

# ENVIRONMENTAL IMPACT OF OUTDOOR ADVERTISING

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The impact of outdoor advertising is not only limited to traffic safety and visual impacts. There are a variety of other interrelated impacts that are not normally recognised. In order to achieve effective management of outdoor advertising these impacts have to be approached in a holistic manner.

According to the South African Manual for Outdoor Advertising Control (DEAT, 1998, April, p.vii) outdoor advertising is defined as "any visible representation of a word, name, letter, figure, object, mark or symbol or of an abbreviation of a word or name, or of any combination of such elements with the object of transferring information." Outdoor advertising therefore entails much more than the ordinary billboard.

For the purpose of this paper "environment" will not be limited to the bio-physical environment but will also include the social and psychological environments.

Outdoor advertising has a very strong impact due to its unavoidable nature. Outdoor advertising tends to take place in accordance with six principles if a laissez faire approach is followed. If these principles are not managed properly the impact of outdoor advertising might get out of hand totally.

**(a) Competition or snow ball principle:**

Advertisements and signs tend to compete for the attention of the viewer. New additions to the scene tend to be bigger, higher, closer to the street and displaying brighter colours than existing advertisements. This may cause a snow ball effect which can very easily get out of hand.

**(b) Encroachment principle:**

Advertisements and signs tend to advance towards the observer by either encroaching onto or even into the roadway or pedestrian route or by offering information in advance of the actual site where the product or service is provided.

**(c) Attachment or domination principle:**

Advertisements and signs display the tendency to attach itself to existing settings or designs and to force itself upon the visual scene in a very obtrusive and audacious manner. It often strives to dominate the visual scene by taking advantage of prominent elements in a visual setting, such as a bend in the road or other visual focal points, and in the process may destroy both prominent elements and visual setting. Commercial advertising also displays a tendency to attach itself to more worthy causes such as fund-raising for charities and community services in the form of sponsorships or advertisements may be attached to signs for guiding road users and pedestrians.

**(d) Imperialistic or ubiquity principle:**

Like all other advertising media, outdoor advertising wants to be ubiquitous and therefore tries to conquer new territories by entering or filling new spaces or by making use of new technologies and advertising methods.

**(e) Transition principle:**

Advertisements and signs display a tendency for rapid and constant change since the display periods of individual advertisement tend to be relatively short and can therefore not be seen as permanent visual elements. This feeling of impermanence is aggravated by the fact that most outdoor advertisements is aimed at people in motion with limited time at their disposal to take in information on such advertisements.

**(f) Disorder principle:**

Outdoor advertising reveals a natural tendency for visual disorder. It can therefore be stated that where outdoor advertising is managed insufficiently visual disorder, and deterioration will increase with time.

## **ENVIRONMENTAL OVERSTIMULATION OR INFORMATION OVERLOAD**

Perceptual stress may result from environmental overstimulation due to information overload. Environmental overstimulation may lead to various forms of behaviour breakdown such as confusion, disorientation, a desensitisation to setting and decreased environmental awareness, distortion of reality, fatigue, anxiety, tenseness and extreme irritability, with apathy and emotional withdrawal in the final stages. This may lead to social problems such as a lowering in human productivity, the use of drugs, outbreaks of violence and vandalism and crime. (Toffler, 1973, pp. 305 - 326; Motloch, 1991, p.284). It may also influence man's ability of aesthetic perception and appreciation.

The individual relates to his surroundings perceptually by processing information, imparting meaning and by responding emotionally. (Motloch, 1991, p.278). Image formation, which reduces perceived complexity by aggregating visual parts into some recognizable pattern, can be seen as the essence of this process. (Bell, 1996, p.4) The individual, however, has a limited ability to process information, and through this processing, to form images and to ascribe meaning to settings. (Motloch, 1991, p. 280) Information overload may therefore cause stress in cases where this ability is exceeded.

Information overload is the function of both the amount and relevancy of information. Recent research leads us to believe that the relevancy of information might be more critical than the amount. (Motloch, 1991, p.284 / Kaplan 1989) Information relevancy forms the basis of the important concepts of imageability and a sense of place or *genius locii*. Imageability or placeness can be seen as the *innate ability* of a place or setting to form vivid mental images, to effect major changes in emotional state, and to be remembered over extended periods of time (Motloch, 1991, p. 296). By creating places with a high imageability the information load can be reduced through the chunking of stimuli into a reduced number of visual units and by aggregating parts into a recognizable pattern and in this manner information overload can be diminished.

Seen within the framework of information relevancy outdoor advertising and especially commercial advertising has an ability to destroy placeness and visual harmony due to its natural tendency to accumulate and proliferate and to be prominent, competing and contrasting.

