

## **INFORMATIVE ANIMATION Session 01**

*Chair: Stuart Medley*

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João Paulo Schlittler

### **Anthropophagic design: artificial intelligence, memes and Brazilian pop culture**

*vernacular design / network culture / animated GIFs / memes / artificial intelligence*

Brazilian culture consists of a myriad of influences: from natives, colonizers, imperialists, slaves and immigrants, who have blended for centuries into what Mario de Andrade, a Brazilian modernist author, defined as “Cultural Antropophagy”. A term that even having coined one hundred years ago, continues to permeate Brazil's contemporary techno-cultural habitat. A landscape composed of displaced Miami beach apartment buildings rising next to cinder block makeshift homes, topped by blue fiberglass water tanks, entangled in a mesh of network cables and antennas that connect 200 million smartphone users that chat and post incessantly on social networks. Our popular music: techno brega, funk, sertanejo, rap, is undoubtedly shaped by the media business, however it continues to draw from cannibalistic re-appropriations, evidenced by the global viral repercussion of Brazilian memes as in the case a recent Katy Perry music video where she invited Gretchen, a 1980s sex-bomb turned evangelical pop-star whose images have been "memetized" by Brazilian teenagers.

These are clues towards putting together building blocks of an “animated” representation of Brazilian pop culture. Memes represent how young Brazilians talk, translated into poorly photoshopped GIFs synthesizing local pop symbols, slang and sarcasm in a couple of frames; gambiarras is a term that represent an improvised way of permanently fixing something or solving a problem; and are as chaotic as the exuberant rhythm of colors, shining gold and silver of the live transmission of Carnaval festivities on TV Globo which permeate the collective imaginary.

Future interfaces can be conceived as a media space, where each individual expresses their perception of a narrative, contributing to a networked whole. Akin to the practice of a collaborative digital film montage, in a certain way, it is like thinking of a city, where architects, filmmakers, musicians, visual artists, and designers interfere in the environment. The research aims to explore how motion graphics and animation can reappropriate foreign culture while maintaining local identity in a global digital network. For example, if human robot interaction researchers were to design a Brazilian Artificial Intelligence, how would it behave as a robot? What would it look like on a screen? What does it sound like? Answers to these sorts of questions can be applied to understanding the role of cultural identity in animation, motion graphics and game design.

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Silvia Oliva, Javier Coello and Carlos Jiménez-Martínez

## **Explaining ocean acidification to non-specialized audiences through motion graphics**

*ocean acidification / CO2 vent / science communication / visual thinking /  
Observatorio Marino de Cambio Climático-OMACC*

Ocean acidification constitutes one of the primary consequences of anthropogenic climate change, generating multiple negative effects in the marine realm. Although great advances have been made on ocean acidification research in the last decade, there are still many relevant gaps. In this sense, the acidic sublittoral volcanic vents located at (...) constitute an unequalled and promising natural lab, being hitherto the only one found within the Atlantic subtropical biogeographic region. With an annual variation of CO<sub>2</sub> emission between 459-988  $\mu\text{atm}$  and of pH between 7.4-8.07, its values range within those that will be reached in the next 30-80 years, according to the IPCC projections, thus meaning a window to future ocean (1). Accordingly, a marine observatory of climate change associated to these vents has been recently established in the lighthouse of Fuencaliente, the OMACC. Research conducted at the OMACC is providing and will provide a glimpse of the potential synergies among environmental factors, and changes produced on species interactions and adaptive capacity under acidification. This will enable making projections of utmost utility to identify the roadmap on mitigation and adaptation to climate change. Yet, in order to involve and mobilize society accordingly, including local and regional stakeholders and global visitors, this research needs to be approached and made accessible to non-specialized audiences. To that end, from 'BISAGRA Visual Thinking' (Transference Unit) and in the framework of the project visUaLL, we are developing a thorough communication program associated to the OMACC based on visual thinking. The use of visuals, allows us to translate complex concepts into more comprehensible contents.

