Aalborg Universitet

AALBORG UNIVERSITY

Art, Media, and Sense-making in Responsive Urban Environments

Allingham, Peter

Published in:
Iner-disciplinary.net

Publication date:
2013

Document Version
Early version, also known as pre-print

Link to publication from Aalborg University

Citation for published version (APA):
Allingham, P. (2013). Art, Media, and Sense-making in Responsive Urban Environments. In *Iner-disciplinary.net* Inter-Disciplinary Press.

Art, Media, and Sense-Making in Responsive Urban Environments

[Draft! Work in Progress!]

By: Peter Allingham, associate professor

Department of Communication and Psychology

Aalborg University CPH

Denmark

Abstract:

The aim of the article is to elucidate experience and sense-making in interactive, responsive urban environments through analysis of aesthetic and media aspects of art in such environments. As an analytic example the sculpture D-Tower from the Dutch town of Doetinchem has been chosen. The sculpture has been created by the artist Q. S. Serafijn and the architect Lars Spuybroek. The analysis will be carried out with reference to Neuro Aesthetic theory and with methodological point of departure in Conceptual Metaphor Theory, Blending Theory, and Cognitive Semiotics. The main hypothesis is that when artistic and interactive, responsive media qualities are blended, new forms of experience and sense-making are promoted. It may happen due to emergence and adaptation that may transform both the 'experiencee' and also the experiential environment. In this case information technology has been applied in order to make hitherto invisible and private emotions and feelings visible and public.

Keywords: blending, cognitive semiotics, artifice, experience, interactive media

... the arts [...] are containers for, moulders of feeling.
Ellen Dissanayake: *Homo Aestheticus*, 1995: 46

Local and Distal, Visible and Invisible

Traditionally, media are perceived as materialities and/or as mechanical-electronic technologies, like e.g. printed matter or TV that can transmit messages among communicators. With the advent of experience economy and experience culture both public and private organizations have increasingly incorporated interactive media technology into the built environment and into three dimensional artifacts in still new ways. It has been done with the intension to inform but also to elicit experiences and sense-making among receivers in aesthetically challenging ways. These ways have often been aimed at the co-ordination of sensual impressions and movements of the body that users of urban spaces, i.e. citizens, commuters, passing travelers, tourists and others, carry out in order to move about adequately and sensibly.

The combination of modern interactive digital media and three dimensional aesthetic artifacts can be seen in an increasing number of urban environments like brandscapes, 'culturescapes', theme parks and in neighborhoods of big cities.[1] Here, users and consumers are subjected to new types of functional and aesthetic spatial initiatives that often promote and intensify performative behavior and response and, consequently, experiences.

Apparently, this has been the intension behind the project and the sculpture D-Tower in the Dutch city of Doetinchem. D-Tower is a 12 metres tall erection made of the material epoxy. Further components are a homepage and a computer based survey with a database (cf. http://www.d-toren.nl/site/read.htm). Below, focus will be on D-Tower's particular spatial aesthetics and its media related and responsive qualities.

---

[1] See e.g. Allingham (2010) for various items in Sony Center and Daimler District I Berlin. As an example of interactivity at a smaller scale can be mentioned the NBA Store in New York on 5th Avenue where customers few years ago were challenged by a digital edition of the basketball super star Magic Johnson to a basketball duel. At AutoStadt, Wolfsburg in Germany, the guests may take part in car design and other creative activities (Allingham, 2012; cf. also Thomsen & Poulsen, 2010).

Illustrations No. 1 and 2

1. Daylight

2. Night

At first sight, D-Tower presents itself visually to the surrounding urban space with an expression that apart from its height implies something organically motivated more than it implies a built artifact like a tower. That it may have a certain similarity to a 'being' or something organic is supported by statements from persons living in Doetinchem asked at random. These persons said that D-Tower looked like a 'fist', like a 'pulled tooth' or like an 'alien'. They all thought that D-Tower was ugly and they did not know about D-Tower's further media qualities.[2]

D-Tower has been designed by the Dutch artist Q.S. Serafijn in co-operation with the Dutch architect Lars Spuybroek from NOX Architects.[3] NOX Architects are also behind the interactive part of the project. D-Tower was erected in 2004 on a corner of the intersection Grutstraat-Keppelseweg and Europaweg at the edge of the city centre of Doetinchem, where it presents itself and its material artistic expression to passing travelers and citizens in the local urban space. A special detail about the sculpture is, however, that after the fall of darkness it displays the current atmosphere or emotion among the citizens in Doetinchem by glowing in one of four colours. Each

---

[2] The statements were made during a visit to Doetinchem on the 28 August 2012.

