

Visualizing Water Scarcity: A Semiotic Analysis of Social Awareness Commercials in Morocco

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Abstract:

This article is an academic reaction to the powerful domination of advertising images that aim to raise viewers' awareness about water stress in Morocco. Specifically, they are social awareness commercials that rely on visually intensive forms of mass communication to grab their viewers' attention to the preciousness of drinking water in daily life. These images' importance and prominence stem from the central position they occupy in the mass communication sign system. To investigate the production of meanings on water stress from visuals using semiotics as a theoretical basis, the present paper opts for a content analysis of a set of social awareness commercial slots that are broadcast on social media platforms such as YouTube. It revolves around the commercials' visual communication messages that the Moroccan Ministry of Equipment and Water mainly conveys through pictures and other communicative forms.

Keywords: Water stress, commercials, visual communication, semiotics, media.

1. Introduction

Mass communicators very frequently transmit their messages visually. In a mass communication activity, both senders and receivers exclusively exploit all types of visuals to produce, generate and interpret meaning, which does not lie in the pictures themselves, "but rather in what we bring to them" (Moriarty, 1995, p. 5). Members of a given audience heavily link the pictures' visual information to the deeply held and widely diffused ways of interpreting the world. Studies that deal with meaning in any visual text have usually evolved from semiotics. Advertising images draw their prominence from the central position they occupy in the mass communication sign system. An awareness of the way in which commercials structure and present their picture of reality can pave the way to understand how society works. Insight into advertising visuals is worth considering since ads can "focus and redefine ideas about language, discourse, art, and society" (Cook, 1992, p. 230). This inquiry aims to track three social awareness commercials' production of meanings from visuals using semiotics as a tool for analysis. It revolves around the ads' visual communication messages about water scarcity mainly conveyed through pictures. Hence, a brief introduction to visual communication theory is indispensable for a better understanding.

2. Visual Communication Theory

The theory is concerned with how visual messages "interact with people in order to produce meanings" (Fiske, 1990, p. 2). It is a matter of clear seeing which includes a combination of how much the viewer knows and how he feels at any particular moment. Accounting for the way meaning is produced visually, semiotics is a useful methodological tool "because the thinking processes it proposes are parallel to the

interpretive processes used in creating and understanding visuals” (Moriarty, 1994, p. 8). Its aim is to establish widely applicable principles while its main concern is to explain “how communication works, with the systems of language and culture, and particularly with the structural relationship of semiotic system, culture and reality” (Fiske, 1990, p. 135). Visual communication theory clusters in the areas of visual literacy, visual thinking, visual imagery, and visual perception.

2.1. Visual Literacy and Visual Thinking

Visual communication skills are largely self-taught and happen through our natural perceptual processes that govern much of our visual learning. We understand images “not through learning a code but by transferring real world interpretational processes that we use in everyday perception” (Moriarty, 1994, p. 8). Messari (1994) argues that we become visually literate through a process that is basically perceptual and innate rather than learned as is language. His premise is that visual literacy is a normal human condition. YouTube provides us with repetitive and familiar images that use codes “which are closely related to those by which we perceive reality itself” (Fiske & Hartley, 1978, p. 17). Thus, the more experienced we are in making connections and accurately retaining images, the more literate we become in visual codes. Visual literacy overlaps with the viewers’ cultural context. In practical terms, people, who have been reading the language of visuals, may “fail to attach any meaning to a programme that has not been produced within their own culture” (Harris, 2002, p. 4).

Visual thinking is a free mental process that involves no vocabulary of picturing. People can sometimes visualize their thoughts without feeling the need to verbalize them. Although visual thinking may involve both pictorial and semantic elements, we can best describe it as a conceptual process that moves beyond both words and images and that leads to “an abstract meaning-based format or platform for managing ideational relationships” (Moriarty, 1994, p. 7). Being an inferential interpretation process, semiotic analysis is a useful tool to grasp the make-up and workings of visual thinking.

2.2. Visual Imagery

To analyse visual communication messages adequately, semiotics has focused on representational images, which specialists understand through terms like signs, codes, paradigms, syntagms, denotation, connotation, metaphor, and metonymy. These terms constitute the area of visual imagery, which plays a tremendous role in the highly developing body of visual communication theory.