## **OTHER IMPACTS REATED TO PLACENESS**

By impacting on placeness the proliferation of outdoor advertisements and signs may also contribute to the following problems:

### **a) Crime and vandalism**

Placelessness and untidy environments may result in psychological environments conducive to crime and vandalism since an impression of a lack of control by and involvement of authorities and communities is created in the mind of the criminal. Even in cases where the crime rate might actually not be too high placelessness might still result in psychological unhealthy places by contributing to an insufficient perception of safety and security thereby causing a feeling of insecurity and stress among people making use of such places. Abandoned advertisement and empty advertising structures will contribute even further to untidy environments and a perception of non-involvement and lack of control.

### **b) Poor community identity and a uniform world culture**

A strong relationship exists between sense of place and community identity. The promotion of a world culture and global economy should therefore be seen as a key factor in weakening the identity of groups or communities, which will lead to an identity crisis and uncertainty. Outdoor information transfer and especially commercial advertisements may be seen as a major contributor in creating more uniform visual environments in accordance with a global economy and culture. This influence is not limited to advertising contents and structures only. The premises and buildings of international franchises are often used as advertisements in themselves in order to create a global identity.

### **c) Destruction of a Sense of Permanence**

As one of the most rapid changing elements in the modern urban landscape outdoor advertisements and signs have the inherent capability of destroying a sense of permanence and belonging. Certain visual elements need to provide a framework of permanence within which changes can take place over time. This need for permanence and continuity is becoming a subject of ever-increasing importance in a modern society characterised by rapid lifestyles and constant transformation. If advertisements and signs, of which the actual contents tend to change very quickly, should be allowed to dominate visual scenes or settings such a domination will lead to an overwhelming sense of impermanence and instability.

### **d) Devaluation of place and commercialisation of placeness**

In accordance with the imperialistic principle outdoor advertisements entering and dominating certain places may devaluate and even degrade the integrity of such places. In South Africa schools, like many other institutions, are presently going through difficult economic times. Certain elements in the outdoor advertising industry are exploiting the situation by offering schools an income by means of displaying outdoor advertisements on

school sites. Institutions such as schools with a prestige value and educational status may in this manner be devaluated to mere places of consumerism and commercialism. This will also imply that value systems taught at such institutions will be impaired and devaluated to a materialistic level. Outdoor advertisements might in the future even invade, conquer and devalue more sublime places like church sites.

## **ETHICAL OR MORAL IMPACT**

Ethical impact occurs when the content of outdoor information transfer is objectionable, indecent or prejudicial to the public morals. Outdoor advertising has a larger inherent potential to impact on public morals than the other advertising media due to fact that it cannot be ignored covered or switched off, which also means that children cannot be protected sufficiently from such advertisements. The exposure of children to outdoor advertising messages glamorising tobacco and alcohol is a matter of great ethical concern in many communities. Advertising's impact in the ethical realm should not be underestimated. Independent research carried out in May 1998 for the Advertising Standards Authority (UK) revealed a hardening in UK consumer attitudes in taste and decency since the previous survey conducted in 1996-7. Concern about the portrayal of women as sex objects in advertising has increased to 71% of the respondents, 53% were sensitive about the portrayal of men, almost 80% were concerned about disrespectful religious references, while 81% objected strongly to profanity in advertising (Advertising Standards Authority of SA, 1999, April).

## **UNSUSTAINABLE CONSUMPTION PATTERNS**

Although this is a matter of much philosophical debate, it still has to be taken into consideration.

Advertising may lead to unsustainable consumption patterns, which impacts at social, economic and ecological levels. In modern society commercial advertising is promoting a lifestyle based on material wealth and a growing consumption of products and services. It tends to emphasise the "positive" or desirable aspects of consumption while deliberately ignoring the negative aspects of both consumption and production. Advertisements link the product with a socially desirable referent system. Acquiring a specific product will lead to the acquisition of certain valued meanings or goals, such as social acceptance. Various anti-consumerism groups see overconsumption, which can be directly linked to advertising, as the mother of all environmental problems.

Irresponsible advertising may impact on the social environment by contributing to overspending, personal debts and strained human relationships, while it may also lead to the unsustainable utilisation of natural resources. As consumer patterns in the developed countries of the North become more environmental friendly, sustainable and health conscious, unhealthy, unsustainable and unrealistic consumer patterns are progressively transferred to developing countries in the South by means of aggressive advertising. Such advertising campaigns portray unrealistic lifestyles, creating a thirst for Western luxuries that drains these regions of hundreds of millions of dollars that could go into grassroots development. (Pradervand, 1992, December, p.76). Outdoor advertising serves as a primary advertising medium in these developing communities.

