

THE *LUDUS* OF THE MEDIA: TAMING, COERCION AND REPRODUCTION AS CATEGORIES OF THE MEDIA EXPERIENCE

Norval Baitello Junior & Tiago da Mota e Silva

ABSTRACT

In a private school in the city of São Paulo, Brasil, elementary school students (age 6) have been receiving tablet computers equipped with apps and video games designed for educational purposes. This article is the result of a daily observation of the classrooms in which children used the tablets and its applications. The research is part of a Master's Degree written by Mota e Silva (2016) and supervised by Baitello. By the application of focal groups, observations and a unique method of mimetic work with imagery, the research's objective was to comprehend how the insertion of that equipment altered the communicational environment of the classroom, and also to comprehend how the consumption of images through the tablet impacted the children's imagery. It has been verified indications of how those images transmitted by the equipment sediment itself in the imagery in a process that can be better described by evoking the theories about the play experience and games proposed by Huizinga (2010), Caillois (1990), allied with the Historical Anthropology as developed by Kamper (2002a; 2002b). A *ludus* of the media experience is perceived as a vector that defines the impact and the dynamics of this early media ambience.

KEYWORDS

Educational video games; image; imagination; imagery; play; tablets

RESUMO

Em uma escola particular da cidade de São Paulo, Brasil, *tablets* são distribuídos aos alunos do primeiro ano do Ensino Fundamental (crianças de 6 anos) com aplicativos e jogos eletrônicos de fins educativos com material programático condizente à sua fase de aprendizado. Este artigo é resultado da observação do cotidiano das salas de aula com *tablet* em 2014, feita por Mota e Silva (2016.) supervisionada por Baitello. A partir das informações reunidas, da prática de grupos focais e trabalho mimético com desenhos com as crianças, a pesquisa visava compreender como a inserção daquele meio alterou o ambiente comunicacional tradicional da escola, e como o consumo imagético vindo do aparelho impactou o imaginário das crianças. Constatamos indícios de como as imagens emitidas pelo *tablet* se sedimentam no imaginário das crianças por meio de um processo que pode ser melhor compreendido evocando as teorias sobre o lúdico propostas por Huizinga (2010), Caillois (1990), aliadas à Antropologia Histórica desenvolvida por Kamper (2002a; 2002b). Um *ludus* midiático pode ser vetor que define o impacto e a dinâmica da imagem em um ambiente mediático precoce.

PALAVRAS-CHAVE

Imagem; imaginação; imaginário; lúdico; videogames educacionais; *tablets*

PLAY, COMMUNICATION AND THE MEDIA

In *Man, Play and Games*, Roger Caillois (1990) assumes the task of exploring the tensions between the concepts and thought of Johan Huizinga in his work *Homo Ludens, a study of the play element in culture* (2010). Huizinga, for his part, develops the theory of play as a key structure on which culture develops and becomes more complex. For him, “the great archetypal activities of human society are all permeated with play from the start” (Huizinga, 2010, p. 7). All mythological narratives, for example, are born of the “fantasy spirit”, at the boundary between play and seriousness – and, the complex languages of communication, cults and rites emerge within the same boundary, in the same environments that are created by games,.

Huizinga’s theory was later developed by other writers besides Caillois. Using a similar line of argument, Ivan Bystrina (1990) also examined games as a root of culture in his *Semiotics of Culture*. The concept of cultural mimesis, developed by Christoph Wulf (2004; 2005), also regards play as an environment of mimetic creation and appropriation. Dietmar Kamper (1998), fascinated by Huizinga’s work, used his theory to understand the excessive advance of work, labour, in contemporary society.

From an even broader perspective, Boris Cyrulnik (1997) made an important study from an ethological point of view: the role of play in the process of “separation-individualisation”. As the body becomes less dependent on its immediate environment – by virtue of homeothermy and the retention of fat – a noticeable interiorised world forms. Then, “play pushes the pleasure of learning and familiarisation into an exterior reality” (Cyrulnik, 1997, p. 232), forming a bridge between the exogenous – that which one apprehends from the exterior world – and the endogenous – that which is interiorised as it is learnt. This presents us with a challenge: to verify whether this biological pattern can be analogous with cultural and civilizational patterns.