2.2.1. Signs and Codes

Peirce (1955), who focuses on the logic of meaning by catering for what signs mean and how they relate to one another, points out that

a sign is something which stands to somebody for something in some respect or capacity. It addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. The sign which it creates I call the interpretant of the first sign. The sign stands for something, its object (Peirce, 1955, cited in Fiske, 1990, p. 42).

Explicitly, the image or word sign, which refers to something other than itself, stands for some other object or concept. It is a signifying construct that people can understand only in terms of the uses they put it to. This means that the sign has “a proper significate effect, that is the interpretant, produced both by the sign and by the user’s experiences of the object” (Fiske, 1990, p. 42). By interpretant, Peirce (1955) means the mental concept to which the sign gives rise. In fact, every interpretant, which translates the immediate content of the sign, increases people’s understanding of it in new ways. Formulating three different sorts of signs, Peirce (1955) states that every sign is determined by its object, either first, by partaking in the

character of the object, when I call the sign an icon; secondly, by being really and in its individual existence connected with the individual object, when I call the sign an index; thirdly, by certainty that it will be interpreted as denoting the object in consequence of a habit ... when I call the sign a symbol (Peirce, 1955, cited in Fiske, 1990, p. 47).

It is a tripartite system for analyzing visual signs, which include iconic, indexical and symbolic categories of meaning. An icon for Peirce (1955) is similar to its subject. It is a representation such as a picture where resemblance is a determining characteristic. In Peirce's citation, an index is physically connected to its object as an indication that something exists or has occurred. Peirce refers to a symbol as the most abstract and arbitrary sign that has no logical or representational connection with its object. The three varieties of signs are not mutually exclusive in the sense that "any picture often has all three types represented at the same time" (Lester, 2003, p. 54). In a given culture, these rules determine "how and in what contexts these signs are used and how they can be combined to form more complex messages" (Fiske, 1990, p. 19). Lester (2003) stresses the importance and usefulness of condensed codes in visual communication. They consist of "several signs that combine to form a new, composite sign" (Lester, 2003, p. 55). Fiske (1990) introduces the broadcast code that members of a mass audience share and that caters for a degree of heterogeneity. It is "community-oriented, appealing to what people have in common and tending to link them to their society" (Fiske, 1990, p. 73). Broadcast and condensed codes share two basic features. First, they "have a number of units from which a selection is made. This is the paradigmatic dimension. Second, these units may be combined by rules or conventions. This is the syntagmatic dimension" (Ibid, p. 64).

2.2.2. Paradigm and Syntagm

There are two ways of organizing signs into meaningful codes. The first is the paradigm where we choose a specific sign to create meaning by virtue of its relationship to other signs. It is a vertical set of signs from which we select the required one. The second is the syntagm which is the horizontal chain where signs make a meaningful whole via their relationships to the signs before or after them according to agreed rules and conventions. In a paradigm, the units of signs are different and separate from each other, but when we combine them into a syntagm, we can modify them according to their relationship with other units. For Fiske and Hartley (1978), a unit in a paradigm has two dimensions of meaning. The first one concerns its relationship with and at the same time distinctiveness from its fellow units. In the second dimension, we define a unit's meaning in opposition to others in its paradigm, and "we therefore understand a sign by contrasting it with what it is not" (Fiske & Hartley, 1978, p. 51). Barthes (1977) argues that we create meanings through our arbitrary semiotic paradigmatic choice and syntagmatic ordering.

2.2.3. Denotation and Connotation

Denotation, the first order of signification, is the simple, common-sense and obvious meaning of a sign (Eco, 1979). It frequently refers to the image content in that we carefully look at the image details and describe what they are. Connotation, the second order of signification, is largely arbitrary and specific to one culture because "it describes the interaction that occurs when the sign meets the feelings or emotions of the users and the values of their culture" (Barthes, 1977, p. 85). Connotation is about image meaning, which results from personal and cultural associations and experiences members of the same community share. Denotation caters for covert messages while connotation seeks the overt ones. Being expressive and subjective, connotation is essentially the way in which the advertiser "transmits his feelings or judgement about the subject of the message" (Fiske & Hartley, 1978, p. 44). In this context, "the literal image is denoted and the symbolic image connoted" (Barthes, 1977, p. 196).