## **IMPACT ON TOURISM RESOURCES**

The proliferation of advertisements and signs may have a very negative impact on visual resources such as scenic landscapes and cultural streetscapes, which constitute major tourist attractions. However, the impact of outdoor advertising is not limited to such outstanding attractions since the visual environment also forms a backdrop to most other tourist activities such as game watching, touring, entertainment, shopping and sport. The visual environment can be seen as the fabric that gives meaning and substance to any tourism experience.

Furthermore, each country, area, city or town has its own unique visual character and atmosphere, which plays an important role in the quality of any tourist experience. Standardised outdoor advertisements and uniform franchises signs and buildings may have a very negative impact on local character and sense of place.

## **IMPACT ON TRAFFIC SAFETY**

Outdoor information transfer may have the following detrimental effects regarding the above issue:

- ❑ Distracting the attention of the motorist
- ❑ Interfering and creating confusion with traffic signals, traffic signs and road markings
- ❑ Obstructing the view of the motorist
- ❑ Forming physical obstructions
- ❑ Billboards and signs hitting pedestrians cyclists and motorists

### **a) Distracting the Attention of the Motorist**

This issue has been the main focus of the controversy surrounding traffic safety and outdoor advertising.

By their very nature outdoor advertisements are designed to pull the eyes of the motorist off the road and onto roadside displays. They are therefore placed in such a manner as to receive maximum exposure in locations that require special attention from the driver and which are critical from a traffic safety point of view, such as bends in the road and intersections. The Institute of Outdoor Advertising (USA) itself has admitted that outdoor advertising has a distracting influence by stating: "Outdoor's sheer physical size allows for eye stopping, bigger-than-life illustrations. It is virtually impossible not to notice the world's biggest scoop of ice cream or shiny automobile. At night a billboard encounters no other visual to compete with the motorist's attention. There is only eye stopping visual display emblazoned across the sky." (Scenic Missouri, online).

In the United States federal and state courts have for long cited traffic safety as a legitimate basis for billboard regulation.<sup>1</sup>

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<sup>1</sup> Major Media of the Southeast v. City of Raleigh (1987) and Metromedia v. San Diego (Scenic Missouri, online)

Various studies have been undertaken regarding the distraction effect of larger commercial signs along the road. A large number of these studies indicated a definite correlation between accidents and the presence of roadside advertising.<sup>2</sup> However, other studies found no correlation.<sup>3</sup>

An objective review of the above studies seems to favour a definite correlation between accidents and advertising signs along roadways. It must also be born in mind that most of the above studies have been undertaken a very long time ago, mainly during the 1950s and 1960s, involving only ordinary billboards at the side of the road. Outdoor advertising has changed a lot from the billboard of the fifties and sixties. Nowadays variable message signs and other techniques and technologies are becoming more and more sophisticated, eye-catching and distracting, therefore making the correlation between accidents and outdoor advertising an even stronger possibility. Furthermore, the ordinary study on advertising and road accidents cannot take all factors into consideration. Factors such as mobile advertising and advertising messages evoking a response from the observer and therefore enhancing the distraction effect, such as a phone call or writing down a phone number while driving, are ignored in most cases.

It should be accepted that there never would be a research study that will be infallible and free of criticism due to the large number of variables to be taken into consideration. There will therefore always be enough material to keep the controversy regarding road accidents and outdoor advertising alive. Seen in this light it is necessary to apply what we call in environmental management terms the precautionary principle since it only seems logical that in the absence of effective control, accidents will happen and a significant correlation between accidents and roadside advertising will exist. In the absence of effective control measures more and more advertising contractors will go to extremes in order to get on top of competitors, while the boundaries of extremity will be shifted further and further due to the inherent mechanism and characteristics of outdoor advertisements and signs.

### **b) Interfering and Creating Confusion with Traffic Signals, Traffic Signs and Road Markings**

The driver may be confused by advertisements and signs on or at traffic signs or signals. The written messages, images or colours of such advertisements may be of such an eye-catching nature that it simply overawes and overrides the messages conveyed by traffic signs and signals. Such advertisements may even physically conceal traffic signs and signals. It has become a common practice in South Africa to attach posters to traffic signs and signals

### **c) Obstructing the View of the Motorist**

Posters, advertising signs, trailers or other mobile displays may obstruct the view of the motorist with regard to other vehicular traffic, cyclists or pedestrians. (Rekord-Oos, 1997, Maart 14, b; 1997 Oktober 31). This may create a serious traffic safety hazard at stop streets and intersections. (Record East, 1998 August 28, b)

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<sup>2</sup> Minnesota Department of Highways, 1951; Rusch, 1951; Madigan-Hyland, 1963; Faustman, DJ, 1961; Weiner, S, 1973 Aug.; Holahan, et.al., 1978, Jan. 18; Holahan, et.al., 1978; Stanway Edwards, 1995, Dec.