For Huizinga (2010, p. 16), it is the concept of the “magic circle” that organises this charged meaning. He proposes his magic circles as an enigma and, throughout his oeuvre, the works that form the concept are presented in a fragmented manner. It is impossible to study Huizinga without bearing in mind the fact that he was a medievalist. And therefore by using the word “magic” to describe the play-ground, he proposes that readers take part in a game to revive within themselves the magical awareness of the Middle Ages – only then will they be able to decode the concept. Play-grounds are a magical spell (Huizinga, 2010, p. 13), something that is fascinating and captivating – the word “illusion”, from the Latin *in-lusio* = “in + to play (ludere)”. Huizinga (2010, p. 13) stated: “inside the play-ground an absolute and peculiar order reigns. Here we come across another, very positive feature of play: it creates order, *is* order.” Magic circles are, above all, sacred places (Huizinga, 2010, p. 13), marked out in time and space (Huizinga 2010, p. 12-13). The rules which govern them (Huizinga, 2010, p. 14) are able to create a certain order of things, and be order (Huizinga, 2010, p. 11).

In culture, an act of magic is one which imagines abstract things (names, numbers, mazes, mythological creatures) and which makes them, or hopes to make them, real in the form of powerful images (Wulf, 2005, p. 133). It thus turns objects, animals and other

elements into imaginary relics and beasts, assigning them a direct role in the experience of the reality it constructs. Consequently, the “magic circle” concept describes game playing as the operation of transmutations. By this principle, the *magic circle* is not only the place of order, but, expanding Huizinga’s thought and drawing it towards Kamper, what can be understood as the place where images are created.

The concept of the image is not limited to visual images that reach us by means of our screens. Images are also audible, tactile, gustatory, olfactory and proprioceptive. For Dietmar Kamper (2002a), the image is a dualistic element between magic and representation – a concept which begins with contemplation about the ambivalent meaning of the German word for image, *Bild*. On the one hand, this word underlines “that by which something obtains its form, reaches its essence, arrives at the full unleashing of its miraculous force” (Kamper, 2002a, p. 2). He therefore describes the image as an experience in all its magical force, which vivifies that which is absent. On the other hand, it is that which reproduces, represents or draws. It thus constitutes, a mutable dynamic between “a fully present magical order in which the image is identical to that which it depicts and an order of representation which tends towards the empty, which, in the best of cases, it is similar to” (Kamper, 2002a, p. 2). By bringing this concept close to Huizinga’s magic circles, the aim is to recognise these spaces as the place where the magical presence of these images is evoked. When a child plays with a broomstick in his hand, the broomstick doesn’t resemble a horse, it *is* a horse. The same principle applies to the more complex and varied rituals of culture.

Drawing this concept of the image towards studies of play is not strange, given that such studies assume movements and ambiguities which help to understand the image. Caillois, for his part, adds layers of complexity to reflection through his categorising of games into two major aspects, two completely opposed fundamental forces: *ludus* and *paidia* (Caillois, 1990, p. 47). The categories of *ludus* and *paidia* can be regarded as two forces of play. *Paidia* is an “elementary need for disturbance and tumult” (Caillois, 1990, p. 48). It originates from “an impulse to touch, grab, taste, smell and then drop any accessible object” (Caillois, 1990, p. 48). *Paidia* is, then, the kingdom of enjoyable play, with a tendency for chaos and disorder, and associated with “primary freedom”, with a “need for fantasy” (Caillois, 1990, p. 47) and gratuitous enjoyment. But in all playful activity there is also pleasure in rules and submission. The name for this impetus is *ludus*, the orderly character of games, the game governed by rules, which “is complementary to and a refinement of *paidia*, which it disciplines and enriches” (Caillois, 1990, p. 50). It is therefore institutional. Although Caillois refutes Huizinga’s theory of “mystery”, the dualism of *ludus* and *paidia* doesn’t just separate the games on two fronts, but the tensions between both parts and the frictions between the forces can be extended as categories, as drivers of culture, the oscillating movements of the creation of images and meanings. On the one side the chaos that is always destined to be refined, and on the other the refinement that is always destined to rupture into new chaos. From this friction come new play, new images, new rituals.

