VIDEOGAMES AND (LANGUAGE) EDUCATION

Towards a critical post-videogaming perspective

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Abstract

There is a productive discussion concerning the use of videogames in (literacy) education, focusing on their unique pedagogic potentials and on their interconnection with contemporary developments in textual and semiotic issues. Our main aim is to extend this discussion towards a more critical post-videogaming perspective, in the sense that videogames have to be considered as part and parcel of the contemporary, complex socio-cultural and historical context. Therefore, we focus on highlighting indicative aspects of this complexity, and we adopt concepts from the field of critical sociolinguistics, such as scales, strategies, and orders of literacy. We analyze a combination of quantitative (1.185 questionnaires) and qualitative data (6 ethnographic case studies) originating from children 11-15 years old. Our analysis reveals that, although videogaming tends to be a common youth practice, the other important differences/inequalities permeating parenting strategies, school practices, and children's literate identities remain unchanged, posing serious questions in terms of the promising educational use of videogames. We propose a historically sensitive perspective in order to connect videogames with schooling and especially L1 teaching.

Keywords: videogames, post-digital, language teaching, critical sociolinguistics, literacy practices

1.   INTRODUCTION

The close etymological interrelationship among the words *παίζω* [*paizo*] (i.e. play in Ancient and Modern Greek), *παίγνιον/παιχνίδι* [*paignion/paichnidi*] (i.e. game in Ancient and Modern Greek, respectively) and *παιδεύω/εκπαιδεύω* [*paideuo/ekpaideuo*] (i.e. educate in Ancient and Modern Greek, respectively), which have the same root, that is, the word *παῖς/παιδί* [*pais/paidi*] (i.e. child in Ancient and Modern Greek, respectively) (Chantraine, 1984, pp.848-850), acutely demonstrates the strong interplay among game play, children, and education. Therefore, extending the aforementioned etymological similarities, it is not surprising that the turn towards the wide use of videogames in children's out-of-school time has engaged the attention of academic inquiry and public discussions related to education.

As we will discuss in the next section, relevant literature acknowledges, to a wide extent, the necessity of videogames' educational use in that (a) they have a unique learning potential, which facilitates changes to the present, static teaching culture, and (b) they constitute an important element of children's funds of knowledge brought to school, which should not be ignored.

Scientific inquiry related to the use of videogames in language education enriches the discussion with issues pertaining to literacy and semiosis. The majority of relevant literature (Beavis et al., 2017; Hanghøj et al., 2020; Marlatt, 2018; Steinkuehler & King, 2009) extends this discourse of pedagogic potentials to the digital literacy perspective, arguing that using videogames in literacy education offers the possibility of enriching the language teaching curricula in terms of the new textual, interactive and multimodal reality.

We consider that research of videogames in education has offered interesting pedagogical implications. However, we view it as mainly *edugamification*-centered, in that it has videogames as its starting and finishing point. We support that broadening the discussion towards a post-digital and, consequently, post-videogaming perspective, in which the importance of videogames is incorporated in a complex socio-cultural and historical context, will give rise to interesting new dimensions. In order to delineate this complexity, we draw upon notions from critical sociolinguistic traditions (social semiotics, Critical Discourse Analysis and sociolinguistics of globalization). More specifically, we use the notion of scales, which is widely used in recent sociolinguistic research. As it will be indicated in the next section, this concept has already been widely used in spatiotemporal terms, focusing on children's in and out-of-school literacy practices. The notion of scales, as it will be further developed in this paper, enables us to underscore the complexity of our times and enrich dominant approaches. We believe that the extension towards a multiscalar perspective in conjunction with a post-digital perspective, will facilitate the depiction of a more holistic and complex reality. In order to demonstrate this complexity at the level of children's literacy practices, we use the notion of "orders of literacy".

We use a combination of quantitative and qualitative data from a large-scale research project (2011-2015). Our data comprise 1,185 questionnaires completed by

children 11-15 years old and 6 ethnographic case studies with children of the same age. Our main aim is to turn the interest towards a post-videogaming perspective in research, focusing on the relation among children's videogaming, their wider literacy practices, their identities, and then connecting our findings with language education. This is an intriguing interplay and investigation which rarely is discussed in existing surveys on children's out-of-school game habits.

2. THEORETICAL FRAMEWORK

2.1 Academic discussions about edugamification

The turn to digitally mediated playing in children's life has dynamically fuelled a huge academic discussion around, what could be called *edugamification*, or the use of games in educational contexts.

This discussion is mainly based on a strong pedagogic assumption, because it is considered that playing digital games holds the most promising pedagogical and learning potential. It is stressed that the interactivity of games facilitates learning by doing, that learning is situated and based on learners' literate identities, and that the new knowledge is the result of immersed experimentation and collaboration (Beavis et al., 2017; Gee, 2003; Hanghøj, 2017; Jensen, 2017; Williamson 2009). Moreover, it is underscored that these practices are supported by online affinity groups wherein rich, collaborative, and supportive literacy practices take place (Gee, 2003; Steinkuehler, 2007; Zaidan, 2019). In this frame, contemporary schooling and curricular requirements are assessed depending on whether they "afford or limit the space for students' funds of knowledge to emerge within the classroom" (Abrams, 2012, p.2).

This discourse on the educational use of games is enriched by more specific arguments and research in language teaching, drawing from various theoretical traditions (for a comprehensive review, see Abrams, 2015b). Progressivist views (Chouliaraki, 1995) are permeating this research, such as principles of "the personal growth model" and in terms of the educational exploitation of children's out-of-school experiences, the questioning of the differentiation between literary canon and other art forms (Bacalja, 2020; Burn, 2016). In this line of thought, it is considered that children can engage in rich and complex literacy practices (reading, writing, sharing) surrounding game playing (e.g., paratexts, Apperley & Walsh, 2012; Hanghøj et al., 2020), using language for meaningful and multiple reasons, interconnecting traditional and new literacies (e.g., new narrative forms, new kinds of textuality in games) (Burn, 2016) and bridging in-school and out-of-school reality.

The impact of the multiliteracies tradition is underlined in relevant literature (Abrams, 2015a, 2015b; Beavis et al., 2017; Hanghøj et al., 2020; Marlatt, 2018; Steinkuehler & King, 2009, p. 57). In this case, the notions of new textuality, multimodality, design and text as action are quite prominent. To this direction, Beavis (2014, p. 435) remarked: "Games, it seemed to me, were dense, multilayered, and intertextual, and they exemplified literacy changing in the direction of design (Kress,

2003; New London Group, 1996)". Critical literacy traditions also have contributed to the development of critical approaches in the field (Bacalja 2018, 2020; Beavis, 2014; Beavis et al., 2017).