[3] "Nox Architects (Maurice Nio and Lars Spuybroek) is a design company that focuses on both architecture and the media […]. Lars Spuybroek is principal of NOX, an architecture office in Rotterdam. Since the early 1990s he has been involved in researching the relationship between architecture and media, often more specifically between architecture and computing." (http://www.medienkunstnetz.de/artist/nox/biography/).

'mood' or emotion has its own symbolic colour, red for love, blue for happiness, yellow for fear, and green for hate.

The colour of the day is found in the following way. A selected number of citizens from different parts of Doetinchem, who have registered voluntarily for a survey period, initially answer a number of questions on a homepage. The survey continues with four new questions every other day, and the answers are processed by a computer connected to the homepage and D-Tower. This method makes sure that persons without a permanent address in Doetinchem cannot take part in the ongoing survey. The computer processes the answers statistically, calculate the emotional atmosphere of the city, and activate the correct topical colour which is exposed by means of the coloured light to those who are present in the urban space around the sculpture. In this way the sculpture D-Tower transmits the emotional mood of the day to the citizens present in the surrounding urban space. Besides, the graphic representations of the results are updated on the homepage so that those interested can track the development of the city atmosphere on the Internet.[4]

However, the question is how the interplay between aesthetic form, experience and meaning can be understood in the physical environment around D-Tower.

The sculpture is at the same time a work of art that, especially during daytime, like other sculptural media communicates in a traditional three dimensional way in the local urban space. But the sculpture also functions as an electronic-digital public service medium that after darkness has fallen glows up in the topical colour transmitting information about the emotional atmosphere of the city from the local authorities to passing citizens, commuters, tourists, et. al. The two states of presentation can be summarized schematically in the following way:

Fig. 1. The two specific states of D-Tower.

Space Time/24 hours	Centre	Periphery
State 1: Daylight	Sculpture	Local visible surroundings
State 2: Darkness	Sculpture + colours	Distal invisible 'surroundings' shown locally

The two states of the sculpture around the 24 hours, where artistic aesthetic and factual public communication mesh (interplay) will be examined in further details below. The point of departure is that when D-Tower is read as a public service medium that relates the normally invisible collective moods, the inherent artistic qualities of the sculpture will change. On the other hand, the aesthetic and artistic qualities of the sculpture seem to be a precondition for being able to represent what is

---

[4] http://www.d-toren.nl/site/read.htm.

normally invisible, namely emotions and moods of a city, in an involving and experientially engaging way. How activating, involving and experiencing unfold will be subject to further analysis below.

Method

In order to understand systematically, first, the activating and involvement in question theory with a focus on sensuous, bodily, and cognitive processes inherent in sense-making, experience and cognition will be referred to.

Within recent years this kind of theory has been developed in cognitive linguistics, semantics, and semiotics. Here we find Conceptual Metaphor Theory developed by among others George Lakoff, Mark Johnson (Lakoff & Johnson, 1980; Johnson, 1987; Lakoff, 1987), so called Blending Theory developed by, among others, cognitive linguists like Gilles Fauconnier og Mark Turner (Fauconnier & Turner, 2002), and Cognitive Semiotic Theory developed by among others Line Brandt and Per Aage Brandt (2005).

According to these theories metaphoric operations have emergent qualities, i.e. metaphors may procure experiences and elicit new meaning.

An important step in the theoretical development of the cognitive 'embodied mind' theories is offered by the cognitive semioticians Line Brandt and Per Aage Brandt in the article "Making Sense of a Blend – A cognitive-semiotic approach to metaphor" from 2005.

