

# Communication and entertainment in cyberculture: rethinking the relations between the ludic, cognition and technology

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## Abstract

Information and Communications Technologies (ICTs) have revolutionized contemporary media and entertainment systems. This change enhances socio-cultural practices – participation, socialization and language learning – that require users to refine their cognitive abilities. This paper aims to show how cyberculture, while highlighting the cognitive activities that exist in the practices of communications and contemporary entertainment, gives rise to a dual repositioning: the concepts of games/entertainment and technology/media are both associated with cognition. We will base our assumptions on the change in the concept of cognition that took place during the twentieth century to rethink the links between technology, the ludic and cognition in cyberculture. Among the preliminary results, we observe that entertainment has ceased to be childish, unpretentious and escapist, and is approaching the ludic category, while technology has ceased to be a mere tool, instead becoming an agent in cognitive processes.

### Keywords:

Information and Communications Technologies.  
Cyberculture. Entertainment. Cognition.

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## 1 Introduction

*The human mind appears to better advantage  
in games than in more serious matters.*

**Leibniz**

The advent of Information and Communications Technology (ICT) has revolutionized the entertainment industry. Several scholars have noted that media systems and contemporary entertainment are more complex and require the user to develop practices – participation, socialization and learning languages and interfaces – requiring the refinement of cognitive skills.

By spotlighting the cognitive activities present in contemporary cultural practices, cyberculture seems to produce a repositioning of the concepts of entertainment and technology. Entertainment is no longer seen as childish, unpretentious and escapist, and is approaching the category of the *ludic*. In turn, technology/media is no longer a mere tool, prosthesis or extension and has become an agent in cognitive processes.

The aim of this study is to build on the changing concept of cognition in the twentieth century

to accomplish its goal: rethinking the links between technology, cognition and the ludic in the processes of cyberculture. This paper is divided into three parts. The first is a brief mapping of cognitive abilities attributed by cyberculture theorists to current communications and entertainment practices. Next, we present some meanings of the concept of the ludic as a way to rethink the idea of entertainment. As we shall see, the more general meaning of entertainment does not assign that term the cognitive attributes described by the authors surveyed. These characteristics best describe the concept of that which, throughout history, has been called *ludic*. In the third part, considering that today's media and entertainment are associated with skills that require cognitive refinement in several areas, we will briefly discuss the concept of cognition, demonstrating that, today, cognitive processes are inseparable from their links with the environment, technical objects and social interactions.

## 2 Cognitive skills in entertainment and the communications practices of Cyberculture

Although scholars such as Georg Simmel (1987) and Walter Benjamin (1994) have argued about the ways in which the communications technologies of the modern metropolis reshape individuals' subjective perceptions and experiences, the prevalent theories in the twentieth century have focused on the production of meaning and aesthetic and ideological content in the mass communications media (MCM).

By analyzing the products of entertainment under the lens of aesthetics, representation and ideology, different theories (the Frankfurt School, Structuralism, Cultural Imperialism and others) have classified mass entertainment as culturally inferior and alienating, while having low cognitive and aesthetic standards.

At the turn of the twenty-first century, the advent of ICT has made a strong contribution to changing this outlook. The emergence of the Internet and the reconfiguration of existing media have begun to revolutionize contemporary cultural practices.

Three cyberculture processes in particular have been key to this revolution. The first – **digitization** – has permitted the transposition of codes and languages from the various types of media (analog and digital) to the digital base, encouraging the practice of recombining texts, illustrations, pictures, sounds, music, videos and animations. The **integration of media** resulting from the introduction of compatible equipment and technologies (Ipods, iPhones, Palm Pilots, cell phones) has favored the extensive flow and movement of content. The third process – **networks** – has enabled the production, exchange and sharing of information and products, increasing the rise of social networks, virtual communities and social networking websites, among others. The fact is that the interlinking of these three processes has engendered *cultural practices* that require their users to be “more

active,” thus encouraging the individual user’s refinement of his or her cognitive skills.

