that saw the rise and spread of literacy through movable type and book learning. But the

Machine Age is, in fact, a very short period of transition from one era to another and is not typical of human endeavours transacted in the previous Folk Age and now the unfolding Digital Age.

These three epochs, *The Folk Age*, *The Machine Age* and *The Digital Age* embrace various cultures similar in the balance they strike in their use of our memory systems.

FOLK AGE

Though every act of remembering and recollecting is a uniquely personal act, our memory structures are influenced by the way we use available technologies in order to live with each other. But in earlier cultures this was not so—simply because they were without writing and technology. Indeed, oral cultures had to rely almost solely on techniques for the storing of their memories. Because the majority of human societies predated technologies such as writing so the records of their cultures were oral. What could not endure in the memory of each person, evaporated completely and was lost. Histories, ancestries, stories and journeys all had to be conveyed by the spoken word in order to forge social groupings with shared cultures that could endure over successive generations. In these societies special individuals were identified as the keepers of knowledge—so they needed techniques to help them remember many things—they had to design their own human memory systems for long term storage and retrieval.

Let me give you one example of this. In early oral cultures ballads and poems were the chief strategies used to break information down into small chunks linked to each other in some logical order—so being easier to remember. Oral cultures were also able to retrieve such knowledge from memory in a non-linear fashion being able to manipulate sequence and order at will. For example, the following extract refers to a map in the form of a song. In it an old Eskimo woman explains how her ancestors navigated their canoes in the search for food—the very last line being significant.

“Everythin’ we ever knew about the movement of the sea was preserved in the verses of a song. For thousands of years we went

where we wanted and came home safe because of the song. ...There was a song for goin’ to China and a song for goin’ to Japan, a song for the big island and a song for the smaller one. All we had to know was the song and we knew where we were. To get back, we just sang the song in reverse...”

Around 400 BC Socrates was one of the first thinkers to cast doubt on the spread of writing. He never wrote anything down himself and we only know his philosophies through the writings of his pupil Plato. Socrates warned that, writing placed outside the mind that which should rightly be within it. This signalled the first step in the externalisation of our memories and Socrates suggested it would have three consequences.

- it would change the way educated ourselves
- we would cease to be private individuals
- we would lose our memories.

As the Folk Age progressed so too did its techniques and technologies develop in order to best externalise and contain our memories. And four main techniques were developed — CHUNKS, SURPRISES, LINKS and JOURNIES.

*Technique One —CHUNKS—*The first technique is based on the overriding principle that information can most readily be stored and retrieved in human memory—in vast quantities—if it is broken down into small chunks with each then being formed as a graphic image. Why this should be so is still not fully understood but has been observed since the earliest times. Aristotle referred to a memory as “a sort of eikón”; Plato to it as “the seeing of internal pictures” and Albertus Magnus that a memory “is not secure enough by hearing, but it is made firm by seeing”. Aristotle likened memory to a wax tablet



with the things to be remembered being impressed in it as images. The previous image by Magritte illustrates this principle of chunking images into memory and impressing them on its 'wax tablet'.

In 1130 Hugh of St Victor produced a manuscript work entitled the *Chronica* addressed to students beginning their study of scripture in the School of St. Victor. In the preface he clearly describes its memory purpose and the role of graphic imagery in this saying:

"...it is a great value for fixing a memory-image that when we read books, we study to impress on our memory through our mental-image-forming power not only the number and order of verses or ideas, but at the same time the colour, shape, position, and placement of the letters, where we have seen this or that written, in what part, in what location we saw it positioned, in what colour we observed the trace of the letter or the ornamented surface of the parchment. Indeed I think nothing so useful for stimulating the memory..."

This extract underlines the specific intention that manuscript pages were designed to be 'seen' and 'read' from the permanent store of human memory, not from the page itself—so graphic representations of words and images were crucial devices in this process of internalising information and knowledge.

Technique Two—SURPRISES—The second technique extends this principle in the knowledge that human memory is, *per se*, an associative process and things can be more readily retrieved from it when combined with other things in the imagination. Indeed, the more unusual or surprising these associations are the more memorable they will be. For example, one of the earliest essays describing these strategies—known as the *Ad Herrenium*—gives the following advice on the matter:

"We ought then to set up images of a kind that can adhere longest in the memory, and we shall do so if we establish likenesses as striking as possible...if we assign to them exceptional beauty or singular ugliness, if we dress some of them with crowns or purple cloaks...so that the likeness may be more distinct to us, or we

somehow disfigure them, as by introducing one stained with blood or soiled with mud or smeared with red paint...this too will ensure our remembering them more readily"

Therefore, in this respect—mediaeval letterforms, illuminations, lines of text, punctuation marks and page layouts were all graphic devices, exploited in the realisation of these mnemonic strategies. For example, Peter of Ravenna (a fifteenth century Italian lawyer) devised a system of alphabetic memory-places in which he claimed to be able to store 20,000 bits of information—the system he describes as using "human figures in place of the letters and thus living, vivid images". He elaborates by adding that to make the letters more memorable he had cast them in the forms of enticing women adding that "these greatly simulate my memory" but saying this is not a technique for those who hate women or are easily excitable.