While the magic circle concept describes an environment, *ludus* and *paidia* describe this environment’s dynamic of forces. For too long, both have been reduced to the mere

formal description of play, but if their assumptions and biographies are understood, Huizinga and Caillois provide a complex model of communication and culture as a participatory game. The magic circle describes the experience of being in communicational environments, while *ludus* and *paidia* describe the ambivalence of communication and human bonds.

There is an archaeological element in evoking play to understand human communication, and the way we bond with others, with images, and with ideas. Starting with the archaic, the description of the power of play in Huizinga and Caillois also suggests a theory of the media used. To attain this power of play, we have to bring the resources close to Vilém Flusser (1985), who, in *Philosophy of the Black Box: Essays toward a Philosophy of Photography* describes the photographic apparatus – which extends to the media apparatus, in general – as the “game of swapping programmed symbols” (Flusser, 1985, p. 15). This observation is not just a comment on the system of rules which one enters when operating within media, but also the experience of the media itself. Roger Silverstone (2005) evokes the concept of the magic circle to describe precisely this experience. For him (Silverstone, 2005, p. 116), this understanding is based on recognition of the “as if” nature of the relationship with the media. That is, of the magical facet of the experience of the media, which is capable of absorbing in its own logic and order of things and there create and perpetuate images – a magic circle. “The media has the capacity, and it depends on this capacity, to engage an audience within spaces and times that are distinguished – marked off – from the otherwise relentless confusions of everyday life” (Silverstone, 2005, p. 116). And also according to him, “we play with our media and by means of it. We play with it and around it” (Silverstone, 2005, p. 120). For the author, these moments of suspension that come from the experience with the media, even though contained and within boundaries, are play-grounds that enable a form of re-enchantment in de-encharnted daily life.

IMAGINATION AND IMAGERY

Another key assumption to embrace these concepts of play is to understand their ambivalence. It is commonsense to perceive a game as non-serious, as just fun, as Huizinga himself (2010, p. 11) argues. This understanding contrasts playful activity with the seriousness of work, the same dichotomy that contrasts the adult world with that of children. But during the Middle Ages, orally transmitted knowledge made no distinction between children and adults. Modern ideas about childhood only took hold when adults found their own exclusive means to communicate – through more widespread literacy and the Gutenberg printing press (Escudero, 2015, p. 17) – excluding those who didn’t yet possess the full repertoire to read these codes: children. Throughout *Outono da Idade Média (The Waning of the Middle-Ages)*, his main work, Huizinga (2013) describes the various medieval games (courtly games, religious games, war-like games, etc.) and realises how adults dedicated themselves to games that are today deemed childish, as there was no clear distinction between the two. Taking Huizinga’s observation, Kamper (1998,

p. 27) demonstrates how the separation of adults and children into opposing worlds is both the reason for and consequence of the advancement of work in culture. But, based on this reflection, we can also diagnose another effect of assuming games as merely recreational or non-serious: that of naively assuming that imaginary monsters and beasts don't originate in play-grounds, in magic circles.

Play is not just a space of imaginative enjoyment, but also where imagery takes root. Like *ludus* and *paidia*, imagination and imagery are different categories which describe an image movement or dynamic. We need to look at Dietmar Kamper to understand this distinction. For Kamper, imagination is a force, an intelligence to create and understand images. Kamper (2002b, p. 12) suggests a third way of looking at imagination: "it structures man's relationship with his body". As he says:

an unceasing flow of images wipes human knowledge clean and gives rise to new myths, sagas, legends and fables. This imagination is interpreted as an archaic force that is effective on the transcendental. ... Seen in this way, images are canvases which protect against the traumatic violence of naked reality. The ghost conceals a trauma caused by fear and terror, and to some extent takes its place. Reality comes coded in imaginary terms. In contrast, this means that the vestiges of a real wound survive in each image that can become moments of memories and repetitions. (Kamper, 2002b, pp. 12-13)

