INNOVATIVE DIGITAL MOVING IMAGES: STRUCTURAL DIGITAL VIDEO AND HANDMADE DIGITAL CINEMA

By Pedro Ferreira

I mostly like experimental cinema because of the highest request of consciousness. I grew up in an era where digital technology is accessible for a wider culture, since earlier I started to play with the digital media. My scholar research bases on innovative practices of experimental cinema through the digital media. Avant-garde cinema is considered as an idea of radical approach into moving images that crosses the limit of what is accepted and not conforms exclusively to any media. Therefore, which is the radical practice that crosses the border of the accepted practices of experimental cinema nowadays? Le Grice (1999) affirms that it is difficult to define digital media as a medium with its own distinct characteristics, although he distinguishes digital art from modernist art. Modernism rests on the physical properties of the medium in opposition to digital systems that have the 'non-tactility' characteristic – processes of zeros and

one.[1] These processes are analysed and performed by software and hardware, responding to inputs and outputs given through interaction with artists or spectators. The avant-garde cinema techniques such as scratching, drawing and painting directly on film, velocity manipulation and live projection are the main influences in the appearance of such practices as VJ and Live Cinema, by manipulating images in real time, through audio-visual performance, relating cinema with space, time, projection, live montage and musical collaboration.[2] Le Grice noted four directions of the experimental film that are key for digital media. Firstly, the Abstract Film – abstraction of visual qualities from their representational function, bringing the concept and aesthetic of programmable

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1 Le Grice, "Digital Cinema and experimental film – Continuities and Discontinuities", 1999
2 Nabais, "A autópsia digital do cinema: Um mapa pessoal dos encontros do cinema com o computador", 11, 31-32
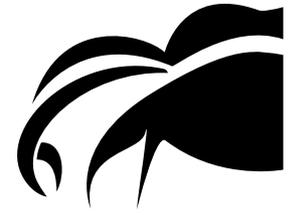
principles through the computer, pioneered by John and James Whitney in the 1950s. Secondly, transforming image film by transforming the photographic image, as Man Ray and Len Lye did in their experiments, manipulating and transforming the real image, allowing the components of data and raw material to operate in a new form. Thirdly, Non-Narrative Film (structural and surrealist) – the cinematic non-linear models are related directly to the intrinsic feature of Random Access Memory in computers. And finally, Expanded Cinema – by using specific locations for performance or installation and demanding the involvement of the audience, Expanded Cinema created the concept of interaction. If Le Grice noted influences of experimental cinema on digital media, Manovich (2002) describes the transformation of the 1920s avant-garde techniques into software through the human-computer interface in the 1990s and changed into new paradigms. By media access, analysing, generation and manipulation, "existing media images are juxtaposed together in order to be analysed"[3], new possibilities of moving image exploitation are obtained in a new territory, with the use of a computer interface. The Structural Digital Video is a term adapted by Clint Enns and represents the continuation of Structural film practice towards digital media. Enns explains that the digital file is manipulated through software and explored by algorithm. Its aesthetic emphasizes the digital artefacts such as, glitch, noise, compression and feedback. Datamoshing, the practice that "aestheticizes artifacts of video compression, are structuralist visualizations of digital forms"[4], offers new imagery and exploitation of digital video. The Handmade Digital Cinema practice offers and pushes cinema into a new territory, it does not represent "a historical rupture with older forms of the moving image, but rather as the most recent manifestation of the desire to use moving-image technology to create new modes of vision"[5]. As Zinman (2012) notes, the contemporary artists are crossing between the analogue and digital mediums, they represent a continuation of the handmade techniques, giving emphasis to the material and abstract imagery providing new visions

through employing digital technologies, software and hardware crossing with analogue practices. Digital media allows the combination of different kinds of media through computer interface. Digital technologies digitize and transform encoded information into binary data, stored in digital form. The contemporary technique of digital handmade cinema carries on with the avant-garde and experimental cinema practice. Allowing a new field that combines the old medium techniques and offers new possibilities to access and manipulate moving images with the use of computer. The Structural Digital Video and Handmade Digital Cinema offers new innovative forms and visions by exploitation of software, programming, interaction, random access, manipulation and data transformation, the digital media offers new practices for the experimental cinema. I explore the cross-media possibilities and through digital media I attempt to create new images for the practice of experimental cinema. Combining handmade film, electronic and digital video, montage, the possibilities of manipulate image through sound, interaction, synthesizers, electric guitar and software (Final Cut, Resolume, Max/Msp), as well, exploring the possibilities of hybrid presentation of the work as traditional screening, installation or live act, embracing the digital aesthetic.

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Ferreira, Pedro, *Avant-garde and experimental cinema: From film to digital - Workshop for*

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3 Manovich, "Software as avant-garde", 9
4 Ennes, "Structural Digital Video", 2011
5 Zinman, "Handmade: The Moving Image In The Artisanal Mode", 570

painting students. MA FEUP, University of Porto 2013: *http://issuu.com/pedroferreira1/docs/avant-garde_and_experimental_cinema*

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