In short, the dominant arguments support the claim that using videogames in school settings can connect children's out-of-school literacies with schooled ones, balancing the traditionally called 'home-school mismatch hypothesis' (Koutsogiannis, 2009). The main assumption behind these arguments is that the use of games in school can bridge productively out-of-school practices, such as videogaming, with in-school realities, such as using ICTs for whole-class projection of information, drill and practice, simple internet search and basic IT skills. The interactive characteristics of videogames contribute to better pedagogic practices and especially to literacy and language development, and to easily connect the print-based schooled reality with the new 'textual' reality (Kress, 2010).

Apart from the dominant argument, there has been critical work on games and literacies (e.g. Buckingham, 2007; Burn, 2016). There also has been quite limited research that focuses on school reality and complexity, and interrogates some of the dominant "big ideas" (Williamson, 2009). In this line of thought, it is underlined that children have different experiences and attitudes towards games (Hanghøj et al., 2020), and teachers' experiences and educational identities lead to different choices in terms of game-based teaching practices (Beavis et al., 2017; Hanghøj et al., 2020). It is not accidental that, in research focusing on videogames as part of everyday school life, the emerging reality is far more complex and multidimensional, and, thus, less optimistic compared to dominant assumptions (Selwyn et al., 2017).

Part of recent relevant literature begins to question many of the widely accepted dominant dichotomies between the old and the new, the online and the offline, the digital and the printed, the material and the immaterial (Burnett, 2013; Burnett & Merchant, 2014), and it looks beyond the home-school binary (e.g. Bjørgen & Erstad, 2015; Bulfin & Koutsogiannis, 2012; Lenters & McTavish, 2013). Dualisms are also questioned in games, literacy and learning empirical research. Gilje & Silseth (2019), for example, following a student "across a wide range of contexts," highlighted "how young people's engagement in gaming and the knowledge acquired can be transformed into a literacy practice in school, where game play in itself is often not valued" (p. 189) (see also, Leander & Lovvorn, 2006).

The present research adopts such critical directions and expands its research lens towards three interdependent directions, following the spirit of a nexus analytic perspective, which approaches language or literacy practices as rich multilayered phenomena (Blommaert, 2005, 2010), wherein past and present, personal and social, local and global elements coexist in a complicated way. The first one is horizontal and focuses on a holistic approach, according to which videogames are viewed as part of children's (digital) literacy practices. This is explored in the next section under the term "post-digital". The second is vertical and attempts to highlight the dynamic –and often invisible– relationship among children's practices and current ideologies, agentive initiatives, contextual parameters, and social stratification. It is theoretically

explored under the notion of scales in the next section. The third is related to history because it does not approach the present school reality as simply static and enriched by the potential of videogames, but as an institution in a strong dialectic relationship with the past and present.

This nexus analytic perspective will be further elaborated by outlining our theoretical framework.

2.2 Theoretical perspectives

In this text, we claim that we need a different theoretical frame for enriching the extant research of videogames and education. Our fundamental assumptions are that we live in a complex world whose complexity is not only based on the wide use of digital media, in general, and of videogames, in particular. We claim that the present historical juncture can be conceptualized in terms of a nexus of economic, social, technological and individual variables. This complex reality can provide us with the necessary framework in order to understand children's videogaming practices, school as an institution, and the educational use of videogames. In order to meet these requirements, we need new conceptualizations, as well as corresponding methodological choices.

We claim that this theoretical inquiry should expand towards three interconnecting directions (in which new concepts have to be used), that is, towards a post-digital, a multiscalar - historically sensitive perspective and the relevant methodological choices.

2.2.1   Towards a post-digital / post-videogaming perspective

As it is already indicated, most of the literature discussed so far has a strong videogaming-centered focus, trying to capture the pedagogic potentials and the semiotic particularities of videogames. Although the perspective of considering games as strong learning vehicles has its interest, we believe that it should be supplemented with a post-digital perspective (see Blommaert, 2020; Knox, 2019).

We support that "the digital has lost its novelty or salience" (Fuller & Jandrić, 2019, p. 215), in that it has penetrated everyday reality and it has become part of wider practices and accompanying ideologies. Therefore, it is quite difficult and one-dimensional to approach children's literacy practices or education only in terms of specific digital environments (e.g. videogames), despite their significance. Thus, the emphasis on wider practices and actions, in which digital and non-digital could be intermingled (Blommaert 2019, 2020), has many advantages: (a) it incorporates games in the present era, which is hardly neutral (see Silcock et al., 2016), (b) it contributes "with understanding the digital as a moment in history, albeit a recent one" (Knox, 2019), which means that emphasis on history has a significant priority (Elf et al., 2020), and (c) it allows us to speak about children's literate identities and not just

gaming or digital literate identities. In other words, it is aligned with the essence of a social semiotic perspective in that "the social is prior" (Kress 2012, 2013).

Such a perspective allows, among other things, the connection of videogames to other dimensions related to the complex nature of contemporary times. Because "[t]ools are inseparable from symbioses," they are the organic part of a wider and multilayered social reality, and "a society is defined by its amalgamations, not by its tools" (Deleuze & Guattari, 1987, pp. 99-100) (see Koutsogiannis et al., 2020).

In order to consciously highlight this complex and multilayered reality, we employ the notions of scales and orders of literacy.

2.2.2   Towards a multiscalar perspective

The notion of scales is an analytic construct, which is widely used in the fields of sociolinguistics (e.g. Blommaert, 2019; Pietikäinen, 2010) and education (e.g. Canagarajaha & De Costa, 2016; Hult, 2017). It also is employed in literacy studies, mainly in global and local dimensions (Brandt & Clinton, 2002), as well as in the development of a "transliteracies theoretical framework" (Stornaiuolo et al., 2017). Most part of the already discussed videogames' research, as well as the investigation of children's digital literacy practices that focuses on the differences between out-of-school videogaming and schooled practices, could also be explained using the notion of scales in that it approaches these practices from a spatio-temporal perspective. Although this distinction has been questioned (see Bulfin & Koutsogiannis, 2012), it remains a basic (explicit or not) assumption in literature. To avoid this clear-cut distinction and to reveal the complexity of the issue, we use the term 'scale' "as an attempt to at least provide a metaphor that suggests that we have to imagine things that are of a different order, that are hierarchically ranked and stratified" (Blommaert, 2010, p. 33). We believe that there should be a turn towards a conscious multiscalar perspective, utilizing and expanding, thus, the relevant sociolinguistic inquiry. We will discuss below this transcalar perspective by exploring the socio-historical, the personal and the institutional scales that will be used in our analysis.