2.2.4. Metaphor and Metonymy

Metaphor and metonymy are “two fundamental modes by means of which the meanings of signs are conveyed” (Fiske & Hartley, 1978, p. 48). Derived from symbolic communication, metaphor points out similarities between two things and evokes meaning by transferring qualities from a referent or signified to a new object or signifier through implied comparison. We assert rather than apply this metaphor literally or conventionally so that it may then itself become conventional. Fiske and Hartley (1978) refer to visual communication that uses analogical thinking as visual metaphors that we do not assert but construct. They argue that this type of metaphor involves “a transposition or displacement from signified to signifier, together with the recognition that such a transposition implies an equivalence between these two elements of signs” (Ibid). For Fiske (1990), a metonym basically makes a part that stands for the whole. It is a part of reality for which it stands indexically. It is different from the natural indexes in the sense that it involves a highly arbitrary selection that we often disguise or at least ignore so that the metonym can appear a natural index and may, therefore, acquire “the status of the real, the not to be questioned” (Fiske, 1990, p. 96).

2.3. Visual Perception

Defining visual perception as an encoding process, Fiske (1990) believes that Perception involves making sense of the data before us: it involves identifying significant differences and thus identifying units- what we are perceiving. It then involves the perception of the relationship between these units, so that we see them as a whole. In other words, it involves creating paradigms and syntagms. Our perception and understanding of reality is as specific to our culture as our language is. It is in this sense that we talk of reality as a social construct (p. 66).

The first issue Fiske (1990) raises is that our process of perception internalizes the meaning of signs we encounter in our everyday life. Visual perception occurs when our senses intersect with reality-based data, which we take as information from the perceived world. We generate meaning through both encoding and decoding. This relationship of sign production and reception is the essence of the process of interpretation. Lester (2003) argues that “a viewer actively arrives at a conclusion about the perception through mental operations” (p. 56). He maintains that memory is the most important mental activity that links our visual repertoire with newly perceived images. The second issue that Fiske (1990) mentions above is the socio-cultural context of perception. We see “the world in terms of our cultural heritage and capacity of our perceptual organs to deliver culturally predetermined messages to us” (Highwater, 1981, cited in Chandler, 1995, p. 262). Fiske (1990) also talks about reality as a social construct. Chandler (1995) supports this idea by claiming that “the world is to some extent constructed in the process of perception” (Ibid). Meaning is a matter of encoding and decoding.

2.3.1. Encoding

Encoding can be broadcast and aberrant. For Fiske (1990), a broadcast encoder caters for three important areas, the content, form, and aberrant encoding. Content means that broadcast encoding involves matters of general concern so that the audience can widely receive and understand the message easily and successfully. A proficient encoder is “the one who is in tune with the feelings and concerns of society at large” (Fiske, 1990, p. 74). The form of the broadcast message means that communicators encode “new versions of old structures. The audience has certain expectations based on a cultural experience shared with the broadcasters” (Ibid). Aberrant encoding becomes important when a heterogeneous audience requires different codes so that communicators can “fit the message into the varieties of convention or

cultural experience of the mass audience” (Ibid, p. 82). This is a common trait of communication which makes sure that the encoders’ messages “are in touch with the central meaning systems of the culture and that the codes in which the message is transmitted are widely available” (Fiske & Hartley, 1978, p. 81).

2.3.2. Decoding

Meaning is not an absolute concept we can find neatly parcelled up in the message. It mostly relates to the decoder, who creates, generates, and negotiates the meaning of messages. This negotiation is a give-and-take relationship that prioritizes the decoder’s individual interpretation. Fiske (1990) believes that every decoder brings his preferred reading of an open text. He also suggests that this concept is very fruitful since “it gives us a model that enables us to link the negotiated meanings of a message with the social structure within which both message and reader operate” (Fiske, 1990, p. 111). Chandler (1995) labels the same phenomenon as perceptual set, which he defines as a “pre-disposition to perceive something in relation to prior perceptual experiences” (p. 263). The decoder establishes a sort of negotiation between his own discourses that derive from his social grouping and the discourse implied in the text. A commercial “is made idiosyncratic by the time it is decoded by its viewers; each family audience will negotiate its own stance towards the message and so modify its meaning” (Fiske & Hartley, 1978, p. 110).