If mass communications theorists generally overlook the aesthetic and cognitive attributes of traditional communications, the situation with current media systems seems to be different:

several scholars of cyberculture (LEMONS, 2002; SANTAELLA, 2003; 2004; SÁ, 2004; 2006; JOHNSON, 2005; ANDERSON, 2006; GEE, 2007; FELINTO, 2008; and JENKINS, 2008, among others) underscore the cognitive characteristics and skills stimulated by digital technologies and contemporary entertainment products.

Based on an exploratory and preliminary study, we believe that we can point out three social practices encouraged by ICTs that have enabled this revolution in popular culture: **user participation; learning languages and the use of interfaces and software; and social interaction.**

In the following section, we highlight some brief excerpts from cyberculture theorists that have enabled us to synthesize these three practices. The first – user participation – is subdivided into three modes.

## 2.1 User participation

### 2.1.1 Searching for desired information

According to Brazilian scholar Lúcia Santaella:

The new communication processes established by the introduction of new technologies – and

the dialogue between them and their predecessors have **turn us away from the inertia** of the reception of externally imposed messages and **trained us to search for the information** and entertainment we want to find (2003, p. 16, our emphasis).

Theoretician Henry Jenkins argues:

The convergence of [the media] is a cultural transformation, as consumers are encouraged to seek new information and make connections among dispersed media content. This book is about the work – and play – that spectators perform in the new media system (2008, p. 28).

For example, the experience of following a TV series today is not limited to watching weekly episodes. Fans of shows like *Lost*, *Heroes* and *24* need to seek additional information about the characters and discuss theories about the sub-plots in various forums such as discussion groups, virtual communities, social networks, blogs and websites.

### 2.1.2 Producing/creating content

Chris Anderson, in his now classic *The Long Tail*, argues: “The consequence of all this [cheap and ubiquitous technology] is that we are no longer just passive consumers and have become active producers” (2006, p. 61, our translation). Further on, he notes that “[The Internet] favors the creation of new models of ‘art,’ such as *mashups* (playing a track by one artist on another) and *spoofs* (creations based on videos) by the average user (Ibid., emphasis added).

Lev Manovich calls this process in which user participation takes place through the creation

and recombination of languages and media “remixability”:

The transformative process through which the media and information we organize and share can be recombined and built to create new forms, concepts, ideas, mashups and services (MANOVICH, 2005, our translation).

One example of this process is movie director Esmir Filho, whose talent was discovered through his short film “O Tapa na Pantera” (“Slapping the Cougar”), which became a massive hit on YouTube (PORTO, 2006) and launched his film career.

### 2.1.3 Exploring environments

Gaming scholars Espen Aarseth and Steven Johnson point out that user involvement also takes place through the exploration of environments.

The Norwegian Espen Aarseth argues that video games are a type of text that requires physical, bodily effort from the “user,” a non-trivial effort that is different from the effort to interpret a text in the traditional act of reading. Aarseth calls texts that demand physical performance from the “reader” cybertexts. For Aarseth, “the cybertext reader is a gamer...; he can explore, get lost and discover secret paths in these texts...” (1997, p. 4).

Steven Johnson goes further and argues that the desire to explore is a neurological characteristic of humans, associated with the feeling of pleasure. “With regard to connecting our brains, the instinct to desire triggers the desire to

explore” (JOHNSON, 2005, p. 29, emphasis added, our translation). In other words, the use of a reward system in games and electronic environments in general is linked to this instinct for seeking desire/pleasure, which encourages the exploration of spaces and objects.

For example, in another paper (REGIS; PERANI, 2010) in which we carried out an empirical study of games in the *Sims* series (produced by the US company Electronic Arts), we observe that all the games studied encourage the exploration of these virtual environments; in particular, we noted that the most recent games, such as *Spore* (2008), require greater refinement in the skills of association, probing, and knowledge of new objectives and rules during the game.

## 2.2 Learning languages, interfaces and software programs

Steven Johnson posits that email and the Internet have enabled us to

...learn an entirely new language of communication and the small arsenal of software tools that comes with it (2005, p. 92).