Beginning with the socio-historical scale, we support that in and out-of-school literacies are related to our era and history (see Collins & Blot, 2003; Green & Cormack, 2015). It is well known, for example, that L1 education has been formulated as a school subject through the historical lens of the nation-state, of a specific socio-economic and historical juncture, and, therefore, the school subjects "are social and cultural domains just as any other domain" (Moje, 2017, p. 248).

The creation and development of language education under these specific historical circumstances, the development of relevant theories and the power of tradition have created a common "metadiscursive regime" (Wee, 2011), according to which school reality is approached as natural, a given reality which is used as a starting point of every attempt for introducing new theories and technologies. However, school organization in subjects and classrooms, its spatio-temporal dimensions, the assessment principles and procedures are historical constructs. Therefore, the

emphasis on history, our era and its characteristics, as well as the different local traditions, are embedded on what we can consider as the socio-historical scale.

This approach of current reality as deeply historical is important. It is equally important to emphasize the role of children or parents, what is often called in literature "agency." This emphasis on the personal scale is also essential. To avoid the ambiguity of the term agency, we adopt the terms "design" (Bezemer & Kress, 2016; Kress, 2010, 2012) and "strategies" (Fairclough, 2003, 2005). Kress uses the term design to highlight the agentive processes of meaning making. We use it here more broadly, to reveal the agentive processes involved in designing one's future. In this frame, we consider all children and all family members as active designers of their future, but, although they try to respond creatively to the new global and local reality, they draw from different "available resources" (e.g., discourses about learning, schooling, literacy). Therefore, they are not equal in the design processes. In order to give to the notion of "design" a conscious ideological perspective, we adopt the notion of "strategies", as it is used in Critical Discourse Analysis (Fairclough, 2003, pp. 110-11, 214-215). Following Fairclough (2005, p. 55), we believe that during periods of big changes and crises, a space is created "for strategic interventions to signify and redirect the course of events (or to protect the existing 'fix')".

Emphasis on school as an important institution is also crucial for two, at least, reasons: it is an important element in families' choices for designing the future of their children, and it sponsors (Brandt, 1998) not only the in-school but important part of out-of-school children's literacy practices. Therefore, we believe that the focus on the personal level is inadequate without considering dimensions of the institutional and socio-historical scales. Our research so far (see Bulfin & Koutsogiannis, 2012; Koutsogiannis, 2011, 2015; Koutsogiannis & Adampa, 2012) has shown that the new reality of globalization has affected to a great extent children's literacy practices at a personal level because competition is introduced at a younger age. Families try to cope with this new reality by developing various socialization strategies, as well as choices for designing their children's future.

We approach videogames, as well as the new digital reality in literacy, as part of this complex in and out-of-school reality, which is interconnected and permeated by diverse discourses and ideologies. We acknowledge the mobility of children/families and institutions, not as just neutral willingness for mobility, but we try to interpret it within this socio-historical context.

The notion of scales in its three dimensions (socio-historical, personal and institutional) is very useful because it offers the opportunity to present a more complex perspective than the dominant in and out-of-school scale, and it gives the possibility to capture "a horizontal image of spread, dimension, degree" of literacies and a "vertical image of stratification" (Blommaert, 2019). However, this distinction is sometimes used quite generally, without clarifying the interconnection among the scale-levels. In order to avoid this danger, we employ the notion of "orders of literacy" (Koutsogiannis, 2015), which connects all scales in an interrelated manner. This concept is based on the Foucauldian notion of "the order of discourse" (Foucault, 1984),

as used by critical sociolinguistic traditions (Blommaert, 2019; Chouliaraki & Fairclough, 1999; Fairclough, 2003).

What we intend to capture with this term is "the lifewide systems of literacies that youth traverse" (Smith et al., 2020, p. 22) and to express the potential "normalcy" (Blommaert, 2019) in literacy practices. In other words, this notion is related to "the network of literacy practices (in official, unofficial, vernacular, digital or oral settings) a child participates…" (Koutsogiannis, 2015, p. 193). In this frame, the notion of orders of literacy attempts to understand videogaming from a more holistic, vertical and ideological perspective, as an organic (but not unique) element in the wide spectrum of literacies children participate.

We encounter two kinds of orders of literacy, at a personal and at a social level. The first is more idiosyncratic, and it is related with the habitus and the personality of every child. It is obvious that the orders of literacy in which every child engages differ. The second is more cultural, and it is based on a critical realist assumption that the social reality is structured but changing (Bhaskar, 1989). The personal level is depicted in ethnographic research, whereas the social level is demonstrated through quantitative research. We consider both research methods as complementary and we employ them in our own research.

To sum up, in order to highlight the complex contemporary reality (in and out-of-school), we use the notion of scales. However, because there has been criticism regarding the use of scales, in that binary "stable, static and clear-cut distinctions" are reinforced, we use them only as a departure point for our theoretical and methodological framework (see Blommaert, 2019). The combination with the notion of orders of literacy, along with methodologies drawing from the tradition of Nexus Analysis (Scollon & Scollon, 2004) contribute towards this research direction.

In this section, we have placed special emphasis on outlining a suitable theoretical frame in order to extend the existing problematic to a more holistic and complex perspective. The main aim of the next part of the paper is to use a combination of qualitative and quantitative data so as to index videogaming within a broader spectrum of socioeconomic, sociocultural, and personal dimensions.

3.   METHODOLOGY

As Law (2004, p. 5) indicated "methods, their rules, and even more methods' practices, not only describe but also help to produce the reality that they understand." Therefore, our methodological choices are consciously informed by our ontological-theoretical frame we have just described. Firstly, we adopt a post-digital/post-videogaming perspective. In this frame, one of our main goals is to approach digital literacy practices, and, more specifically, videogaming, in terms of a broader spectrum of children's practices. This is reflected both in our qualitative (ethnographic case studies) and quantitative part of our research (survey) because we attempt to map digital and non-digital, schooled and informal literacy practices, as well as the related ideologies. In our survey, for example, the focus on videogaming is just on two

questions in which children are asked: (a) whether they play videogames and (b) if they do, to write down their three most favorite videogames. Their answers have been coded according to the classification cited by Kirriemuir and Mcfarlane (2004), which is based on the genres of games (e.g. sports/action/adventure games etc.), and analysed by using diverse variables (demographic, family background, type of school etc.) and connecting videogaming with children's other literacy practices, such as watching television, playing games, mobile phone practices, use of word processing and presentation software for personal and school texts, email use, internet/website visits, Facebook practices, practices related to ICT integration in school lessons, foreign language literacies, reading books/magazines/newspapers, practices during holidays, other free-time activities. In such a frame, we aim to incorporate individual videogaming choices (personal scale), in a complex global and local environment (socio-historical scale), in which schools and their role can be understood (institutional scale). This is how we approach the social semiotic principle "the social is prior" (Kress, 2012, 2013).