Their point of departure is that expressive blends are signs and hence communication phenomena. Therefore, blending is a cognitive semiotic activity (ibid: 37) that must be studied within the framework of a cognitive semiotics that studies cognition in semiosis in general (ibid: 1), understood as, "[…] the situation in which utterances or other exchanges of signs occur." (ibid: 14).

Consequently, Brandt & Brandt present a theory of blending with directionality between source and target obtained by supplementing schematic relevance in form of an Interpretant. The result is a model of blending as semiosis in a Peircian conception (ibid: 35).

Sign Categories: Icon, Index, Symbol, and Artifice

Adhering to the communicative stance of cognitive semiotics the communication of the sculpture D-Tower will be analyzed subsequently. The aim is to examine not only its making sense but also to specify the experiential potential which the sculpture makes possible.

Furthermore, the communicative stance of cognitive semiotics will be supplemented by Roman Jakobson's four different semiotic types presented in the article "Coup d'Oeil sur le Développement de la Sémiotique" (Jakobson 1975). In this article Roman Jakobson pointed out that Charles

Sanders Peirce in his definition of semiotic types with point of departure in two binary oppositions contiguity/similarity and factual/imputed, only deduced three semiotic types, icon, index, symbol out of four possible ones (Peirce 1931:553). Therefore, Jakobson added a fouth type, Artifice, based on imputed similarity, a sign which he dedicated to artistic semiosis. Furthermore, Jakobson indicated that the sign in any kind of artistic semiosis depends on parallelism (Jakobson 1979:131).

Therefore, it seems possible to conclude that Artifice as a sign represents due to imputed similarity, i.e. due to parallelism between two components. It may be e.g. in the form of metaphor (A=B) or in form of the pars pro toto of the synechdoche (a⊆A), but also in numerous other ways, e.g. found in the expressive metrical, sonorous, etc. patterns of e.g. poetry or music.

However, metaphors, synechdoches and other parallelisms in the contexts in which they appear are characterized by two features. First, by a sort of 'timeless presence', as pattern that binds together in certain ways, i.e. as style, that presents what must be perceived, during the now of appropriation. In other words, *artifice represents by presenting*. Exactly this makes Artifice an aggregating instance or link in communication that entails contact and presence, two qualities often related to aesthetics.

Secondly, it seems that, apart from pattern, excess is manifested in parallelism due to the not quite corresponding 'quality' of imputed similarity. It also seems that imputed similarity must be understood as an approximation or an adequation which differs from the equation of factual similarity (Preziosi, 2003: 145); and, finally, imputed similarity must be understood as an expansion that may manifest itself in different ways, among others substantially as a material surplus, as something not subsumed that remains unexplained and therefore poses a challenge (Jantzen, Vetner and Bouchet, 2011:126).

However, it seems reasonable to assume that all objects or artifacts contain all four semiotic modes, although with a varying prominence (cf. Eco 1976: 262). But Artifice must, necessarily, be the first modal quality that human senses meet in physical perception and consequently entry to further processes of understanding situated in the levels of mental architecture (Brandt 2007:174).[5]

Artifice as metaphor is run and appropriated through blending, i.e. in a process of interpretation focusing on sense-making.

D-Tower as experience and meaning

Below follows an analysis of D-Tower with point of departure in Roman Jakobson's theory of signs in accordance with the communicative point of view of cognitive semiotics.

In the urban space of Doetinchem the D-Tower communicates in at least four different semiotic modal levels. They are indicated on the matrix below.

---

[5] In Brandt (2007) a model of the mental architecture is sketched out with five levels that organize attention and through which meaning is processed: sensing, perception, apperception (intentional perception), reflection, and affect. For the processing two principles have priority. First, all levels are both neurally and mentally active, Secondly, the integration among levels are not linear.

Fig. 2. Roman Jakobson's typology of signs.

D-Tower	Similarity:	Contiguity:
Factual:	Icon: 'fist' 'tooth' 'alien' …	Index: 'Here' 'centre'
Imputed:	Artifice: Organic form Colours	Symbol: 'Node' Emotions

As a sculpture D-Tower presents itself visually to viewers in the local urban space, due to its artifice, as art where the tension between presentation and representation at first glance is striking.