James Paul Gee describes videogames as semiotic domains that require the ability to apprehend several types of verbal and non-verbal languages.

In his view, videogames are:

...any set of practices that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artifacts, etc.) to communicate distinctive types of meanings. (GEE, 2007, p. 19).

This learning process is easily exemplified by the learning models for Wii games using the console launched by Nintendo in 2006. Because Wii requires some changes to the players' usual gaming style, including more physical involvement, most of the games released for this platform include an initial training and learning phase in which the rules and command keys are explained in detail and the players have a chance to practice using them. Without that learning process, the players' range of action in the game would be very limited.

### 2.3 Social interactions

Regarding the encouragement of social interactions, Henry Jenkins argues:

Convergence occurs within the brains of individual consumers and their social interactions with others.... None of us can know everything, every one of us knows something, and we can put the pieces together if we associate our resources and combine our abilities (2008, p. 28).

On the same subject, Chris Anderson states:

The Internet has become the preferred medium for listening to music. And what happened to the music has happened to all sectors of the media and mass entertainment: people want niche products. They want to form groups based on shared affinities and common interests (2006, p. 12).

These passages are intended to highlight the fact that, in order to be carried out, the practices cited above encourage the development of a broad cognitive repertoire involving sensory, perceptual and social skills, as well as the activities of traditional intelligence, such as logic, problem solving, analysis, pattern recognition and decision making. Thus, the current entertainment products seem to require physical activity and the work of cognitive forms, which cannot be reduced to the representational skills by which we usually judge mass culture.<sup>1</sup> By including activities pertaining to a broad cognitive repertoire,<sup>2</sup> such as exploring the environment, learning languages and interacting socially, communication practices and contemporary entertainment are associated with the term *ludic*, which will be discussed in the following section.

### 3 Broadening the concept of entertainment: the ludic

In modern times, associating the terms ludic and entertainment seems commonplace, even involuntary: the two words are believed to be synonymous, representing the human desire to spend time engaging an enjoyable activity that is different from their daily tasks. This conception

<sup>1</sup> For an in-depth study of the relationship between the practices of cyberculture and the cognitive skills involved, see Regis (2008).

<sup>2</sup> A pioneer in studies of cyberculture, Pierre Lévy (1993) was among the first to advocate ICT's propensity for the development of socialization and the construction of what he called "collective intelligence." For Lévy's purposes, however, intelligence technologies are unique attributes of computer-mediated communication (multilateral and democratic). For Lévy, this is a crucial difference between ICT and the MCM (unilateral and authoritarian communication). Based on our research, we believe that the entire media system (traditional and current, analog and digital) has cognitive potential.

of the ludic as enjoyment has been adopted by many communications theorists, especially after the advent of electronic games, which explicitly make this connection both striking and unambiguous.

However, interest from various disciplines (Philosophy, Anthropology, Education, Psychology, Physical Education, and recently, Communications Science) in the term ludic has given rise to multiple and even mutually incompatible approaches. Built up on the basis of the interconnections between different sciences over the centuries, ludic has become an open, polysemous and often ambiguous term.

However, if at first glance the ambiguity of the word seems to give the ludic a conceptual vagueness, a closer look focuses on its precise connections. In fact, associating the ludic exclusively with entertainment not only limits the term but reflects a central notion that has persisted over the centuries: the opposition between play and seriousness established by Aristotle. For the Stagiran philosopher who elaborated on this line of thinking through lessons on the concepts of pleasure of the pre-Socratic philosophers and Plato, games had an exclusively recreational character, and were not connected with the realms of the sacred and/or the competitions used by classical Hellenic culture. In Aristotelian philosophy, happiness is the supreme good, because it is self-sufficient and fulfilled, having no other purpose than to be itself. Aristotle devotes some time to proving

that games do not share these attributes.