The second assumption permeating our methodological choices is the basic principle of critical realism that the world is structured, differentiated and changing (Norris, 1999) and that science is viewed as a constant attempt to map the deep structure of a social or physical reality, which is unknown to us. A fundamental principle in this theory is that we can understand, and, thus, change the world, if we detect the deep structures activated by specific events and the discourses (ideologies) drawn upon (Bhaskar, 1989). Based on this departure point, the ethnographic part of our research focuses on mapping the orders of literacy at a personal level and highlighting the habitus, personality and mobility of children and their families. The quantitative part of our research investigates the extent to which these individual orders of literacy have a "normalcy" (Blommaert, 2019) in the researched sample at the specific historical moment, revealing, thus, some common characteristics we have called social orders of literacy.

We also attempt to investigate the extent to which the (social) variables related to children's digital literacy practices alter in the course of time or tend to become normalized at least during the last decade. For the sake of this investigation, we follow what Blommaert (2015) called "the Bourdieunian methodological loop," which means a sequential use of qualitative–quantitative–qualitative–quantitative research. In this way, our findings from the current research are crosstabulated with findings from our previous research, which took place in 2006 and was informed by similar theoretical and methodological principles. It comprised an extensive quantitative survey (4,174 questionnaires) and qualitative investigation (23 case studies, 77 semi-structured interviews) addressing secondary school pupils, aged 14–16 (Bulfin & Koutsogiannis, 2012; Koutsogiannis, 2009, 2011; Koutsogiannis & Adampa, 2012).

More specifically, the present data on youth digital literacy practices were collected as part of a broader project entitled: "Formulation of innovative methodology for educational scenarios based on ICT and formulation of educational scenarios for

Greek language learning lessons at Primary and Secondary Education." In this five-year project (2011-2015), selected, highly qualified language teachers from different parts of Greece and various types of schools (state, experimental, private) collaborated through online communities in order to design and develop innovative lesson plans with ICT implementation in Modern Greek language lessons. The students participating in our research as case studies and as respondents of the questionnaire attended the classes of the aforementioned language teachers.

The first research phase was conducted during 2011-2012 and involved the case studies of 33 students, 10-15 years old, focusing on their in and, mainly, out-of-school (digital) literacy practices, following ethnographic and qualitative techniques. The research team collected data through school and home visits, children's diaries, photos of their favourite objects, students' school assignments/texts, semi-structured interviews with children and their parents, extensive field notes, as well as a three-month social media investigation. This qualitative investigation, which consisted of 33 research reports, formulated the basis for the redesign/enrichment of the questionnaire originally used for the previous research conducted in 2006-2007. This survey was completed by 1,185 children in 2014-2015.

Throughout our research we have not adopted positivistic research traditions with an emphasis on representative data, checking concrete hypotheses and working in purely statistical terms. We move in the exact opposite direction, following the spirit of recent developments in critical sociolinguistics (Blommaert, 2010, 2013; Scollon & Scollon, 2004) that gives emphasis on the complexity and interconnection of different parameters. In this spirit, every case study is approached from a post-digital perspective, emphasizing the totality of children's practices, and not only the digital ones. In parallel, every child's literacy practice is considered as encapsulating a multilayered reality, which we try to capture using the theoretical framework we have already discussed (scales, strategies, orders of literacy). In the same line we interpret our qualitative and quantitative research data in a combined manner as a trans-scalar "nexus of practice" (Hult, 2017; Scollon & Scollon, 2004), in which many elements of the personal, institutional, historical, local and global are interconnected (Koutsogiannis et al., 2020).

Emphasis is also placed on highlighting not only similarities, but also differences. This is the reason why our research focuses on children attending different school types and having different school experiences: state schools, attended by most children; private schools, with high tuition fees, attended by students from high socio-economic status (SES) families; and experimental schools, which are state schools, but they cooperate with universities, they experiment with new curricula, teaching material and methods, and their educational staff is highly qualified.[1]

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[1] *For more information on the Greek educational system and different school types, see https://eacea.ec.europa.eu/national-policies/eurydice/content/greece_en & https://eacea.ec.europa.eu/national-policies/eurydice/content/organisational-variations-and-alternative-structures-primary-education-20_en (Last access 11/2/2021).*

4.   ANALYSIS

4.1 Quantitative analysis

Our data reveal that, indeed, videogames penetrate out-of-school everyday practices to a great extent as 84.4% of the students replied that they played PC, mobile, Facebook or PlayStation games. Such a high percentage is in alignment with other research (Anderson & Jiang, 2018; Chaudron et al., 2018; Common Sense Media, 2015; Koutsogiannis, 2011).

The crosstabs with other variables reveal that children play videogames regardless of their parents' educational and professional background or their mother tongue. There is a tendency for lower percentages in children from medium and high SES backgrounds, however with no statistical significance. This finding has also been the outcome of the analysis of our past data (Koutsogiannis, 2011).

Our data also show that not only videogames are popular among children. The following table includes children's favourite digital literacy practices. Apart from digital game play (84.4%), listening to music (83%), watching popular TV series (68.2%), using digital environments for chat (70.3%) and social media (Facebook profile, 61.7%) are the most popular (digital) literacy practices for children, regardless of other socio-economic variables.

Table 1: Children's popular digital literacy practices

Website visits for downloading/listening to music (YouTube)	83%
Watching popular TV series	68.2%
Using digital environments for chat (e.g., Facebook / Skype / Viber / Hangouts etc.)	70.3%
Digital game play	84.4%
Using social media (Facebook profile)	61.7%

The aforementioned research findings seem to support the view that this generation is primarily a digital generation because one of its main characteristics is the wide use of digital media. This characteristic reflects to a great extent Generation Z (Fullan, 2020) (see also, Parker & Igielnik, 2020).

However, important differences emerge when we turn our focus on out-of-school literacy practices sponsored by schools, that is, when personal choices (personal scale) are combined with institutional practices (institutional scale). To discuss this, we turn our attention to two widely used digital environments in Modern Greek language teaching contexts: word processing (Word) and presentation (PowerPoint) software. Their use is crosstabulated with four variables, which can demonstrate potential differences: school type, parents' educational and professional background and school performance. The following table shows statistically significant differences.