The organic material appearance of the sculpture with or without colours pose a challenge due to this tension and elicit response e.g. in form of tenders for its representation, its iconic meaning, e.g. factual similarity to a fist, a tooth, or an alien, etc. Symbolically, the colour will as far as the code is well-known, otherwise not, be attached to one of the emotions. As an index the sculpture will mark out a point, a 'here', a centre that measured against a more or less clear periphery must be assumed to be connected to something important.

In sum, the sculpture poses a challenge to viewers according to a variety of interests and background knowledge. The challenge can especially be related to the material surplus of the sculpture, to its annoying and irritating hovering meaning that throws viewers off balance. However, this is presumably one of the experiential points about the communication of the sculpture.

Dynamics and Schematics

As it has already appeared from the indexical properties of the sculpture it can be connected to a centre-periphery image schema. This schematics can be unfolded in two specific versions over 24 hours (see figure 1). The versions can be related to two interpretational image schematic matrixes.

Fig. 3. Image schematic interpretational matrixes of the D-Tower.

Space Time/24 hours	Centre	Periphery	Image schematic Interpretation matrix
State 1: Dagslight	Sculpture	Local visible surroundings	'Centre of periphery'
State 2: Darkness	Sculptur+colous	Distal invisible 'surroundings' shown locally	'Periphery of centre'

In this case D-Tower in the daylight version seems to activate a classic centre-periphery image schema where the centre is related to what is important and positive, and periphery related to what is less important and less positive (cf. Johnson, 1987: 124).

This version may elicit spontaneous interpretations of D-Tower as e.g. a tooth, etc. from citizens asked at random.

However, this image schema and ensuing interpretations are questioned and/or supplied by the interpretations that result from the connection of the sculpture to the interactive electronic-digital network that links the physical centrality of the sculpture to non-physical, emotional atmospheres in the periphery of Doetinchem. This leads to central representation of peripheral states.

With point of departure in the centre-periphery schema the semantic understanding of the D-Tower can be further elucidated. Basically, the sculpture can be seen as a node that attracts and regulates various forces. On the one hand the daylight version of the sculpture appears as a traditional work of art expressing itself due to its physical aesthetic form. This form causes a number of interpretations from those who move in the local physical surroundings, interpretations that return to the sculpture. On the other hand, the darkness version is a medium that in an informative way makes visible that which cannot be seen physically, but only be felt mentally during staying in a city for some time, namely the emotional atmosphere in the city. Simultaneously, the sculpture is, invisibly, an object of external communication in terms of input from the electronic-digital medium, i.e. the computer that encodes the lights of the sculpture on the basis of the returned answers of the survey respondents. All in all the image schematic centre-periphery structure organize the semantics of the sculpture with alternating vectors.

The physical surface of the sculpture expresses not only inherent 'artificial' signs (Artifice) but also makes possible visually the symbolic appearance of peripheral bodily perceived moods and emotions. In this way the darkness version of the sculpture appears as a metaphorically concretized, emotionally marked and concentrated 'embodiment' of the city that presents the surroundings and persons in it with an emotional 'status report' about the city. And what is even more important, the sculpture will appear to the citizens of Doetinchem, who must be primary addressees of the communication of D-Tower, as a ' mirror reflection' of themselves in as much as any citizen with the proper aesthetic tuning looking at the sculpture must realize that 'this is (an image of also) me'.

To tourists on short stays and others from out of town and/or chance passers-by the sculpture may relate an array of meanings but probably with a smaller degree of 'mirror effect'..

The metaphoric blend between sculpture, city and interpreting body makes a secondary but perhaps the proper experiential effect/affect of the sculpture.

The decisive point is that the transformation taking place following the change between the daylight and darkness versions imply a reframing (Interpretant) during which the centre-periphery-schema is replaced by a container schema. This takes place in the s o-called 'mirror'interpretation where the interpreter realizes that the emotion that the sculpture presents outwardly as coloured light represents emotions from 'inside' the city. The inversion from 'inside' to 'outside' is attached to and centered upon a container image schema in which the core is 'the body as container'.

