Chapter 13
Universality and Communicability in Computer Animation

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ABSTRACT

The current chapter presents the results of the heuristic evaluation of the landscape and digital contexts in computer animations where there is a combination of 2D and 3D images. In addition, a series of strategies is presented to be followed at the moment of generating computer animations to cut down the production costs at the stage of inserting the digital characters in an environment and a context. Finally, the isotopyes are shown that exists in the landscape to reach universality and communicability of the message without resorting to the oral or written word.

INTRODUCTION

One of the main goals of communicability in computer animation is reaching the universality of the message with low costs and a high artistic quality. In this sense the combination of techniques and methods stemming from 2D and 3D animation have yielded excellent artistic results, especially in the movie sector, with films such as Mary Poppins or Roger Rabbit, to mention two examples. Evidently, in the first example there is no use of computers as in the second film. However, the world diffusion of both films has consolidated with the passing of years, until being considered as a “cult classic” film by millions of people along the years. The combination of these forms of animation, real images combined with computer generated images, has been growing in the first decade of the new millennium, due to the reduction of the cost of hardware: digital picture
cameras, 3D scanner, digital video camera, etc. (Baskinger, 2008; Laurel, 2004; Kerlow, 2009).

The landscape and the digital contexts inside which is developed the narration of the main actors may be totally real, unreal and mixed or hybrid (Laurel, 2004). We focus on this latter case in the current research, taking as analysis the 78 episodes of the television series “Minuscule” (www.minuscule.tv). Our universe of study are all the episodes with a duration of 383 minutes. In it can be seen the different stories developed from the members of a small-sized animal kingdom. This entertaining animated series is sure to capture every children and adult imagination (Reeves & Nass, 1996; Veltman, 2006) as it follows the day-to-day life of a range of charming and adorable insects. In each 3 to 5 minute episode, the insects interact with each other in ways that mimic comical human behaviour. The audio is a combination of genuine insect and ambient recordings, with added synthesized buzzings generated from sound effects such as cars, helicopters, and aircraft engines. In each episode ‘insect-like’ words and sound effects replace normal dialogue.

As a rule, these three dimensional insects are incorporated into real landscapes or a digital context of an excellent visual quality (Cipolla-Ficarra, Cipolla-Ficarra, & Harder, 2008). Aside from the creative factor which takes us closer to the real world through an emulation or simulation of reality (both terms are not synonymous), currently and thanks to the 3D and 2D commercial software, a great variety of techniques can be used to make the animations easier to create and faster to render with which the production costs are cut (Schweppe, 2011). However, it is necessary to join to this cost-time equation the quality of the communication (Vicente, 2003) and the universality of the message.

CONTEXT FOR COMPUTER ANIMATION

At the moment of elaborating contexts for the unreal bidimensional or three-dimensional characters or real characters, it is necessary to consider the environments as scenarios where the main and secondary characters act in keeping with a script or storyboard and a set of norms and rules pre-established beforehand (Laurel, 2004; Rosenbloom, 1999; Cipolla-Ficarra, 2008). Inside

Figure 1. Minuscule TV episodes. Among the more commonly recurring insect characters are ants, grasshoppers, flies, ladybugs, spiders, and snails. Other occasional insect characters include bees, butterflies, caterpillars, cicadas, dung beetles, dragonflies, mosquitoes, and wasps.