Table 2. Out-of-school use of word processing/presentation software and socio-economic variables

	Word & PowerPoint competence	Writing out-of-school texts and presentations for school subjects	Word & PowerPoint use (editing, inserting images / tables / graphs, spelling check etc.)
School type Parents' educational background	Private & Experimental University education	Experimental University education	Private & Experimental University education
Parents' profession Students' school performance*	High status Excellent[2]	High status Excellent	High status Excellent

*p < .001 only for state schools (agency – activation of the 'good student identity')

According to our findings discussed so far, some children's out-of-school literacies belong to a more informal scale, in which they widely use digital media and play videogames to a great extent, regardless of socio-economic variables. We could therefore claim that there is a strong part in their orders of literacy related to vernacular digital literacies. Digital games belong to this category (Table 1).

However, a large part of children's out-of-school practices is colonized (Fairclough, 2003), by schooled discourses, and, as competition addresses younger ages, such discourses will become even more pervasive (Koutsogiannis, 2009). In these school-oriented practices, a different set of literacies develops, which are not homogenous across all children. In Table 2 it is clearly indicated that social stratification (family SES background) appears to be quite important in children's school-type digital literacy practices (competence and use of Word and PowerPoint), in that children from more advantageous social groups seem to be more competent/skillful and use such digital environments more extensively. Moreover, the out-of-school use of word processing and presentation software is also closely associated with parental design through school choice (experimental/private). Another important variable is school performance, because students with excellent performance appear to 'invest' more on the use of such digital environments for schooled literacies. It is noteworthy that especially state school students with excellent grades seem to activate their 'good student identity' through the wide use of such digital environments. As Selwyn et al. (2017, pp. 153) remarked: "We certainly came across many academically engaged students who were using digital technologies to 'get on' with what was being demanded of them by education authorities. This involved using devices and

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[2] *According to the grading system used in the Greek education system, grades ranging from 18,5 to 20 are characterized as 'excellent'. For Greek pupils'/students' assessment, see: https://eacea.ec.europa.eu/national-policies/eurydice/content/assessment-general-lower-secondary-education-16_ro (Last access 15/5/2021).*

applications to complete school work, get good grades and move onwards through the system."

These school-type literacies are quite different from the ones related with informal practices, which involve the majority of children, irrespective of other social variables (except for gender). Therefore, it becomes evident that, if we abandon analysis based solely on spatial scales (in & out-of-school), and approach school and out-of-school time as a continuum ruled by specific values, then we discover that the out-of-school scale is not unified but differently structured, depending on the type of resources drawn upon by families and children for the design of their future (see Bulfin & Koutsogiannis, 2012; Koutsogiannis, 2015). In our qualitative analysis, we will discuss that the resources drawn upon are socially dependent, in that children and parents of different socio-economic backgrounds seem to employ different available resources.

This finding undermines one of the basic arguments used for the educational use of videogames and expands how we should approach children's literate identities. On the one hand, the orders of literacy of some children share many common characteristics around certain types of practices. On the other hand, they begin to have differences in practices which are more valued in the school 'market' (used in its Bourdieunian perspective).

4.1.1   *Videogaming and gendered identities*

Our quantitative research confirms the findings of international research (e.g. Carr, 2005; Thorhauge & Gregersen, 2019), according to which there are significant gendered differences in game play. More specifically, in our quantitative data more boys than girls play games, irrespective of other (socio-economic and cultural) variables. Moreover, as can be seen in Table 3, there are gender differences in videogame play, without statistically significant within-group (girls-boys) variation, and regardless of type of school, performance and SES background:

Table 3. Gendered preferences in videogame play (grouping)

	Girls	Boys
Videogames categories	-action (e.g. Mario) -puzzle (e.g. candy crush) -simulation (e.g. sims) -casual (e.g. fashion/beauty: stardoll, patty) -websites with many games (e.g. 1001 games) -school-type (riddles, crossword puzzles, anagrams, kidipedia etc.)	-role-playing (e.g. World of Warcraft) -sports (e.g. Pro Evolution Soccer, Fifa) -shooting (e.g. call of duty) -strategy (e.g. age of empire, civilisation)

Our data show that girls and boys have different preferred game genres, and, consequently, different types of gaming experience: girls prefer to play more casual,

simulation and puzzle games, having a relatively private experience, whereas boys tend to play sports, role-playing, shooting and strategy games, all of which are associated with a more social, collaborative and competitive style of play. In general, in our longitudinal study, digital game play has been a daily dominant practice for boys, which strongly connects them with their social network of male peers (at home or through internet café visits).

Apart from different gaming experiences, there are specific gendered identity performances around digital games: on the one hand, girls prefer to play casual games related to fashion, beauty, cooking, caring/nurturing, that is, pertaining to the domestic sphere and lifestyle culture. Boys, on the other hand, tend to play sports and fighting/shooting games, indexing particular gendered identities and sociocultural practices: "masculine figures, action, and combat featured centrally in boys' playground games" (Willett et al., 2013 as cited in Pallitt & Walton, 2015, p. 109).

Interestingly, there are strong affinities between girls' and boys' game preferences and their out-of-school print and digital literacy practices, as it is indicated in Table 4:

Table 4. Girls' and boys' out-of-school print and digital literacy practices

	Girls	*Boys*
Out-of-school time	a walk to the market, magazines for fashion, beauty and celebrity news, reading literature	magazines for cars, motorcycles, digital games/technology, sports newspapers, digital game play, internet café visits, reading politics, science books & comics
Television	Greek series/shows	sports programmes
Internet	websites related to: -celebrities -TV series -school subjects (encyclopedias, Digital School etc.) -music (YouTube)	websites related to: -videogames -sports -politics (e.g. newspapers, blogs etc.)
Facebook	Pages/groups for: - fashion - relationship issues	Pages/groups for: -game play -sports -technology -humour

As Carr (2005) aptly remarked: "It is not difficult to generate data that will indicate that gendered tastes exist, but *it is short-sighted to divorce such preferences from the various practices that form them* [emphasis added]" (p. 479). In our data (Table 4), girls' game play and other literacy practices (magazines, internet, TV shows etc.) are aligned with the globalized pop/celebrity culture and consumerism, whereas

boys' videogaming and other literacy practices (newspapers, websites, Facebook groups etc.) correspond to specific performances of masculinity.

Following a post-digital perspective, it becomes evident from Table 4 that there are actually two different social orders of literacy based on two different ways of conceptualizing and performing gender, which are not solely related to videogaming but to gender construction in contemporary times. Gender issues in game play seem to be quite complex since they are also defined to a certain extent within specific national and cultural contexts (see Inchley et al., 2016). There should be a more systematic inquiry into the gendered play preferences/differences and identity work, but it is beyond the scope of this paper to discuss gendered dimensions of game play and other literacy practices, as well as gender norms in Greece, in further detail.