Happiness is not found in recreation, as it is achieved through work and virtuous acts carried out on a continuous basis, and is therefore a means and not an end. In *Politics*, we find a passage that expresses Aristotle's ideas on the function of games:

Both leisure and occupation are indispensable, but leisure is better than occupation and is its end; and therefore the question must be asked, what ought we to do when at leisure? Clearly we ought not to be amusing ourselves, for then amusement would be the end of life. If possible, it would be better to remove amusement from the occupations. Those who work have need of relaxation, and amusement gives relaxation. Occupation is always accompanied with exertion and effort. We should introduce amusements only at suitable times, and they should be our medicines (ARISTÓTELES, [344 BC?], p. 57).

Viewing ludic activities as expendable, childish or even harmful to the individual and society is a direct legacy of Aristotle's philosophy, and this concept became so ingrained in Western thought that only in the nineteenth century, beginning with Romanticism, was it challenged more vigorously. Over the centuries, several contributions have been made to the concept. The Roman Empire gave a new meaning to games, adding the sense of training, drill and exercise. The Latin term *ludus*, which gave rise to the word ludic, was also synonymous with school, as games were used to teach "real" activities, such as war games (BROUGÈRE, 1998). Among medieval thinkers, it was Thomas Aquinas who developed the most significant studies on the

importance of games. Aquinas addressed ludic activities from an ethical and anthropological standpoint, covering the role of games in society, the need for play, and its virtues and vices.

The Roman Catholic philosopher debates and deals with adult games as a moral virtue that is indispensable to social life (LAUAND, 2000).

From the sixteenth to the eighteenth centuries, gambling became the model for leisure activity, as demonstrated in the encyclopedias of the time (DUFLO, 1999; BROUGÈRE, 1998). At that time, recreational activities took on two dichotomous functions. If, on one hand, addiction to gambling can grow, destroying families and human dignity (DUFLO, 1999; BROUGÈRE, 1998), on the other, it can become the object of study by researchers eager to unravel the mysteries of chance.

Mathematics was responsible for analyzing ludic activities, conceived as phenomena arising through human ingenuity, and therefore meriting detailed studies (DUFLO, 1999).

For mathematicians,

...games should be studied because they provide an excellent field for exercising human intelligence for two different and complementary reasons. On one hand, there is pleasure, which is a tremendous incentive.... On the other, and above all, in games, the spirit is given free rein without the constraints of needs and reality, offering pure conditions for exercising ingenuity (DUFLO, 1999, p. 25).

The philosopher G.W. Leibniz recounts the beginnings of mathematical studies of the ludic in *New Essays on Human Understanding*, published in 1703. After describing the beginning of logical explorations of games of chance, Leibniz argues the need for other studies of Logic that cover probability to supplement the Logic founded by Aristotle. For Leibniz, games require vigilant thinking because they involve risks and necessary combinations, thereby “teaching” the player to exercise reasoning; the ludic involves pleasures that lead the individual to make calculations that he or she would not make in other circumstances (DUFLO, 1999).

Eighteenth-century scholars of Education, called the pre-Romantic school, came up with the idea that play is part of a child’s nature, a quality that should be used to help teachers be more successful in their mission.<sup>3</sup> Among those thinkers, we can cite Jean-Jacques Rousseau, who addressed this issue in *Émile or On Education*, originally published in 1762. The French philosopher believed that play is part of children’s nature that must be preserved so that they can discover their true needs: “nature provides, in its own way, that which is necessary for the growth of the child, and it never must be contradicted.... All the activities themselves are the body’s instincts for vigorous growth”

**3** This line of thinking was inspired by *De pueris instituendis* (On Education for Children), by Erasmus, published in the sixteenth century, whose theme was the fact that children supposedly did not understand the importance of knowledge being transmitted to them, and therefore ludic activities were a way to get them to do their work without realizing it. However, Erasmus advised caution when using games, which should only be a palliative for education. Otherwise, in future, children could become *players*, with all the negative meaning the term implies (DUFLO, 1999).

(ROUSSEAU, 2004, our translation). Rousseau's view, despite valuing the ludic as a useful tool for human development, reinforced the concept of games as frivolous activities, focused exclusively on entertainment. It was, however, thanks to the appreciation of the symbolic figure of the child by the nineteenth-century Romantics that games, although still seen as a childish activity, also underwent a reassessment, finally gaining space in various kinds of scientific exploration and even leading to the emergence of a field of self-knowledge in the twentieth century: game studies.