Kamper's "force of imagination" (quoted in Baitello, 2005, p. 92) – *Einbildungskraft*, in German – is the counterpoint of the orbit of the imaginary. Here lies one of the maxims of Kamper's thought: "against the imaginary, only the imagination can help" (Kamper, 2002b, p. 9); i.e., imagination as the ability to absorb the imaged nature of images, to perceive their magical force and to actively rework them. Kamper also uses the expression "reflective imagination". For him, "the expression indicates knowledge with the help of the imagination which has reflected on itself and the consequences" (Kamper, 2002b, p. 11). When one loses the ability to perceive, absorb and rework images, they take root in culture; they become increasingly less mutable. The realm of these great images is the imaginary. There, these images calcify and perpetuate. We merely perform them and no longer rework them.

The imagination, and also the imaginary, find space to manifest themselves in the magic circles of culture: the cults, games, states of altered consciousness, art, etc. Huizinga (2013, p. 69), for example, describes the ideal of medieval honour, rooted by the rituals of etiquette and games of chivalry. Transgression of this magic circle was deemed a mortal outrage, since it destroyed the illusion (*in-lusio*) of a higher and purer existence. Note, therefore, the potent capacity of magic circles not only to create images – with their values and related emotions – but to root them in the imaginary universe, constituting transgressions of other images, values or emotions which break with this specific order. It is detrimental for thinking about play and, consequently, about human communication not to consider the ambiguity of these communicational environments.

The imaginary emerges as refinement of the imagination, just as *ludus* emerges as the refinement of *paidia* in the play-grounds of culture. The impulse for fantasy, for

grabbing and pulling in *paidia*, is thus an impulse of the body. As Christoph Wulf (2014) also highlights, the imagination is linked to bodily action, as are emotions. For Wulf, it is “an energy whose source is the body and therefore the unconscious, but which manifests in the form of images in the consciousness and also presents the emotions there” (Wulf, 2014, p. 15). In turn, *ludus* will refine *paidia*, and transform it into rules and institutionalise it. The force of *ludus* will nail powerful images to the walls of the imaginary. While Kamper makes the distinction between imagination and imagery, Caillois’ dualistic *ludus* and *paidia* describe the *how* of these processes.

From the perspective of communication, that which is crucial to root images in culture is their exhibition and the intensity of their flow. In the environments of the body’s primary media, the exposure and flow of these images and the emotions related to them depend on the gestures of only those which share the same communicational environment determined by personally experienced space and time. In the era of electronic media, the same images are open to unparalleled reproduction, communicating their related emotions to a large number of people, in real time, or stored in global networks. Accordingly, the media today, taking the assumption of the magic circle as a description for its fundamental experience, operates a *ludus* of human communication: refining and rooting images on a very wide scale, for their subsequent reproduction.

TAMING

Having talked about these assumptions, this article will now examine a case study¹ upon which this reflection is based.

In a private school in São Paulo², children in the first year of elementary school – aged 6 to 7 – have access to a technology which has a growing impact on education³: the tablet. The introduction of this apparatus into the daily life of the classroom is part of a technological and educational project underway since 2011 whose plan is to gradually make tablets available to students at all levels of education. Initially, the experiment was conducted with just one middle school class. Over time, it was also extended to primary education.

Unlike the pupils in middle school⁴, the elementary school children only have access to the tablets in class time on days and at times previously decided by teachers and

¹ The thesis *Tablet, o Brinquedo: um estudo da apropriação lúdica da tecnologia por crianças do primeiro ano do Ensino Fundamental* (Silva, 2016). Supervised by Norval Baitello Junior.

² The school in question preferred not to divulge its name and the names of its employees in any subsequent research publications. In the 2014 school year, 227 pupils were enrolled in the first years, divided into 14 classes (A-N). In that same year, the monthly fee for elementary education I at the school was around R\$2000.00 (equivalent to US\$900, at the exchange rate in April 2014).

³ According to a survey conducted for this research, in 15 similarly priced private schools, 10 others also used tablets in classrooms at least at one level of education. If we also take tablets provided to teachers and employees into consideration, 12 of the 15 private schools used them.