4.2 Qualitative analysis

As previously mentioned in the methodology section, we have focused on the investigation of the literacy practices of 33 children (11-15 years old). Due to space limitations, in the following table we provide an overview of six (6) indicative case studies (3 girls and 3 boys). We have selected to discuss indicative case studies, in the sense that they are representative in terms of gender (3 girls and 3 boys), as well as from a nexus analytic perspective (discussed in the methodology section). Their out-of-school literacy practices are grouped, due to methodological reasons, in two broad categories: print-based and digital literacies, the latter being further subdivided in school and entertainment digital literacies (games, TV shows, internet and social media).

Table 5. Overview of indicative case studies (3 girls and 3 boys)

Case studies	Out-of-school (print-based) literacies	Out-of-school digital literacies				Remarks
		Entertainment Practices			School practices	
		Games	TV shows	Internet & social media		
Anthi 11 years old, 5th grade, state primary school in a rural area in Northern Greece, diligent student, father-taxi driver mother-farmer	-children's literature -Patty magazine -English lessons at a private language school (2nd year-A1+ level) -basketball & track sports	-websites with many games (dod.gr, friv, 1001 games) - school-type (riddles, cross-word puzzles, anagrams, scrabble type, etc.) -casual (fashion, dance, beauty, e.g. Barbie, Patty)	-various popular Greek and foreign TV series (Patty, CSI etc.)	-missed episodes of her favourite TV programmes (especially Patty) -information on Patty's protagonists, songs etc. -Patty's protagonist's songs on YouTube -sporadic information on basketball news, players etc. -chat with her friends / co-players at dod.gr	-word processing and presentation software for school assignments -internet search for information retrieval	continuities among her media and literacy practices, being based on her personal interest in the TV show Patty
Anna 17 years old, 9th grade (immigrant from Georgia, almost 1,5 year in Greece), state intercultural school in a big city of Northern Greece, mother-elderly care/house cleaner	-Cosmopolitan magazine in order to practise Greek -hapkido (martial arts)	-simulation (farmerama) (Russian fb)	-watching Greek TV shows (as another means of Greek language learning)	-Georgian TV series and films on YouTube -Skype, Facebook and a Russian social media environment (friends and relatives in Georgia and Greek language practice through her classmates' Fb posts) - gendered digital texts in Georgian ('mainly for girls')	-supplementary teaching/learning material (in digital form) for school assignments (copy-paste) -use of google translate (Georgian ↔ Greek)	practices (mainly entertainment/vernacular ones) related to her bilingual background

Elpida 14 years old, 8th grade, experimental junior high school of a town in Southern Greece, very diligent student, mother-owner of private kindergarten father-emergency medical technician	-museum visits and theatre in Athens - adolescent literature & detective stories -piano lessons -tennis and volleyball -English lessons at a private language school (C2 level) and German (private lessons, B1 level) -Sunday newspapers (mainly literary supplements)	-simulation (good game farmer, guitar hero) -action [Super Mario, Crash Bandicoot / Hidden Chronicles (fb)] -puzzle [fruit ninja (fb)] -sports games (football, tennis, volleyball) -websites with many games (e.g. friv.com, games.gr, dod games) (simulation and casual games)	-popular Greek TV series, detective TV series and films (e.g. Harry Potter, The Island, etc.) based on books	-missed episodes of TV series and information on their protagonists -information on piano virtuosos and music scores -songs and lyrics from YouTube -information on volleyball news, teams, players, events etc. -email (Yahoo) to cousins abroad and teachers for school assignments - Yahoo portal for information on current affairs	-specialized websites (e.g. Portal for the Greek Language), online dictionaries and corpora, as well as software for multimedia posters (glogster), for language lessons and relevant assignments (influenced to a great extent by her language teacher's practices) -word processing and presentation software for school assignments -use of Word for school's book club, as well as for personal texts (creative writing – novel for an adolescent) and song lyrics	-predominant 'diligent student identity' (see also influence by her language teacher's practices) - continuities among her media and literacy practices, being based on her love of music
Stefanos 10 years old 5th grade, state primary school in a big city in Central Greece parents-self-employed (home goods store)	-English lessons at a private language school	-strategy (Ikariam, warfare 1944, and others in websites, such as 1001 games) - car racing (Gran Turismo 5), football (Pro Evolution Soccer) and shooting games (Call of Duty) (playstation)	-popular Greek TV series, films (comedies, children's TV series), documentaries	-children's films and funny videos -msn for communication (local network of classmates) -website construction but no further development due to lack of support -digital game play (mainly strategy games) -skype (older player from a strategy game)	-word processing (upon mother's encouragement for essay writing) and presentation software for personal texts / presentations -experimentation with PowerPoint (Maths notes and a presentation on planets) -information retrieval (Wikipedia – self-discovery)	-agency → creation of website, experimentation with PowerPoint (and with PC in general) -strategy games in alignment with the child's personality (mature, organizing spirit)

Petros 15 years old, 9th grade, state junior high school in a rural area in Northern Greece, used to be a diligent student (grades declining due to adolescence and out-of-school interests); mother-nurse (military officer), father-farmer	-sports newspapers and magazines -English (private lessons) -football	-role-playing [League of Legends (LoL), with global network of friends, & Shakes & Fidget] - football (Pro Evolution Soccer), wrestling (Smackdown), and racing games (Need for Speed) (playstation)	-sports programmes, popular Greek TV series, films	-films -Greek pop music (YouTube) -sports news (e.g. gazzetta.gr), playstation games, and prices for guitars and sports shoes (ebay) -skype (other LoL players) -internet cafés to play games with friends (mainly LoL) and listen to music (YouTube)	-word processing and presentation software for school assignments -information retrieval (Wikipedia)	mainly entertainment practices related to his out-of-school interests, that is, football and videogames
Leonidas 13,5 years old, 8th grade, private junior high school in a big city in Central Greece, diligent student mother-lawyer father –civil engineer (working in Brussels)	-IT magazines -fiction in English -adventure and detective novels -Arabic (private lessons - language of the Koran) (upon 1st grade teacher's encouragement who noticed Leonidas's aptitude for foreign languages) -basketball -cinema with friends (adventure/action films)	-role-playing [League of Legends (LoL) with local (classmates) and global network of friends] -in the past, World of Warcraft (role-playing)/ has stopped because he had reached a high level and couldn't stay up late at night - football (with his father in the past), shooting (Call of Duty) (playstation)	-adventure films, detective TV series and comedies	-YouTube clips on videogames -rock/metal music (YouTube) -sports events (live streaming) -skype (father, who works abroad, and close friends)	-school library visits and use of its rich collection for assignments -English (B2 level) (see CLIL, private school's emphasis on English across most subjects) and French (A2 level) at school (interactive whiteboards) -word processing and presentation software for school assignments (in English as well) -occasionally email and fb (group school assignments) -internet search for information retrieval with a critical approach (issues of website reliability and remixing of online sources for school assignments) -school website (CMS) visits (announcements, student resources etc.)	-literacy practices influenced by school practices and its related emphasis on English (see also aptitude for foreign languages) - continuities among games (role-playing, shooting), films on TV and cinema (adventure /action/detective), and literature (adventure and detective novels)

The findings from the analysis of qualitative data—included in the table above—further support and develop the findings emanating from our quantitative research. More specifically, all 6 children under investigation as case studies play videogames. Some children play various and different games (e.g. Anthi) and other play fewer games (e.g. Anna). This finding is in alignment with the results of our survey and with relevant international research.

