Production of the environmental documentary "PLASTICLYSM"

Michalis Katsouris, Oceanographer, MSc (Dept. of Cultural Technology and Communication, University of the Aegean, Mytilene, Greece, michaliskatsouris@gmail.com)
Gerasimos Pavlogeorgatos, Environmental Scientist, Associate Professor (Dept. of Cultural Technology and Communication, University of the Aegean, Mytilene, Greece, gpav@aegean.gr)

Abstract
Documentary film is one of the strongest audiovisual means of communication. Its strength comes from the combination of image, audio and information it includes. The use of documentary film to raise public awareness towards many different topics is common throughout history. Nowadays, several environmental documentaries are produced every year. One of the most serious environmental problems that modern societies are facing is that of plastic pollution. In global scale, plastic production is estimated at 300 million tons annually. This paper discusses environmental documentary as a genre and describes the production process of the environmental documentary "PLASTICLYSM".

Keywords:
Documentary, Plastics, Pollution, Communication, Awareness, Education.
1. Introduction

Nowadays, one of the most common and serious environmental problems is plastic pollution. It affects both natural and anthropogenic environment. It is reported from Arctic to Antarctic and from the surface to the sediment (Kubria, 2017). Plastic is the most used raw material in global scale and one of the reasons for this is its endurance through time. There are numerous estimations on how long plastics can remain after they have been used. Most of them conclude that the average time that plastic needs to decompose is about 500 years. Other characteristics that make plastic so popular worldwide, for both customers and industries, is its low weight, its waterproof ability and its price which makes it the cheapest raw material.

The annual production rate of plastics is calculated to 300 million tons (2014), while there is an increase of 3-5% every year (Valavanidis, 2006). Today, the average civilian in a developed country consumes about 10 kilos of plastic per year, which is mostly originated from food package (Valavanidis, 2006). Plastics can be divided into two categories. The concern of the scientific community about microplastics grows day by day and so does the public concern. The biggest threat of microplastics is that, because of their diameter, they can intrude into food chain and therefore into our body. Microplastics get into marine ecosystem and from there by bioaccumulation and biomagnification to fishes and eventually end up to our table (Clapham et al., 1999). Among others, the plastic pollution has also social negative impact. Tourism is the field that is affected the most. Most of the plastic garbage ends up in the sea or in the coastal zone. This leads to the devaluation of the area and the decrease of tourists and touristic activities, as no one wants to spend his holidays on such areas. In matters of sustainability, the management of plastic pollutants in touristic areas is becoming a global environmental problem (Arbulu et al., 2016; Cingolani et al., 2016; Ezeah et al., 2015; McDoughall and Hruska, 2000). Plastic pollutants cause a disturbing smell and image on the area and this results to the economic devaluation of the place. In addition, plastic pollutants affect fauna and flora of both land and marine ecosystem tremendously (Cingolani et al., 2016; Rodriguez-Rodriguez, 2012). Studies have shown that that the major issue considering environmental problems is the lack of environmental information and awareness of the public. Means like seminars of environmental education, environmental documentaries, campaigns etc. have been more effective to public than penalties for example (Cingolani et al., 2016; Hendee et al., 1978; Kidd et al., 2005).

In this paper we present the means and methods to increase the environmental information and awareness of the public and we analyse the genre of the environmental documentary, as cinema is one of the strongest forms of media in human history. Finally, the production of documentary “PLASTICLYSM” will be described and its impact on local communities will be evaluated.

2. Methods to raise environmental awareness

If we want to give a simplistic definition of the environment, we would say that it refers to the surrounding, including external factors that influence the life of people, animals and plants (Charles-Davis, 1992). We can separate environment into two categories. Physical/natural environment and anthropogenic environment. Physical environment is the place where every
human being lives and every ecological process takes place (Tolba, 1991). On the other hand, anthropogenic environment is where every social/economical/cultural activity takes place. It can be argued that all human activities have direct or indirect bearing to the environment. Environment and human health are closely connected, and a healthy environment is crucial to the health and well-being of every living creature (Rodda, 1993). That is why the subjects of environmental education and environmental awareness have become of top priority to the public agenda.

In order to increase the environmental awareness of the public, the role of environmental education in a society should be mentioned. Environmental education relates to teaching conceptual knowledge and skills, a process within which people’s awareness raises and this makes them to act and motivates them to work and promote the sustainability in order to solve present and future environmental problems (GDRC, 2004).

The main idea in environmental education is to raise awareness and empathy on ecological, political, economic and social independence in urban and rural areas, to give every human the chance to gain experience, knowledge, information and skills to protect and improve the environment, to change individual’s and society’s attitude towards environmental issues (Mohamed, 2006). Raising environmental awareness through education is one of the key elements in reducing environmental impact of an increasing population (Tambovceva, 2005).

Environmental awareness is the proper tool for the conservation of the natural resources that are essential for every living being. Environmental education can implant goals and build skills that can change human behavior towards the environment, while it also changes people attitude and makes them take part in environmental/ecological actions or campaigns. More research has to be done on how to implement environmental education from preschool to higher level of education and from local to national level (Mohamed, 2006).

Mass media can play a crucial role in raising environmental awareness. Television, radio, newspapers, cinema can serve as the means of spreading the idea of environmentalism by designing awareness programs or campaigns in order to disseminate knowledge about the environment and its issues and on the role that community participation can play in solving them (Mohamed, 2006).

