

Chapter 16

Scratch: Learning the Grammar for a New Language

Euridice Cabañes
ARSGAMES, Spain

Luca Carrubba
ARSGAMES, Spain

ABSTRACT

Videogames, as a new and playful interactive language, have great potential in the education field. On the one hand, we can find educational videogames to cover almost the whole spectrum of topics offered by colleges and academies (although they are used mainly at home and not in the academic environment). On the other hand, playing videogames is in itself a recreational way to generate technical competencies and teach the use of a whole new “digital language.” Depending on different countries and cultures, there is a tendency to implement this technology in educational centres in varying degrees. In order to exemplify this implementation, the authors look at “Scratch,” a creative videogame program for children with a big community behind it. In the conclusion, they focus on the introduction of videogame language in the educational context, not as educational videogames but as a tool to learn digital literacy and contemporary society.

INTRODUCTION

Technology has obtained increasing importance in our daily life, becoming a principal way to obtain information about the world and to communicate with other people. Technology is so important nowadays that is almost impossible

to describe humanity without talking about its technological facet.

Our world is becoming more technological each day. At this moment, we are living in the transition from an analogue technology paradigm to a digital paradigm. We are immersed in what Lévy and Kerckhove (1999) define as the “third

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age of communication,” in which “a new language has taken shape that is even more universal than the alphabet, i.e. the digital language. An age that has followed those of orality and of writing.”

This has multiple implications, but in this chapter, we are going to focus on how this technological environment influences education. We will explore how education in this new environment is immersed in a paradigm change in two fundamental ways: through the emergence of a new language and through the idea of ‘information saturation.’

New Languages

The so-called “new media,” based on the technological advances derived from the digitalization of contents, have brought about a revolution in the domain of audiovisual languages. This implies not only that a new type of content is being developed, but—simultaneously and inextricably—a new way of relating to these contents has appeared.

A good example of this is that the traditional media (print, TV, radio) in their analogical state have often tried to appear as transmitters of information for a passive audience, but after content digitalization, using the possibilities that Internet offers (on-line radios, journals, and TV channels emerge, adapting and creating new languages), they have suffered a fast transformation process. By being enabled to select diverse content to the access to global information, the audience has increasingly been put in the role of ‘active users.’ This transformation is also apparent within the cultural and entertainment industry, where we can observe, as Antoni Marín (2009) says, that “while some media had evolved from previous realities, others have originally emerged with the digital technology.”

In this sense, music, cinema, or even electronic books with their huge hypertextual possibilities are evolving from analogous to digital media, while others, like video games, would not be possible without digital technology.

The important thing that defines this new media is not the new kind of content that they produce but the new ways to relate to this content. The determinant is the interactivity that emerges from the use of new technologies: “The interactivity modifies not only the way an author deals with her task, but also the contents themselves that she creates and even the role of the spectator. In fact, the latter is now usually more properly called user” (Marín, 2009).

However, we must see to what extent this implies a change in the educational paradigm. As Pérez Tornero affirms (2000): “The privilege that at the educational centers the grammar had over the general semiology, the book over the audiovisual media and the textual writing over the multimedia production, reflects much of the conflict and tends to alienate the education from a society that has strongly enhanced the audiovisual language.”

Every education system must carry out a previous analysis of its social context if it is to achieve the aim of providing students with an effective education. As Tornero recognizes, this context is characterized by a massive consumption of the new media that is not accompanied by an appropriate knowledge of their codes and languages, especially when these are languages that are modeling new cognitive styles and configuring modes of appropriation of reality. Therefore, if we live in a time where a new language and new ways to relate with content and information are proliferating, when the new media are gaining increasing supremacy, the education system has to understand this new context, including an education which enables students’ competence in the use of these new languages and to enhance the development of technological skills. In this context, education should provide students with a “digital literacy” that allows the use of the new communication and information languages to code and decode messages, as well as to develop a full awareness of its use that involves a critical and creative utilization.

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