This table also confirms that boys play different games than girls. This finding appears throughout our longitudinal study of children's literacy practices. However, our qualitative research shows that this disparity is not always clear-cut. There are, for example, girls such as Elpida, who play 'boyish', sports games. This game preference is related to what Gee might have called strong sports Discourse (Gee, 2015), because she plays volleyball and tennis. This aspect of her identity affects the kind of orders of literacy in which she engages, part of which include digital literacy practices around sports (e.g., searching information on volleyball news, teams, players, events). It is interesting to note that, in our data, some primary school girls due to their extracurricular sports activities develop a strong set of literacies related to sports because they engage in videogaming and other literacy practices revolving around sports (e.g., websites for teams, sports news/events, scores etc.), however with a permeating lifestyle element (e.g., searching information about male football/basketball players with a celebrity status, such as Beckham, Ronaldo).

Qualitative research also shows that certain practices are "truncated" (Blommaert, 2010), that is, although they exist in a specific field, they are not necessarily present in other fields. This means that it is not taken for granted that a child engaging in sports activities will actually develop literacy practices revolving around sports. Anthi, for example, plays basketball and does track sports as free time activities without developing relevant literacy practices. The same applies to foreign languages. While many children learn German out-of-school (e.g. Elpida), they do not necessarily participate in literacy practices related to German language. On the contrary, English is widely used, especially by students attending private schools, which is connected with the schools' teaching practices (e.g. Leonidas). Such teaching practices can only be understood in the context of the global role of English in contemporary times.

Therefore, it is quite interesting that the children's orders of literacy are not evenly distributed across all fields. In certain cases, the literacy practices developed focus on one of the fields depicted in Table 5. In other cases they permeate many fields (e.g. sports and music in Elpida's case). What is of importance is to detect in which cases there are continuities and the formation of a strong network of literacies within a child's orders of literacy (or not). For example, in the cases of Elpida and Leonidas—children with a more privileged socio-economic background—it becomes evident that an important part of their literacy practices relates to highly valued literacies by parents, school, and Greek society: multilingualism (i.e., Leonidas's aptitude and his school's emphasis on English across the school curriculum), reading literature (such as adolescent literature, fiction), functional ICT integration in school

subjects (i.e., the school's role is important in both cases). The two children's orders of literacy are quite different from the rest, and, if our quantitative data is taken into consideration, it seems that these two cases are indicative of a larger category of children attending experimental and private schools, who share common characteristics in their school-based literacy practices.

Let us have a closer look at Elpida's case study. There is a strong network of (digital) schooled literacies in her orders of literacy, also depicted in the school-type organization of her free time activities (projection of a diligent student identity). Being an experimental school student offers her the opportunity to engage in a wide range of literacy practices, digital and print (see also her language teacher's role through the use of digital environments for L1 teaching, students' participation in a book club etc.). Apart from her schooled literacies, she also engages in entertainment literacy practices, offline and online, mainly related to music and sports.

On the other hand, if we focus on the other children's literacy practices (Anna, Petros), we conclude that their out-of-school orders of literacy include a strong network of informal literacies but also a truncated part pertaining to their schooled literacies, because they are not adequately developed by the present state school culture and their families' strategies. Following a post-videogaming perspective, according to which videogames are incorporated in the present complex historical juncture, it becomes obvious that videogames constitute an important part of the students' everyday literacies, but the other differences prove remarkably persistent. Such differences are hardly discussed or investigated despite their importance for schools and L1 teaching.

We could say that a trans-scalar perspective helps demonstrate that there is not discontinuity but continuity between in and out-of-school children's practices. According to our data, we could make the following distinctions: there are two types of continuity, out-of-school oriented and in-school oriented.

In the first case, our investigation has shown that all children use digital media out of school for their school assignments. However, there are differences in the type and range of digital media use for schooled literacy practices. These differences are detected in the ways each school conceptualizes digital literacy. One of the main practices colonizing children's out-of-school time is writing presentations and searching the internet for information. This is mainly the case for state schools, and it has a ritualistic character, just like book-based exercises (see Anthi, Petros). Many of these practices are the outcome of L1 Greek language teaching. Our data lead to the conclusion that the ways of conceptualizing digital language teaching formulate to a great extent the children's out-of-school experiences. This means that the emphasis should not only be placed on children's informal literacies and their incorporation in school practices but also on the kind of practices (that should be) developed in school and language teaching in order to use children's out-of-school time creatively. The Greek (state) school's emphasis on ICT integration simply for whole-class projection of information, for drill and practice, for internet search without any guidance and filtering of data, as well as for basic IT skills, has a significant contribution

to the formation of specific orders of literacy and literate experiences. In cases where school and teachers' initiatives are more dynamic (e.g. Elpida), things are quite different.

Therefore, while all children play videogames and the differences are mainly gendered ones, our analysis—which approaches videogaming in terms of the whole spectrum of children's practices—shows that there are deeper differences connected with various school practices and parents' strategies, affecting children's in and out-of-school time.

In the second case, a distinction can be made between a visible school-oriented and an invisible school-oriented continuity. In our longitudinal research, we have not detected any educational use of videogames, which means that their integration in school practices is quite marginal and that there are no, to our knowledge, visible school-oriented cases of continuity. In general, research on videogaming from a literacies perspective in a Greek context is rather limited (see Kiourti, 2018).

To the contrary, the invisible school-oriented strategy is most common, and it is mainly developed by families of a more privileged socioeconomic background. The case studies of Elpida and Leonidas are indicative. Elpida's out-of-school (print-based) (museum visits and theatre in Athens, language learning at a higher level, reading literature) literacies are as highly valued as school-type literacies or they are acknowledged as being typical of more privileged social strata in the Greek context (e.g. piano lessons and tennis). These practices complement schooled ones, which have a functional digital literacy orientation (e.g., specialized Greek Language websites, creating multimodal texts (posters), using word processing for creative writing etc.). Leonidas's out-of-school (print-based) literacies are also as highly valued as school-type practices: reading fiction in English (see his school's role), going to the cinema, multilingualism (Arabic private lessons). Our longitudinal research indicates that there is a clear strategy in the designs of these families, i.e. to construct a harmonious synchronization between the activities sponsored by parents and by school.