This description illustrates both the increased memorability of unusual image juxtapositions and suggests that our view of early pictorial alphabets as being essentially ornamental is perhaps wrong—they were designed this way so as to be more readily memorable. Their visual form was not simply the result of some exuberant designer—intent on whimsy, novelty or ornament for its own sake. Such elaborate initials, complex borders, grotesque images and typographic bestiaries were specifically designed as mnemonic icons for the ready storage and retrieval of knowledge as well as being a metaphorical representation for memory itself.

This technique of association, by making two thoughts collide within a single graphic image was famously described by Arthur Koestler in his book *The Act of Creation* as "bisociation". He also pointed out that the collision of two thoughts in memory was the source of laughter.

Indeed, the more commonplace the images and the more striking



plate from the Hours of Catherine of Cleves the linking can be clearly seen. In these times memories were considered to be fish that had to be hunted down and caught. And here the fished/memories are linked to each other as one eats the tail of the next. Hooking one fish (at the page bottom) hauls in all the other memories linked to it — the source of our term the 'hook'.

Technique Four — JOURNIES—In technique four the sequence should be set in a landscape through which the rememberer can travel. And this virtual space should be permanently engraved in memory so that it can be navigated in the imagination from one place to another—either as a journey or as a story.

Let me first give you a little test by way of supporting this example. If I were to ask how many doors there are in your house or apartment you would probably not be able to give an answer—possibly because you have never been counted them. But, with a little reflection the answer can be found by recreating the space of your home in imagination and walking round it to count each door. More than this, each of us could probably still count the number of doors in the house before that, and perhaps, even, the one before that.

The process by which this virtual space is formed makes a number of facts obvious. Firstly, through experience we can form an internal representation of what something looks like. Secondly, this is a strong representation that can last for long periods of time. Thirdly, we can activate this representation at will from amongst the millions of memories we carry. Finally, once activated we can interrogate and move around it in any direction we choose in order to retrieve information. In mediaeval times the two and three dimen-

sional architecture of each manuscript page was conceived as an aid in the construction of such virtual spaces within memory. The architectural mnemonic of Greek and Renaissance times was generally conceived as being a public space in which objects of the things to be remembered could be distributed. And in mediaeval times this space was imagined as two dimensional—being shaped from the manuscript page.

Specific places within this virtual space should be identified as fixed points where the things to be remembered can be located and associated. This is the well established principle of loci used and described since the earliest times. Whether they be architectural features, numbers or letters such points of location must be fixed permanently in the virtual space of memory so that their position (and the memories associated with them) can always be found. This method has been described by the Russian neuropsychologist AR Luria in a lengthy case study of a Russian journalist, Shereshevski, who had a prodigious memory. Luria described Shereshevski's method by saying that he would first memorise a street in the town where he lived—say Gorky Street in Moscow—and then would...

"...take a mental walk along the street...beginning at Mayakovsky square, and slowly make his way down, distributing his images at gates and store windows. At times, without realising it, he would suddenly find himself back in his home town where he would wind up his trip in the house he had lived in as a child."

Though the early oral cultures were entirely memorial, manuscript cultures were essentially so. The practical difference being that oral cultures relied almost entirely on these four techniques for the conservation of their memories whereas manuscript cultures augmented these through the application of technologies (ie. pen, ink and parchment)—this said, they both operated from the premise that knowledge was to be stored in, and retrieved from, biological memory; external images being seen as simply 'signs' in this process of internalisation and subsequent reactivation of the memories. In these cultures books and manuscripts were considered as metaphors for memory rather than its substitute. And the ability

to perfectly recollect information stored in biological memory, again and again, in any sequence, backwards, forwards, randomly was a highly prized skill. So it was not intended by the designers of mediaeval manuscripts that their prime function was to freeze knowledge between the bindings of each book; no, manuscripts contained metaphors for memory with their contents being designed in a form readily transferable into it—biological memory being considered its ultimate place of conservation and reactivation. In this sense the mnemonic images of mediaeval manuscripts had two functions; to first load images into memory then to relocate and trigger their recollection.