3. Environmental Documentary

From its early stages, documentary film played a massive role in social movements and it became a popular and powerful means of communication among scholars analyzing mass media, visual rhetoric and implications on culture and pedagogy (Opel, 2007). Environmental documentary films can promote new ideas about environmental activism, behavior and agency (Monani, 2008). As the genre of environmental documentary gains popularity, ideas of environmentalism are approaching a much wider audience and this leads to more attention by scholars (Rosteck and Frentz, 2009). Karlin and Johnson (2011) referred to the strategic importance of a scientific approach and argued on the combination of empirical analysis with basic scientific theory in environmental documentaries, in order to measure their impact on public.

Environmental documentary does not only give knowledge to the public but also works as a response in itself, since ideas and beliefs emerge during the process of audio-visual
recording of the environment. Like any other social genre, the film maker must be involved and not only engaged with the topic of the film. Considering environmental documentary as a political project, the film maker has to be involved both in professional and personal level. So, the film maker must try to limit the role of film making in environmental degradation. Films can play a vital role in raising environmental consciousness.

To place the documentary in the context of communication/education rather than aesthetics means to take sides of the question on the intentionality of the film and to call intentionality as the key element of the documentary. The production of environmental documentaries can be seen in the context of a general interest increase for the creative possibilities of documentary form. In parallel, the perception that film as a medium was being used increasingly to convey environmental ideas became more prominent.

Although environmental documentaries cover a variety of themes, they show a tendency to display a shared structure, a consistent set of characters and a recognizable cinematography. Not all documentaries are catalysts of social change though. Although documentaries are meant to be a depiction of real people, places and events, they are influenced by the film maker’s vision, ideology and intentionality. This characteristic makes them subject of interpretation by the critics and by the audience. Likewise, as documentary films become more popular, film makers are expected to strategically choose rhetorical tactics that offer a dominant voice to their cause.

4. Production of the environmental documentary “PLASTICLYSM”

At the early stages of the production, the film-maker contacted University of the Aegean (Dept. of Marine Sciences), getting in touch with Mr. Drosos Koutsoubas (Professor of marine biology) and Mr. Stelios Katsanevakis (Assoc. Professor of marine biodiversity/ecology). Both were chosen considering their relativity to the subject of the documentary. Moreover, several known members of the local community of Mytilene were invited to participate in the film and talk about the consequences of overusing plastic in natural and domestic environment. These people were: Michalis Mpakas (Environmental Scientist), Myrsini Tourvali (veterinarian), Giorgos Filios (professional diver and owner of Lesvos oceanic center) and Apostolos Mpenakis (owner of the café ‘‘mousiko kafeneio’’).

The production took place from late November 2018 until February of 2019. The equipment that was used was completely provided by the University of the Aegean - Dept. of Cultural Technology and Communication and consisted of two cameras (Panasonic UX90, Panasonic VX1), a tripod and a lavalier type microphone. During postproduction Da Vinci Resolve 15 was used for video editing.

“PLASTICLYSM” can be described as participatory/journalistic documentary; participatory because the film maker himself was involved with the people that were participating in the project and they were headed to the film maker’s intentionality and journalistic because its structure is based on parallel interviews that were combined to construct a coherent narration.

The purpose of the documentary was to inform and raise awareness of the public about:
• The use and rejection of plastics in the environment
• The consequences of plastic litter on both fauna, flora and environment in general.
The alternative ways to replace plastic with other eco-friendlier raw materials.

The documentary was created as part of the film maker’s master thesis in the Postgraduate Program “Cultural informatics and communication: Culture and documentary production” of the University of the Aegean (Dept. of Cultural Technology and Communication).

Screenshots of the film:

- Even in the dumping grounds where all our rubbish end up...
5. Conclusions

“PLASTICLYSM” is an environmental documentary that deals with the consequences of plastics overuse on the natural environment. It was fully produced in the island of Lesvos and its duration is 18.17 minutes. People that are experts or relevant to the subject are appearing on the film and deposit their own different perspective on plastic pollution. By using images
of everyday plastics use and rejection, the documentary tries to describe the “circle of life” of plastics; from our home or from a café to the bottom of the sea or to landfill and their impact to human health, fauna and flora.

After its release, “PLASTICLYSM” was available on YouTube. Considering that our primary goal was to inform and raise awareness of the public effectively and quickly, YouTube was selected as the best platform to reach a wider audience for free. Since its upload (8/4/19), 1297 unique users have reached the documentary (until 3/9/19). The average view time is 4.34 minutes and more than 60% of the viewers reached the film through Facebook or by searching on YouTube. Moreover, 60% of its viewers come from Greece and most of them from Lesvos Island. YouTube “PLASTICLYSM” has been screened in primary schools and environmental festivals.

The local impact was quite impressive as the documentary was promoted by local websites (stonisi.gr, politika.gr) as well as by environmental websites and Facebook pages (envinow.gr, plasticfreegreece, greenliving.gr and more).

During the last six months, thousands of people that have watched the environmental documentary “PLASTICLYSM” have been informed, concerned and started a public dialogue about plastic pollution, one of the most serious environmental problems in our days.
This process shows that environmental documentary could and should be used as a powerful tool in order to inform, educate and raise awareness of people towards environmental issues.

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