The aforementioned examples are indicative and demonstrate that there is an invisible continuity between out-of-school and in-school practices, which is also evident in the analysis of our quantitative data (Table 2). It seems that literacies are not simply many, digital or multimodal. It appears that the in-school and out-of-school scales are much more complicated, and that personal choices (personal scale) are quite different as to how school (institutional scale) and socio-economic reality (socio-historical scale) are conceptualized. We have concluded from our research that all families and children, consciously or not, develop strategies, and an important part of these strategies is the acquisition of schooled literacies, as they are approached by the formal educational system. This type of literacies, bounded by the school curriculum, are essential for all parents. There is also another type of schooled literacies, that we could call "enriched schooled literacies". In the Greek context, they are literacies developed by certain private and experimental schools in third space contexts (e.g. after-school clubs). They are usually digitally oriented practices (e.g. robotics, STEM etc.). The development of such literacies is primarily the main

aim of high SES families, who prefer either private (if there is adequate economic capital) or experimental schools. It becomes obvious, then, that "different literacies have different currency on the 'literacy market'" (Scollon & De Saint-Georges, 2011), and that it is not possible for all social strata to acknowledge and act upon such differences.

It is interesting to note that literature around digital games extensively proposes their integration as part of enriched schooled literacies. The question posed is quite obvious: will the addition of another element to enriched schooled literacies change the present complicated reality and for whom?

5.   CONCLUSIONS AND DISCUSSION

Most of the literature related to the use of video games in education is videogaming-centered. This has led so far to a deep understanding of their pedagogic potentials and, above all, to their interconnection with contemporary developments in textual and semiotic issues, which is very crucial for language teaching.

However, we have argued in the present text, through the analysis of qualitative and quantitative data, that a shift towards a critical post-videogaming perspective is necessary, in the sense that videogames are not the only one new element in our time but one of the many different elements in the present historical juncture, and that our main aim was to focus on highlighting indicative aspects of this complexity. To achieve these aims, we have adopted concepts from the field of critical sociolinguistics, such as scales and strategies, and we have coined the notion of 'orders of literacy'.

Some of our findings are aligned with international research. Indeed, videogaming is an organic part of children's out-of-school practices, and the differences seem to be related only to gender because girls play different games and to a lesser extent than boys. However, the analysis of our data through a trans-scalar perspective revealed some interesting new findings.

The first is related to the fact that videogaming is part of a wider set of practices in which most children participate. Therefore, they develop a strong part of their out-of-school orders of literacy that are mainly, but not exclusively, connected to specific digital environments. However, treating children's free time activities not as unified and neutral but as penetrated by power ideologies, such as school-sponsored literacy practices or parenting strategies in the process of designing their children's future, reveals important differences.

Our analysis reveals that, while their informal digital practices, including gaming, are indexes, to a great extent, of a rather homogenous youthful world, their digital practices 'sponsored' (Brandt, 1998; Smith et al., 2020) by schools are quite different, contributing to the construction of unequal orders of literacy. Interestingly, such differences seem to reproduce and expand the inequalities already known by the literature related to print literacies (e.g. Heath, 1983; Lareau, 2003). The focus on gender from the same perspective also highlights similar concerns. It turns out that

the differences are not just related to videogaming but they are part of discourses on how gender is performed in the Greek society.

These findings challenge the predominant argument, according to which children's out-of- school funds of knowledge are identified with videogaming. Our analysis has shown that children come to school with a common fund of knowledge only in certain aspects of their orders of literacy, but with significant differences in what the literacy market considers as powerful literacies, such as school-type literacies. According to our research, the partial focus on a part of children's knowledge fund, in what is called "gaming capital" (Consalvo, 2007), carries the great risk of hiding the nuanced aspects of social differences and inequalities.

A second finding is related to children's different out-of-school literacy practices sponsored by schools. Our data indicate that schools constantly offer opportunities for literacy practices in children's "free time", and that these opportunities vary greatly from school to school and, obviously, among teachers. In this case, too, the most privileged social groups seem to have many advantages, since they have the possibility to use certain strategies and implement their designs in terms of school choice for their children. In other words, it seems to be confirmed once again that "classrooms and schools in contemporary societies embody a common historical contradiction: they promise equality of opportunity, but they help to replicate existing inequalities" (Collins, 2012, p. 209).

In such a reality, the introduction of videogames in schools is not easy and it will not solve many of the existing problems. The fact that it is not easy is indicated by research itself, because most attempts are not incorporated into the core curriculum. Hanghøj et. al (2018, p. 775), for example, underlined that, although "digital games have become a key medium in the education field, […] the combined social and curricular promises of gaming have hereto not been studied in the context of classroom inclusion interventions". Therefore, it is not accidental that many research projects take place in "third place contexts" (De Paula et al., 2018; Martin & Steinkuehler, 2010; Steinkuehler & King, 2009, p. 57; Stufft et al., 2016), in which the use of videogames is quite safer. If we consider the Greek educational structures and traditions, it will be easier for the most privileged schools (private, experimental), that already seek an enriched approach to their language courses, to incorporate videogaming, possibly in third place contexts.

All these findings lead us to our concluding remark. The transfer of the research lens from a perspective that considers the existing teaching reality as given, that has to be enriched through the use of digital games, to the one that understands school and school subjects as "social and cultural domains" (Moje, 2017, p. 248) has major consequences. This historical perspective (see Elf et al., 2020) turns the focus to the historicity of our time and to how it is possible to react on it. In this case, emphasis has, inter alia, to be placed on highlighting the characteristics of our time which are, among other things, "closely associated with the sort of subjectivity reinforced by modern society", a "subjectivity preferred by the market", a subjectivity with deeply different social, conceptual and ethical considerations and requirements to those of

'worker' or 'citizen' (Kress, 2010, p. 20). This perspective suggests that "nothing hap-pens [hence videogaming and schooling] in a social and political vacuum" (Scollon & Scollon, 2004, p. viii).

Therefore, such an ontological turn requires the transition from the focus on the educational use of videogaming to more open and consciously political questions, such as: what kind of changes must be designed in the present school, for what kind of future and why? What kind of changes have to be designed in language teaching, for what kind of citizen and why? To what extent and what aspects of the present economic, social, cultural and technological reality have to be taken into account for this discussion?

Edugamification will, of course, play an important role in the yet-to-be thought of these designs, but not the exclusive one.

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