3. Semiotic Analysis of YouTube Commercials on Water Stress

Three YouTube commercials on water stress aroused my interest because of their category that combines the modes of music, pictures and language. Selection was based on the fact that the social awareness slots easily exploit the persuasive impact of YouTube, which relies on the content of its visual messages, its mass audience, its penetration in people’s phones, and its “mass repetition and reinforcement of such messages” (Dimpleby & Burton, 1985, p. 159).

These commercials on water stress are considered as a semiotic system whose “visual content takes the form of paralinguistic signs” (Fiske & Hartley, 1978, p. 83). They are visual signs that basically denote people, artefacts, colours, light, physical background and noise, and water. The Ministry of Equipment and Water (henceforth MEW) devised the commercials with specific traits. First, they belong to display advertising which basically relies on images “to attract attention to the content of the ad” (Lester, 2003, p. 73). Second, the ads are factual in the sense that they involve “objective claims that are clearly verifiable by reference to the external world” (Jackson, 1994, p. 80). Their images depict scenes viewers may easily encounter in reality (Yousef, et al., 2021). Last, the commercials, which aim to raise viewers of the importance of water, are institutional. This means that the ads’ basic goal is not awareness about water shortage as such “but rather image building” (Ibid, p. 81). This type of ads seeks to associate the issue of water scarcity with real images and to foster “beliefs that here is [the Ministry of water] that really cares for [ecology and people]” (Defleur & Dennis, 2002, p. 307). Taken from the Moroccan social and cultural context, the pictures “attract attention, arouse interest, stimulate [concern], create an opinion, and move the viewer to a specific action, to [save water]” (Lester, 2003, p. 73).

The slots’ music and background noise take their roots from crude reality. The choice of the countryside suffering from water stress and droughts as well as individuals wasting water is very clever. The ads combine real images, background noise and music, voiceover, and subtitles in Tamazight language, which all create an idea that fits in “with the audience’s existing beliefs and values” (Dimpleby & Burton, 1985, p. 153).

The commercials’ visuals are motion pictures that contain three major types of visual signs, iconic, indexical, and symbolic. These sign categories intersect in order to communicate the image’s highly

condensed meanings. Fiske and Hartley (1978) point out that icons, indices, and symbols convey meaning on two different levels or orders of signification. In commercials, iconic and indexical signs are self-contained since the simple motivated meanings derive from the sign itself. Yet, when the visual sign is symbolic, it meets a whole range of cultural meanings that originate from “the way the society uses and values both the signifier and the signified” (Fiske & Hartley, 1978, p. 41). When our ads’ iconic or indexical sign carries a socio-cultural dimension, they move to the second level of signification and become symbolic.

Moreover, their visual signs rely on the strategy of cueing because the brief advertising time does not allow for elaborated message development. A visual cue is a signal or reminder of something. Moriarty (1991) maintains that cues bring to mind “something from past knowledge or previous experience that provides a framework of meaning that can be used to interpret the sign” (p. 1). The visual cues contained in the commercials are of three main categories, iconic, indexical, and symbolic.

In the ads’ pictures included in the appendix below, the iconic cues plainly stand for the various sorts of people, objects, and scenes of water that exist in reality. The fact that these icons closely resemble their signified has an undeniable communicative power. They serve the communicator’s purpose, which is to foster a determined meaning about the importance of drinking water. Some shots are icons that denote water like pipe, tap, and container. The camera focuses on people’s faces, glass, and traditional artefacts which are iconic signals that add something to the general meaning of water. Other pictures represent different types of people who can be categorized in terms of age, gender, and social class. The shots contain iconic cues that remind us of what people can do to save water and give hope. Pictures showing families, young women and men, and children in different contexts are plain icons that provide a framework of meaning about the vital need for drinking water.