Amongst the first materials produced in this program there is an introductory animation to ocean acidification. To generate this animation, we followed a transdisciplinary approach. First, the team was multidisciplinary, composed by an expert in marine ecology and climate change (...), who developed the script and supervised the storyboard and scientific rigor of the piece, and two experts in design, one in visual thinking (...), who supervised all the design aspects of the piece and another in motion graphics (...), who developed the storyboard and executed the animation. Second, the workflow to generate the animation followed a combined approach, interconnecting and intrincating the work derived from each of the two visions. This approach allowed us to put design at the service of science, generating a visual narrative that prioritizes scientific rigor without disregarding the

aesthetic component. Several studies confirm that the assimilation of complex scientific information is greatly improved when received through dynamic animations instead of static visuals (2). Further, motion graphics, besides transmitting information by giving movement to its elements, may create a narrative that optimizes the reception of this information, together with a visual poetry that remains engraved in the viewer's mind, and with it the content that is intended to be transmitted. Consequently, considering the nature of our project, in which the topic bears a considerable complexity, the motion graphics appeared as the most suitable option for its execution. The basics of this animation technique lie in applying movement to the design to transmit a message more effectively. The main objects used in this technique are 'pictorial elements', such as images, icons or logos, and 'texts' brought to life by applying movement, on many occasions also adding a piece of music to accompany the animation and a locution that narrates what is being showed in the screen, facilitating the assimilation of the message by the viewer.

The animatic was conducted with Storyboarder. On what refers to the color palette, the main color is blue, to give the corresponding prominence to the ocean, and the remaining colors of the palette were generated trying to create a good contrast and figure-ground color ratio. Subsequently, to check the good legibility of the shapes and optimal figure-ground contrast of the selected palette, a series of 'layouts' (i.e., design of static frames of each scene) were created and revised in iteration, in order to get an animation as refined as possible. The animation was executed with AfterEffects. The locution was made by a professional dubbing actress. For the remaining sound elements, we chose a well-balanced musical composition, with good progression and a grave tone, which is neither excessive in the dramatic nor in the cheerful. Also, some extra sounds (such as that of the sea) were applied in different parts of the video, to enhance certain actions and facilitate the information retention by the viewer.

Once the piece was created, we conducted a preliminary survey to assess its actual usefulness to reach society. This first survey consisted of a two-phase questionnaire, composed of eight questions related to the content of the animation. The questionnaire had to be answered before and after watching the animation. This first survey was conducted with different target groups.

The results of the preliminary survey conducted to assess the usefulness of the developed motion graphics piece to reach society indicate that the animation significantly enhances the understanding of the contents addressed. Overall, surveyed people understood better the concepts in question after viewing the animation. Thorough surveys including other audiences, formats (text vs.

animation) and comparisons are needed. However, we may assert that the animation generated in the framework of this communication program based on visual thinking associated to the OMACC will be of great utility in approaching the basics of ocean acidification to non-specialized audiences.

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Vincenzo Maselli and Giulia Panadisi

### **Cultural Heritage Convergence: The Intersection of Animated Docudrama and Communication Design**

Animation / Docudrama / Communication design / Cultural heritage / Fictional media tools

Documentaries are today consolidated communication and education tools whose first experiments date back to the films projected at the Nickelodeon Theater in New York at the beginning of the 1900s (Winston 2013). Starting from the short film “The Sinking of Lusitania” by Winsor McCay in 1918, animation has “invaded” this audiovisual genre, bringing important innovations in terms of languages, narrative structures and codes of representation (Ceccarelli 2011, Honess Roe 2013, Formenti 2022).