⁴ For middle school pupils, the tablet is placed in the adolescent’s care and can be taken home. In these situations, the respective teachers develop complementary tasks and activities for the pupils to complete. However via a monitoring software, the school is aware of the content accessed and for how long.

coordinators. “Tablet time”, as the children call it, is included during “rotating” activities, a teaching methodology developed by the school itself. Children are split into two or three groups and each has an activity, such as Portuguese or maths lessons, analogue games, or, more recently, use of the tablet. Roughly every half an hour, the groups change activities so that each one completes all of the tasks.

The main activity involving the tablet is the use of electronic games, some of which are educational – such as *Mistério dos Sonhos* [Mystery of Dreams], developed by the company Xmile Learning, which includes content on Portuguese, maths and the natural sciences relating to the first year of elementary school – and others which are commercial, downloaded freely from app stores.

But, at least for the purposes of this article, what is most important is not the *what* of the tablet usage – what software, what hardware, etc. – but rather the *how*: how the school intends to appropriate the media and, more important still, how the children appropriated it and the images of photons and pixels that it emits. In this context, the research observed ambivalent behaviour with regard to use of the media. On the one hand, the use of the tablet and game playing bolster the school’s social programme. On the other hand, it reinvents it. Often, the children submit to the rules of use imposed by the school through their teachers and remain sitting in silence on their own, as they play. In other cases, the need to grab and appropriate objects is stronger: the child imposes himself or herself, stands up, takes the tablet to a friend so they can play together, sits on the floor to play with the device and leaves the teacher with no other option but to accept it. We return, then, to the description of a clash of forces: an appropriating *ludus* and a *paidia*. Out of this dynamic, two uses emerged, one imposed by the school and the other by the child’s needs: sitting at rows of desks, in the first case, and chaotically on the floor, in the second.

As a rule, the children receive the tablets sitting at their desks, and remain there while they play. On these occasions, there is a huge contrast between those playing with the tablets and those playing with other toys. With the devices, the children tend to remain silent and sitting. If anything, they get up to talk to a classmate or show something, but are admonished by the teachers, who habitually ask for silence. However, this impulse by the child to get up, grab and call a classmate is not always restricted by the teacher and the curriculum. And as a result, an unexpected use of the tablet emerged: the children started to sit on the floor in a circle and talk, swapping experiences about the games, and even walking around the classroom.

On the one hand, the tablet merely reinforces the social programme which the school represents. The device, the technical medium itself, the hardware, encourages individual and silent usage. The children sitting with tablets in their hands are doubly seated and doubly sedated (Baitello, 2012, p. 80). According to Baitello (2012, p. 80), the association between chairs and image machines “calm the body and mind”. For him, “[image machines] present canvases that hypnotise and inebriate us, rendering us immobile” (Baitello, 2012, p. 80), while the low desks in which use of the tablet is often obligatory don’t encourage the children to stand up.

In the *ludus* of the media, the body is the first thing to be refined. For Kamper:

in an initially slow and specific disciplining of bodily functions and expressions (modes of coexistence, forms of relation, rules of politeness), the “inner nature” is activated for aims on the outside, and the body is subjected to an overall social abstraction so that it functions simultaneously in agreement and disagreement with this abstraction. (Kamper, 2002b, p. 7)

In this context, the impulse to sit with the device on the floor does not appear to be a rule of appropriation, but a form of resistance to the school model imposed and the *ludus* itself of the use of the media. It is, before or else, a transgression, a *paidia* by the children stemming from their bodily need to grab and pull towards them the world around them, out of a need for bonds. In that sense, it is possible to talk about a *paidia* of the uses of the media, of this body which refuses to be sedated, in contrast to the *ludus* of the media game, whose first rule is to refine the body and, consequently, the force of imagination. But this counterpoint doesn't take place without a violent imagetic confrontation for which the children are not always strong enough to resist. So it is necessary to discuss the effects of this clash.

COERCING

With the children sitting down, the research just needed to assess, or at least collect, some signs that corroborate Kamper and Wulf's theory of historical anthropology that imagination is a bodily faculty. That is, with the body restricted, ably disciplined in a school, the tablet demonstrates its coercion: that it makes them imagine with images that are not their own.