<sup>3</sup> Michigan State Highway Department, 1952; Lauer and McMonagle, 1955; Blanche, undated

#### **d) Forming Physical Obstructions**

Posters, advertising trailers and other advertisements displayed on sidewalks and cycle paths pose a danger to cyclist, who having to swerve in order to avoid these obstacles, may end up in front of vehicular traffic. (Rekord-Oos, 1997 Maart 14, b). The proliferation of estate agents' boards makes certain pavement sections impossible to walk on (The Star 1996, March 25), forcing pedestrians onto the roadway, but also pose a serious hazard to joggers after dark.

#### **e) Billboards and Signs Hitting Pedestrians, Cyclists and Motorists**

Inadequate structures and fixtures may lead to billboards and signs coming down and injuring passer-bys. (Die Burger, 1997 Desember 23; Beeld 1999 Oktober 8). Advertising trailers parked at the side of the road have a very high potential of being blown onto the road surface if not properly anchored and can therefore be a serious hazard to the motorist.

### **DIRECT ECOLOGICAL IMPACT**

Although the direct ecological impact of outdoor information transfer seems insignificant compared to its impact on visual resources such ecological impact cannot be ignored completely.

Vegetation may be damaged in the process of erecting billboard structures or in order to improve the visibility of such billboards. In the United States of America thousands of trees are destroyed each year in order to improve motorists' views of billboards by cutting or by poisoning.

### **NOISE POLLUTION**

Modern sound technology has brought about an increase in sound pollution through outdoor information transfer. The voice of the public crier who through the ages has made an important contribution to local character and placeness is now being drowned by rock music resounding from enormous loudspeakers in front of the clothing or furniture store trying to draw the passer-by's attention to a promotion or sale. It seem as if developing communities show a special predilection for this type of advertising

### **LIGHT POLLUTION**

Light pollution or sky glow is becoming a recognised form of pollution in developed countries such as the USA. It has an impact on the following levels:

- ❑ First of all it has an **aesthetic** implication, especially in larger urban areas but also along freeways and other important roads which "are being whitewashed by floodlit roadside businesses whose commercial glow obscures the heavenly lights for miles around." (Cray, 2000, January 31, p. 56).
- ❑ On a scientific level light pollution has an impact **on astronomical observations**.
- ❑ On the side of **human health** light pollution interfere with the human body's biological rhythms by turning night into day. (Graham, 1996, June)

- **Ecological Impact:** It can be assumed that high-intensity unshielded outdoor lights will have an adverse effect on many species of wildlife.
- **Economical impact – Waste energy:** Wasted light from inefficient lighting sources in the USA equates to an annual waste of 12 million tons of coal or 35 million barrels of oil and amounts to \$2 billion per year. (Graham, 1996, June). The impact of this energy waste in terms of added acid rain and air pollution needs no mentioning.
- **Road safety impact:** Uncontrolled and unshielded lighting creates glare and diminishes visibility and contributes to accidents at night by blinding or confusing drivers and pedestrians.
- **Ratcheting:** This term refers to a snowball effect in the increase of outdoor light levels. When a specific enterprise illuminates its property at extremely high levels, surrounding areas that used to look adequately lit now appear too dark by comparison. The light levels of surrounding properties are now ratcheted up in order to compensate for the high light levels on the first property. (cf. Gilkison, 1998, July; International Dark-Sky Association, 1998, December, online)

Outdoor advertising provides the stimulus for ratcheting in the form of the competition factor. Certain enterprises such as convenience stores and filling stations are nowadays attempting to attract customers by making their canopy area the most brightly lit object in the neighbourhood. In this manner illumination is used as the main instrument for advertising. This leads to a ratcheting war where enterprises in a neighbourhood are trying to outdo one another in attracting attention by illuminating their premises. (cf. Gilkison, 1998, July; International Dark-Sky Association, 1998, December, online). The ratcheting problem is also quite evident among enterprises situated along freeways.

In order to attract attention most billboards are ridiculously overlit. In certain cases externally illuminated billboards may be seen as an important contributor to ratcheting.

## **DEVALUATION OF PROPERTY VALUES AND URBAN DECAY**

According to Scenic America “billboards are both a symptom and a cause of urban blight.” (Scenic America, fact sheet 8, online)

The proliferation of outdoor advertisements and signs also have an indirect effect by contributing in desensitising the human senses, which may tolerate and even contribute to urban decay.

## **CONCLUSION**

The solution in managing the above impacts is not only to look at minimising impacts but to turn possible impacts into benefits. For instance, instead of impacting on placeness appropriate advertisements and advertising structures can be used to contribute to local character and placeness.

The effective management of outdoor advertising should therefore be defined as optimising the benefits of outdoor advertising while minimising its impacts.

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