Thus, we can see that the view of games has changed according to the thinking of each period, introducing new meanings and usages. The ludic can be synonymous with pleasure, the opposite of work, an instrument for human ingenuity, a learning tool, a simulation, a sport, or a children's game, among others.

And through this brief overview of the changing meaning of the ludic, showing the various nuances present in a subject that has been studied for thousands of years, we come to a meaning of games that combines several of the characteristics that we have discussed to demonstrate the full potential of this cognitive concept: the ludic as an exploratory experience. In their most accepted sense, games allow the construction of an aesthetic experience that is lived differently from day to day, based on a

space-time "separation"; a separation that gives us the need to assimilate the rules of operation of a veritable parallel universe created within those realms. Therefore, the ludic is also an environment for explorations and discoveries that enables us to search for information about the environment, contributing to numerous learnings and social interactions, showing that games can serve as a way of understanding and gaining mastery of a given situation, skills that are later used to produce different situations that are unlike the initial ones. Being a cognitive function for the apprehension and understanding of the environment, including physical skills, this perception of *affordances*<sup>4</sup> through play is extremely important for human development and the acquisition of knowledge and experience. All these features can be identified in the practices of contemporary entertainment, so we suggest that the ludic may be a more appropriate concept for analyzing the media system and ludic practices of cyberculture.

#### **4 Cognition today: embodiment, anchoring and sociability**

In the tradition of Western philosophy, cognition is a priority, if not the exclusive task of mental processes, which are often disembodied, relegating motor-sensory experiences and technologies to second place. Suffice it to think of philosophers such as Plato, Descartes and Kant to illustrate this idea.

<sup>4</sup> According to the theory of Ecological Perspective, which originated in Cognitive Science, affordances "are precisely the possibilities afforded by the environment to an individual agent..." (OLIVEIRA; RODRIGUES, 2006).

In the mid-twentieth century, the pioneers of artificial intelligence (AI) maintained the tradition of disembodied cognition. The classical AI researchers devoted themselves to automatically reproducing the faculties of human intelligence related to logical-mathematical decision making and problem solving, such as playing chess and performing complex mathematical calculations. The classical approach is based on the computational theory of the mind – that is, the theory that cognitive functions can be translated into the format of symbolic representations on the basis of a set of logical-formal rules.<sup>5</sup> Thus, cognitive functions are determined solely by formal logic, regardless of the physical properties of the system. This allows the identification of the mind with a computational machine, which is the basis of the theory. By defining intelligence as the basis for manipulating symbols according to rules of formal logic, classical AI ignores the cognitive skills related to motor-sensory functions and the individual's interactions with the world.

In the 1980s, it was observed that although computers can easily perform tasks that require traditional intelligence (logical-mathematical reasoning), there are other activities that humans do without thinking – such as walking, handling objects and recognizing people – that are extremely difficult to automate. Cognitive

science and neuroscience have shown that the motor-sensory system occupies most of our brains and is the result of two billion years of evolution (MORAVEC, 1988). Hans Paul Moravec estimates that the process called the mind is only possible because it is supported by the older and more powerful knowledge of motor-sensory mechanisms, and argues: “organisms that do not have the ability to perceive and explore their environments – like plants – do not seem to acquire the ability to develop intelligence” (1988, p. 16).

In line with these new ideas, scholars from different theoretical areas (DENNETT, 1996; LAKOFF; JOHNSON, 1999; CLARK, 2001; VARELA, n.d.) question the absence of the body and history in the cognitive processes of the computational theory of the mind. They view the mind as the result of an extensive evolutionary process that involves the relationship between body and brain and its interactions with the environment over the course of the biological and cultural history of the individual. These ideas have inspired a new approach to AI studies – connectionism, which is based on the way neurons interact in the brain.