To work with this difficult theory, the research proposed undertaking an exercise in mimetic work with images with the children (Wulf, 2005). They were asked, on the final day of the visits to school, to draw about what they associated with the tablet, the school and the classroom routine. To analyse these drawings, a comparative method based on the work of Aby Warburg (2004, 2010) was proposed which grouped them according to common elements and representations.

This study with the drawings raised various issues and served as the main argument for many of the research conclusions. But for the purposes of this article, we need only mention the recurrence of drawings portraying the characters of *O Mistério dos Sonhos* [The Mystery of Dreams], as can be observed in Figures 2, 3 and 4 in comparison with Figure 1, which portrays one of the screens of the game.



Figure 1: The game The Mystery of Dreams



Figure 2: A child represents in drawing characters of the game The Mystery of Dreams



Figure 3: A child represents in drawing characters of the game *The Mystery of Dreams*



Figure 4: A child represents in drawing characters of the game *The Mystery of Dreams*

In three different drawings, out of many, the children repeated the representations of characters from the game without re-imagining them. Though rare, the characters were reinvented in some cases – and by precisely those children who refused to use the tablet while sitting at a desk. Firstly, this is a strong sign that, within the communication-environments of the tablet media, in the classroom, the device operates as a factor in the sharing of some images and their related emotions. A common imagery is, therefore, created. However, it is possible to go beyond this first sign and question the issue.

Although it's a strong word, coercion in this context is exactly that: by means of the drawings, we were given access to how the children receive the images from the tablets and, in many cases, like those above, signs suggest that exogenous images from the device superimpose themselves on the children's imagination. In describing an anthropology of the image, Hans Belting writes:

the digital media reintroduce the body analogy via denial. The loss of the body has already haunted the mirror fantasies of the nineteenth century, when the doppelganger no longer obeyed the spectator but abandoned the mimesis of the reflecting body. Digital images usually address our bodies' imagination and cross the borderline between visual images and virtual images, images *seen* and images *projected*. In this sense, digital technology pursues the mimesis of our own imagination. Digital images inspire mental images, much as they are inspired by mental images and their free flux. External and internal representations are encouraged to merge. (Belting, 2005, p. 44)

What Belting diagnoses in the quotation above is the loss of the boundary between the exogenous and endogenous. As digital technology seeks to mimic the body and, consequently the imagination, the zero dimensional image aims to occupy the place of imagination itself, making it hard to distinguish between endogenous images, the product of the bodily experience of the imagination, and exogenous images, those delivered by media. Kamper (2002b, p. 13) also presents a similar line of reasoning in his theory of fantasy: "through transformation in the mind machine underway, they are merged with bodily mimesis and technical simulation. Thus the so-called unconscious immediately joins the media". One can also argue that this imposition of technical simulation on bodily imagination shows increasingly lower indices of coercion. Not because this superimposition doesn't occur, but because it is clad in the normality of social interactions in this type of communicational environment. It is a simply performed process.

It is an immaterial, ineffable and invisible process but one made accessible by means of the mimetic work with children's drawings and their comparative analysis. It if wasn't for this methodological approach, there would be no means of identifying it.

REPRODUCING

The consequence of losing the boundary between endogenous and exogenous is the emergence of this reproduced machine-based imagery. Reproduction is one of the effects of this *ludus* of appropriating media. In the drawings mentioned above, although signs of reproduction were already noticeable, it is not fully understood how this process comes about. However, Figures 5, 6 and 7, show examples by three different children from different classrooms drawn at different times.