From the first animated documentaries to the most recent blockbusters (such as the two Oscar Award nominated animated documentary feature films “Waltz with Bashir” by Ari Folman in 2009 and “Flee” by Jonas Poher Rasmussen in 2022) the animation approach to documentary has evolved from that of the traditional live-action documentary, and has generated a new and powerful information means (Glynn 2013) that embraces the library of fictional media tools (Martin 2018,

Aufderheide 2007). Starting from the theoretical and productive framework briefly outlined, the proposed paper questions the communicative power of narratives belonging to a specific subcategory of documentary, namely docudrama, that compromises between the fly-on-the-wall approach – typical of documentaries – and a scripted narrative based on real events, situations and characters (Martin 2018, Hampe 2007).

Docudramas' informative potentials have been explored since the beginning of the new millennium by Gary Rhodes and John Springer (2006), who first named docudrama that form of documentary that is proposed to the public in a fictional form. In recent years, scholars such as Cristina Formenti and Annabelle Honess Roe have contributed to give a scientific dignity to this subgenre, recognizing that docudrama does not only share with documentary the reference to truly happened events, but it also asks the viewer to consider these events truthful portrayals even when they are supported by narrative structures and aesthetic re-constructions (Formenti 2022, Honess Roe 2013, Roscoe and Hight 2001,). Docudramas' design approach, therefore, requires to depict what has been seen, understood and learned in the real world (Paget 2011).

From the “Animated Conversations” series of short films by Aardman in the 80s to the recent feature film “Flee” (2022), docudramas have proved to be powerful tools in the hands of animation to perform actions of both social denounce, psychological exploration and cultural safeguarding (Hooks 2017, Mitchell 2017). These thoughts serve as theoretical premises to extend the use of docudrama to communicate and enhance Cultural Heritage. Animated documentaries for cultural heritage are not new forms of production and, thanks to the informative power and the imperative historical accuracy, they have been used by public entities, research institutes, cultural institutions to promote knowledge of historical events, works of art, social contexts or simply characters of historical or scientific importance. Among the most relevant and diverse examples, we can mention the video “what should I do?” by a group of researchers from the University of Athens. The video of about 1 hour accompanies visitors to the museum annexed to the University in exploring the various works through a fictional narrative (Katifori et al 2020). The series of animated documentaries produced by the “Animationdesign” laboratory of the University of Alghero in collaboration with the Historical Archive of Sassari is more purely informative and descriptive with respect to historical and political contingencies of the staged cultural context. These videos are dedicated to the dissemination of the contents of the Sassari Statutes dating back to the fourteenth century and use animation in a transmedia communication perspective ([animazionedesign.it](http://animazionedesign.it)). The two films produced by Disney “Saludos Amigos” (1942) and “The Three Caballeros” (1945) commissioned by the United States Department

of State as part of the “good neighborhood policy” with Latin America have a way more veiled informational vocation — close to political propaganda — but a strong fictional storytelling structure. The two feature films are a collection of episodes that see as protagonists, among many others, Donald Duck, Goofy and the parrot José Carioca, who cross South America experiencing any kind of fictional events, and in the meantime committed to observing and narrating scenarios, local cultures, traditions and habits with the result to inform and enhance different cultures.

In the realm of psychological and social aimed narratives — according to Andy Glynne — animated docudramas, more than any other form of documentary, are capable of evoking memories, even traumatic ones, of giving shape to abstract thoughts, of representing subjectivity, of building a bridge between the external world made by people and objects, and the internal world made up of thoughts and emotions, and to make the message conveyed as university applicable (Glynne 2013). What does change if we decide to narrate Cultural Heritage in an animated form that exploits the design paradigms of documentary and fictional storytelling? If we apply the narrative structure and the productive pipeline of animated docudramas to the communication of cultural heritage, we need to define new “rules” to follow, and specific criteria to evaluate both the informative impact and the fictional narratives inspired by depicted real episodes. By exploring the above mentioned and other examples of animated documentaries and docudramas aimed at enhancing cultural heritage, the paper tries to answer these questions, and to define hypothetical strategies to be applied to design a docudrama.

The final objective of the analysis of these case studies, therefore, is to formulate a design matrix for producing an animated docudrama in a perspective of cultural and narrative oriented communication.

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