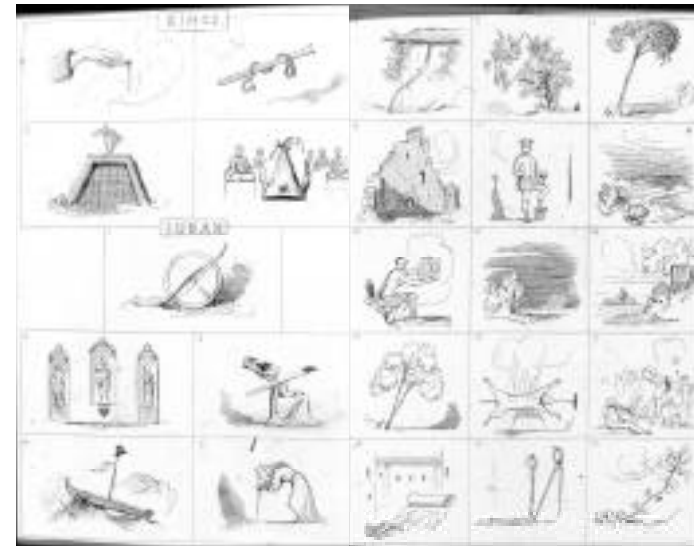


MACHINE AGE

With the advent of modern technologies (such as printing and photography) this process of internalising knowledge into memory through conscious acts of will was finally reversed and the techniques used to do this in earlier times made redundant. At the beginning of the 20th century the vestiges of artificial memory systems remained alive only in the hands of professional memory men—entertainers—and reverend ministers wishing to inculcate scriptures into the soul of popular memory. For example, in 1878 the Rev Robert Rowe Knott published a *New Aid to Memory* in which a battery of visual icons were specifically designed to assist in the memorisation of all major events from the Old Testament. He said this of his graphic signposts:

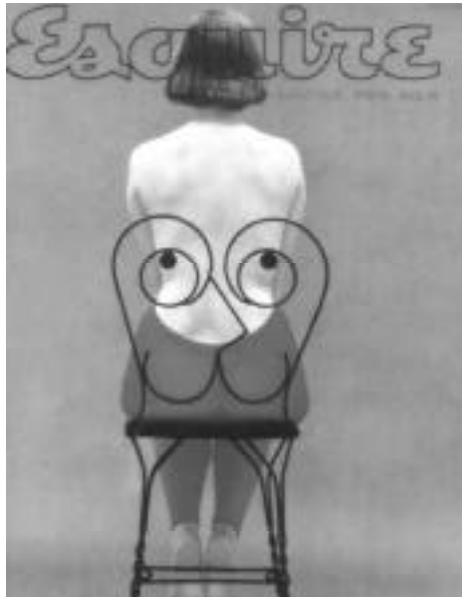
“These ‘landmarks’ of history...are accompanied by...ingenious and

interesting devices...to fix them readily, firmly, and indelibly, on the memory...The work, indeed, may be compared to a map, in which the lines of latitude and longitude, and the most important cities and rivers, are delineated for the use of the pupil...”



Throughout this century the invention of photo lithography has created a graphic revolution in which increasingly sophisticated graphic images have come to permeate our culture just as the demise of visual language gave way to literate communication.

For us modern technology has progressively come to externalise artificial memory outside the mind of the individual—embedding it in the mass produced artifacts of our culture—its books, photographs, films and videotapes. These objects are no longer metaphors for memory but its concrete substitute outside the mind of each person. This process of externalisation began with the invention of writing which was much distrusted by Plato who believed that it placed outside the mind that which should rightly be within it. And this century has evolved a book and media culture supreme in the ability to externalise knowledge through the freeing, packaging and distribution of memories—so being free to



These examples do not offer meaningful content but rather, instead, the suggestion that there is a meaningful system of signs there to be decoded. And this puzzle in itself causes engagement. Once learned, this is powerful in itself.

The irony too, is that these visual systems are more powerful than words simply because we no longer possess the self-conscious will to

control them — for, as Marshall McLuhan suggested....

"Highly literate people cannot cope with the nonverbal art of the pictorial...The unconscious depth-messages of ads are never attacked by the literate, because of their incapacity to notice or discuss nonverbal forms of arrangement and meaning..."

And here these visual systems of meaning become the brand through which the product is recognised. And in this, lies the final trick. It is something first described by TS Elliott as the objective correlative. The theory goes that we perceive the world through an internal schema of memories and emotions that are invisible. But, through these, we construct our perception of the world. And from this we all need a physical object in the material world to which we can connect these abstract resources inside ourselves in order to confirm their existence. This is what Henri Bergson described in Matter and Memory as....

...memory, reflecting upon the object a growing number of suggested images..."and" ...In most cases these memories supplant our actual perceptions, of which we then retain only a few hints, thus using them merely as 'signs' that recall to us former images. The convenience and the rapidity of perception are bought at this price; but hence also springs every kind of illusion."

So at this point I hope you may have come to appreciate the power of visual memory to construct systems of meaning which are branded in our mind. And these brands are then tied to objects as the products that confirm their existence. It is the very act of purchasing these products that verifies the existence of its invisible system of meaning inside our memory. As James Landor suggested



"Products are made in the factory and brands are made in the mind".

For example Benetton is a brand meaning that asserts "we understand the conditions of life" and its garments then purchased and so the person wrapped in this physical confirmation of the belief system inside them.

Recently the Oxford Scholar Thomas Butler reflected on another war in Central Europe and asked "how could it happen". How could relatively peaceful neighbours one day, turn and slaughter each other the next. His answer was that once deeply rooted memories of national identity had been born they had the power to conquer rational behaviour and turn reasonable people into monsters. In his words...

"Memory, as transmitted through folk songs, epic poems, oral traditions and graphic images has the power to destroy empires, as water has the strength to crack stone. Men [and women] will die for Memory..."