Figure 5: A child reproduces the game “O jogo da Forca” in its digital version

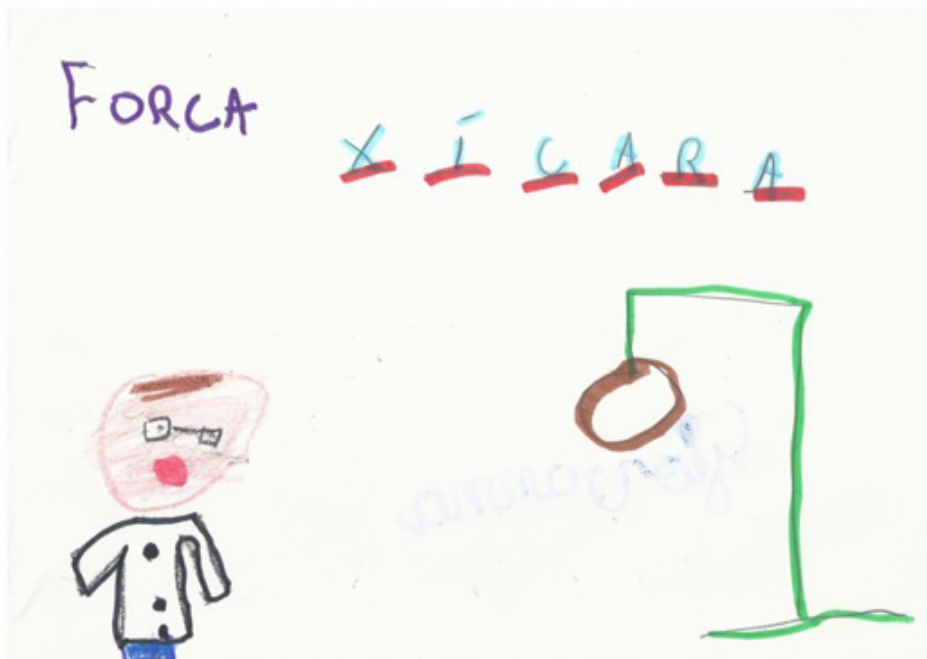


Figure 6: A second child represents the same image of the game “O jogo da Forca” in its digital version



Figura 7: A third child also represents a image of the same game “O Jogo da Forca” in its digital version

In the drawings mentioned, the children reproduced the screen of one of the games played in the classroom. *Jogo da Forca* is one of the digital versions – no longer available at the Google Play app store – of a traditional word guessing game. As it is such an old game, you could argue that drawing it does not necessarily suggest a reproductive imagery. However, we see how the kids use the elements exactly as they appear on the tablet’s screen. It is, therefore, a blatant example of reproduction, and of particular value because the authors are children who don’t socially interact in the same classroom and don’t use the tablet together. The drawings show signs of a loss in the mimetic ability to recreate these images, which are merely repeated.

DEVOURING

These three actions – refining, coercing and reproducing – are what ensure that the *ludus* of the tertiary and electronic media roots the images it exhibits. The *paidia*, of the body, appears as the strategy of resistance. When images are able to devour bodies, it is essentially a problem of imagination and imagery. In other words, it is also a problem of play – without conferring the “fun” aspect commonly assigned to it. We return, then, to the thinking of Walter Benjamin (2009, p. 96), for whom a child’s toy is always a confrontation between the child and the adult imagery imposed on the objects of his play. In Benjamin, the child is able to subvert this imagery: “even the most princely doll becomes a capable proletarian comrade in the children’s play commune” (Benjamin, 2009, p. 87). Extrapolating the meaning of the object of play in Benjamin, we can transpose it to the consumption of electronic media today, in the assumption that this same confrontation (imagination-imagery) takes place with the use of tablets in the classroom. The research, however, reveals situations in which the strength to resist the confrontation doesn’t exist.

The example of the children reveals aspects of this process which, dependent on further research, can be verified in other contexts of media consumption. These include the areas of image addiction, in the case of skewed ideas about bodily image and serious screen dependency (which is extremely frequent today, above all with mobile phones). While the medical sciences face these pathologies, the communication sciences must also necessarily contribute to a better understanding of this epidemic: the effect of the communicational environment of the media image is to superimpose exogenous images over endogenous images based on the degree of exposure these images receive. It is possible to trace the process by which the media images create these effects, characterising them as a *ludus*. What connects an elementary school child with a patient suffering from “iconopathy” or screen dependency is not after all anything but a problem of imagination: to imagine with images that are not our own. What remains to be done is to undertake a multidisciplinary investigation of the physiological and political implications of this confrontation.