The connectionist approach works with bottom-up processing: the idea that the behavior of a connectionist model depends on local interactions of individual units, none of which have a full view of the task at hand – they are the detailed entries in the system that decides

**5** These symbolic representations are the basis on which to compose a sequence of elementary instructions – algorithms – used to program computers. Programming is done step by step, emphasizing top-down processing, whereas a high-level representation of the task is used to initiate, monitor and/or guide the following actions in detail (BODEN, 1996, p. 4).

on the next step. For the scholars who take this approach, the first problems to be solved are **perception** and **mobility** (MORAVEC, 1988, p. 17). To investigate the problems of perception and action, these researchers have linked their neural networks to concrete models, creating situated or anchored robots. This new trend in robotics seeks to build more autonomous robots that are closer to living organisms. One of these robots is called Cog. Rodney Brooks, its creator, chose that name because it evokes both the word “cognition” and a basic part of a ratchet wheel. Cog was created with the goal of modeling human intelligence in a robot with a physical body, enabling the investigation of the factors that define cognition today: development, physical embodiment, motor-sensory integration and social interaction (MENZEL; D’ALUISIO, 2000, p. 64).

Studies involving anchored robots have revolutionized studies of action and perception. Andy Clark explains that the old “see-think-act” system has become anachronistic (2001, p. 88). It was found that perception is not a passive phenomenon in which motor activity is initiated at the end of a complex process in which the individual creates a detailed representation of the scene perceived. Instead, perception and action are articulated so the motor apparatus begins to act long before sensory signals reach the highest level of the cognitive process (reasoning). Clark explains that initial perceptual processing may generate a kind of proto-analysis of the scene, allowing the individual to select actions (such as

movements of the head or eyes) whose role is to provide a slightly improved sensory signal. Thus, perception, action and cognition act together simultaneously and seamlessly. Perception is intertwined with possibilities for action and continuously influenced by motor-sensory and contextual factors (CLARK, 2001, p. 95).

The connectionist approach of AI, robotics, and cognitive sciences argues that the cognitive process requires physical support – the motor-sensory apparatus – which explores the world in search of relevant information. In addition to being embodied, cognition is not limited to higher skills (rational, logical-mathematical). Instead, cognition benefits from the complex articulation of a range of skills, as Lakoff and Johnson explain:

In cognitive science, the term *cognitive* is used for any kind of mental operation or structure.... Thus, visual processing falls under the *cognitive*, as does auditory processing.... Memory and attention fall under the *cognitive*. All aspects of thought and language, conscious or unconscious, are thus *cognitive*.... Mental imagery, emotions, and the conception of motor operations have also been studied from such a cognitive perspective (1999, pp. 11-12).

According to this new perspective, the actions of living beings are linked to the world; their decisions are contextualized, anchored in concrete situations, and rely on all their senses and skills. And that is not all. By positing that knowledge and behavior are not the result of representations of the world, but the emerging dynamics of processes of specific interactions

with the world, scholars such as Donald Norman and Andy Clark have included interactions with other individuals and technical objects in the cognitive process. According to Norman, cognitive artifacts are any tool that helps the mind (1993, p. 4), which includes both material artifacts like paper, pencils, calculators, and computers, and mental artifacts, such as language, logic and arithmetic. Norman also highlights the importance of social cooperation for cognitive activities:

People operate as a type of distributed intelligence, where much of our intelligent behavior results from the interaction of mental processes with the objects and constraints of the world and where much behavior takes place through a cooperative process with others (NORMAN, 1993, p. 146).

And Andy Clark sums up the various factors that make up the complexity of the human mind as follows:

The central idea is that mindfulness, or rather the special kind of mindfulness associated with the distinctive, top-level achievements of the human species, arises at the productive collision points of multiple factors and forces – some bodily, some neural, some technological, and some social and cultural (2001, p. 141).

To understand and operate in the world, the mind must rely not only itself but on the environment, technical objects and social interactions.

## 5 Final Considerations

Now we can process the ultimate goal of this paper, which is the re-articulation of cognition,

the ludic and technology. Our philosophical tradition has consistently maintained the separation of cognition from ludic processes, from perceptions and feelings, from the world, and especially from technical objects.