This change of schema explains the nodal experiential effect of the sculpture that may trigger off further cognitive implication. It may occur when it is realized by the individual interpreter that the emotions represented concern a periphery which is not unfamiliar to him or her. The emotions are also relevant to me, 'as I am part of the periphery, too'. At this reflective point-of-no-return it is realized that the sculpture must be interpreted as a 'container', as a 'body' that, unlike me, carries its emotions visibly on the outside.

In conclusion

The nodal experiential potential of the D-Tower seems attached to the reflective epiphanic moment where the receiver will experience himself/herself split into an "I" and a "me" (cf. Mead, 2005: 201 ff.). The split will form the basis of a third point of 're-cognition' that may result in an emerging, new balanced and adapted self-consciousness. The emergent identity will consequently 'close' the initial split and splitting flow of meaning and initiate a new balanced position from where the meaning of the sculpture – and the meaning of art and life lived in communion with others – may be reconsidered.

So it seems that good works of art will be those that throw their receivers off balance and composure, physically and/or mentally, in such ways that the 'fight' for recovering composure and meaning is supported by means through which it will be possible to regain yourself and your environment, but from another point of view.

References:

Allingham, P. (2012). "Experiential Strategies for the Survival of Small Cities in Europe". I: A. Lorentzen, A. og C.J. Hansen (red.), *The City in the Experience Economy*. London and New York: Routledge Taylor Francis Group.

Allingham, P. (2010). "Autographic Experiences & Branded Environments". I H. Kiib (red.) 2010: *Performative Urban Design*. Aalborg: Aalborg University Press.

Brandt, L. & Brandt, P.Aa. (2005). "Making Sense of a Blend: A Cognitive-Semiotic Approach to Metaphor". http://www.hum.au.dk/semiotics/docs2/pdf/brandt&brandt/making_sense.pdf.

Brandt, P.Aa. (2006), "Form and Meaning in Art". I: M. Turner (red.), *The Artful Mind*. New York: Oxford University Press.

Dissanayake, E. (1992), *Homo Aestheticus*. Seattle and London: University of Washington Press.

Eco, U. (1976), *A Theory of Semiotics*. Bloomington: Indiana University Press.

Fauconnier, G. og Turner, M. (2002). *The Way We Think*. New York: Basic Books.

Jakobson, R. (1979). "Et blik på semiotikkens udvikling". København: Nyt Nordisk Forlag Arnolf Busck.

Johnson, M (1987). *The Body In The Mind: The Bodily Basis of Meaning, Imagination and Reason*. Chicago: University of Chicago Press.

Jantzen, C., Vetner, M. og Bouchet J. (2011). *Oplevelsesdesign*. Frederiksberg: Samfundslitteratur.

Lakoff, G & Johnson, M. (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.

Lakoff, G. (1987). *Women, Fire and Dangerous Things*. Chicago. University of Chicago Press.

Mead, G. H. (2005). *Sindet, selvet og samfundet*. København: Akademisk Forlag.

Peirce, C. S. (1931). "On a new list of categories. In: C. Hawthorne and P. Weiss *The Collected Papers of Charles Sanders Peirce* vol. 1. Cambridge: Harvard University Press.

Preziosi, D. (2003). *Brain of the Earth's Body*. Minneapolis/London: University of Minnesota Press.

Serafijn, Q.S. & Mulder, A. (2005). "D-Tower". *Artistic Research and Development* (aRt&D). http://www.qsserafijn.nl/artikel/14

Thomsen, B. S. & Poulsen, E. S. (2010). "Performative Architecture and Streetscapes". I: H. Kiib (red.) 2010: *Performative Urban Design*. Aalborg: Aalborg University Press.

Links:
http://www.d-toren.nl/site/read.htm
http://www.medienkunstnetz.de/artist/nox/biography/
http://www.qsserafijn.nl/artikel/14
http://markturner.org/blending.html#BOOKS

Photos by P. Allingham.