BIBLIOGRAPHIC REFERENCES

- Baitello Junior, N. (2005). *A era da iconofagia: Ensaios de comunicação e cultura*. São Paulo: Hacker Editores.
- Baitello Junior, N. (2012). *O pensamento sentado: Sobre glúteos, cadeiras e imagens*. São Leopoldo: Unisinos.
- Benjamin, W. (2009). *Reflexões sobre o brinquedo, a criança e a educação*. São Paulo: Editora 34.
- Belting, H. (2005). Por uma antropologia da imagem. *Concinnitas*, 6, 1(8), 65-78.
- Bystrina, I. (1990). Cultura e devoração: as raízes da cultura e a questão do realismo e do não-realismo dos textos culturais. Lecture at the Postgraduate in Communication and Semiotics of the PUC-SP. Retrieved from http://www.cisc.org.br/portal/jdownloads/BYSTRINA Ivan/cultura_e_devorao.pdf
- Contrera, M. (2012). *Mediosfera. medios, imaginário y desencantamiento del mundo*. Sevilla: ArCiBel.
- Caillois, R. (1990). *Os jogos e os homens: A máscara e a vertigem*. Lisbon: Editora Cotovia.
- Cyrułnik, B. (1997). *Do sexto sentido: O homem e o encantamento do mundo*. Lisbon: Instituto Piaget.
- Flusser, V. (1985). *Filosofia da caixa preta: Ensaios para uma futura filosofia da fotografia*. São Paulo: HUCITEC.
- Gebauer, G. & Wulf, C. (2004). *Mimese na cultura: Agir social, ritual e jogos, produções estéticas*. São Paulo: Annablume.
- Huizinga, J. (2010). *Homo ludens: o jogo como elemento de cultura*. São Paulo: Perspectiva.
- Huizinga, J. (2014). *O outono da idade média*. São Paulo: Cosac Naify.
- Kamper, D. (1998). *O trabalho como vida*. São Paulo: Annablume.
- Kamper, D. (2002a). Imagem. In C. Wulf (Ed.), *Cosmo, Corpo, Cultura: enciclopédia antropológica*. Milan: Mondadori. Retrieved from <http://www.cisc.org.br/portal/jdownloads/KAMPER Dietmar/imagem.pdf>
- Kamper, D. (2002b). Fantasia. In C. Wulf (Ed.), *Cosmo, Corpo, Cultura: enciclopédia antropológica*. Milan: Mondadori. Retrieved from <http://www.cisc.org.br/portal/jdownloads/KAMPER Dietmar/imagem.pdf>

- Mota e Silva, T. (2016). *Tablet, o Brinquedo: um estudo da apropriação lúdica da tecnologia por crianças do primeiro ano do Ensino Fundamental*. Masters dissertation, PUC-SP, São Paulo, Brazil.
- Silverstone, R. (2005). *Por que estudar a mídia?*. São Paulo: Loyola.
- Warburg, A. (2004). *El ritual de La serpiente*. City of México: Editorial Sexto Piso.
- Warburg, A. (2010). *Atlas mnemosyne*. Madrid: Ediciones Akal.
- Wulf, C. (2005). *Antropologia da educação*. Campinas: Alínea.
- Wulf, C. (2014). A criação mimética e a circulação de emoções: Um estudo de caso. In N. Baitello Junior & C. Wulf (Eds.), *Emoção e Imaginação: Os Sentidos e as Imagens em Movimento* (pp. 199-214). São Paulo: Estação das Letras e Cores.

BIOGRAPHICAL NOTES

Norval Baitello Junior is a researcher at CNPq and a post-graduate professor at Pontifícia Universidade Católica de São Paulo (PUC-SP).

E-mail: norvalbaitello@pucsp.br

Rua Itapicuru, 333, apto. 124, São Paulo, Brazil

Tiago da Mota e Silva is a journalist and has a master's degree in communication and semiotics from the Pontifícia Universidade Católica de São Paulo (PUC-SP).

E-mail: tiagomotasilva@gmail.com

Avenida Galáxia, n. 914, Arujá, Brazil

* Submitted: 10/05/2017

* Accepted: 30/05/2017