Indexical cues help viewers interpret the commercials’ visual signs and elicit the associated meanings. The ads’ strategy to present people using water in everyday life is a strong index of a dominating reality, which may effectively serve the message. In addition, the various types of water users depicted by the ads’ visuals represent another index of the social, environmental, and economic change in Morocco. More specifically, one of the ads’ shots, which show family using water, indexically draws our attention to the vital need for water in Moroccan households. The last visual presented in the commercial discloses MEW’s logo, a powerful index of the communicator’s presence and credibility. The commercial slots, which remind us of drinking water and its direct impact on our lives by means of visuals, voiceover, subtitles, music, and background noise, is a clear index of an existing ecological concern.

Visual cues as the second order of signification are necessarily symbolic. They trigger meanings that viewers interpret according to social and cultural considerations. In our advertising slots, people, objects and water scenes are symbols that mean different things to different viewers. The visual that portrays tap water, ablution, rain, and droughts includes several symbolic cues which establish a feeling that life can not be possible without water and that people must be responsible users. Another shot which locates dry fields, burning trees, and canal leakage symbolizes the outset of a new era of climate change and global water scarcity. Image designers know that the commercials should arouse the viewers fear and concern about water. They symbolically exploit water scenes, typical citizens, and Darija, Moroccan Arabic, with subtitles in Tamazight language to build an alarming image about water stress in Morocco. They, therefore, aim to foster the idea that if people do not take drastic measures to save water, the country will face a serious ecological and existential threat. For all viewers, MEW should symbolize credibility and trust. To fulfil its social and environmental purposes, these institutional ads operate within Moroccan norms,

religious beliefs and values. Two other pictures denote peasants irrigating agricultural fields while others performing ablution. The fact that both of them use water is very symbolic since this source of life is indispensable to all Moroccans no matter who they are, what they do, where they are, and how much they own. This idea is symbolically clearer via another shot that depicts several hands all carrying a glass of water without which people's existence on this earth will certainly change overnight. These visual signs are not wholly iconic, indexical, or symbolic for the sole reason that most of them combine all three so that the slots can offer viewers and analysts a wider range of meaning and interpretation.

The ads' designers were skilful at exploiting the pictures' metaphoric and metonymic power. They knew how to work on the images' capacity "to stand for a larger world outside the frame and suggest a larger narrative that embraces the moment of exposure" (Mitchell, 1994, p. 3). The shots that denote a woman cleaning her hands and neglecting water leaking is a plain metaphor that refers to water scarcity and to the fact that water stress must be the concern of every community member. Moreover, the picture, which depicts a man being careless about water leakage, is a metonym that leads the viewer to build the unknown remainder of wasting water in society. This type of metonym is a strong conveyor of reality since it indexically refers to water stress in Morocco.

The advertisers' ultimate goal is to cram as much meaning as possible into the short slots. They represent a mass communication that involves the negotiation of meaning between the commercials' mediated reality, where codes are organized into paradigms and syntagms, and the viewer's perceptual reality, which appears to be the natural way of seeing the world. For Bengrad (2002), this selection goes beyond the commercials' ends.

MEW categorizes citizens based on their culture, social class, and education. YouTube ads have acquired a paramount importance in social media platform scenery because of different reasons. First, Moroccans have increasingly become a visually mediated society since the end of the 2010 (Bouzine & Ibahrine, 2011). Viewers make sense of the world around them by reading social media images. The visuals' influence stems from the fact that viewers make "less mental processing" (Lester, 2003, p. 390). Second, advertising images on social media platforms have become more fascinating, influential, tangible, and intentional. Image creators exploit the visuals' persuasive power and the target audience's socio-cultural background to achieve their purposes. Third, the status and production of advertising images have tremendously improved. Advertisers have developed the quality and type of their visuals.

4. Conclusion

Thus far, the paper was an attempt to interpret and analyze visuals of Moroccan commercials on water scarcity. As a participant, the researcher relied on his background knowledge, personal experience and membership of the ads' target audience while he was interpreting the advertising images. He also adopted visual communication theory and semiotic tools to study the ads' visual cues and, thus, to achieve a more developed reading and scrutiny of the commercials' pictures. He eventually referred to his socio-cultural knowledge to compensate for the theory's shortcomings and to better understand and interpret the ads' meanings and connotations.

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