The processes of digitizing and integrating characteristic ICT media have stimulated ludic practices and communications (operating environments, information retrieval, learning new languages and software, etc.) requiring a refinement of cognitive skills. Through the advent of social networks, these skills have been intensified even more by the possibilities of social interaction. These practices have been characteristically present in the definitions of games over the years and are now the basic assumptions of cognitive systems. Media entertainment is now a center of convergence of the ludic, technology and cognition, seeming to confirm the assumption of French educators Jean Chateau (1987) and Gilles Brougère (1998) that games are a fundamental part of the physical and cognitive development of all living beings.

Therefore, the real revolution in media systems and the entertainment industry we are witnessing today has to do with processes that are replicated in the forms of learning and cognition that we practice in our daily lives. Therefore, we not only rely on processes of representation, but on the body and its sensory capabilities, and on technology, the context and social interactions. If contemporary culture replicates life, we

believe that it is not so much because it would sensationalize politics, religion and all areas of life (GABLE, 1999), but more because it would use tasks (social interaction, environmental exploration, etc.) that are characteristic of the processes of cognition, learning and the ludic.

Henry Jenkins predicts the future of the cyberculture media systems:

Right now, we are mostly using this collective power primarily through our recreational life, but soon we will be deploying those skills for more “serious” purposes. In this book, I explore how collective meaning-making within popular culture is starting to change the ways religion, education, law, politics, advertising, and even the military operate (JENKINS, 2008, p. 28).

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## Comunicação e entretenimento na cibercultura: repensando as articulações entre lúdico, cognição e tecnologia

### Resumo:

As TIC têm promovido uma verdadeira revolução nos sistemas de mídia e entretenimento contemporâneos. Essa mudança potencializa práticas socioculturais – participação, sociabilização e aprendizado de linguagens – que exigem do usuário o refinamento de habilidades cognitivas. O objetivo do texto é mostrar como a cibercultura, ao evidenciar as atividades cognitivas presentes nas práticas de comunicação e entretenimento, provoca um duplo reposicionamento: tanto os termos jogo/ entretenimento, quanto os termos tecnologia/mídia são associados à cognição. Tomaremos como base a mudança do conceito de cognição no século XX para repensar as articulações entre tecnologia, ludicidade e cognição na cibercultura. Como resultados preliminares, verifica-se que o entretenimento deixa de ser infantil, não-sério e escapista, aproximando-se da categoria de lúdico, e que a tecnologia deixa de ser mera ferramenta para tornar-se agente nos processos cognitivos.

### Palavras-chave:

Tecnologias de Informação e Comunicação. Cibercultura. Entretenimento. Cognição.

## Comunicación y entretenimiento en la cibercultura: volviendo a pensar las articulaciones entre lúdico, cognición y tecnología

### Resumen:

Las Tecnologías de Información y Comunicación (TICs) han promovido una verdadera revolución en los sistemas mediáticos y de entretenimiento contemporâneos. Este cambio potencializa prácticas socioculturales – participación, sociabilización y aprendizaje de lenguajes – que exigen del usuario un refinamiento de las habilidades cognitivas. El objetivo del presente texto es mostrar cómo en la cibercultura se evidencian las actividades cognitivas presentes en ciertas prácticas de comunicación y de entretenimiento contemporâneas y cómo estas prácticas provocan un doble reposicionamiento: tanto en términos de la concepción de juego/ entretenimiento, cuanto en términos de las tecnologías/medias asociados a la cognición en sí misma. Fundamentados en el cambio de la noción de cognición en el siglo XX proponemos reflexionar sobre las articulaciones entre tecnología, lo lúdico y cognición en el contexto de la cibercultura. Como resultados iniciales, se verifica 1) que el entretenimiento ya no puede ser considerado como algo infantil, no serio o escapista, sino algo que se aproxima de la categoría de lúdico; 2) que la tecnología deja de ser una simple herramienta para tornarse agente en los procesos cognitivos.

### Palabras clave:

Tecnologias de Informação e Comunicação. Cibercultura. Entretenimento. Cognição.

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