FRAMING PLAY: THE RELEVANCE OF GAME STUDIES FOR DESIGN DISCIPLINE AND THE VALUE OF DESIGN RESEARCH FOR GAME DESIGN EDUCATION

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ABSTRACT

How do video game studies, as part of the digital humanities, inspire the design research community and how does design research influence game design? How should design values lead game design education, a field where designers are instructed to operate as subordinate players within the larger economic system, just like—as many customers—gamers are?

This paper explores these questions by highlighting how seriously video games and interactive media are now part of a design culture that is today intertwined in interdisciplinary discourses, reminding us of the leading role that design may play in the future of leisure development. The video game industry remains harnessed to productivity and quick profits, which produces fads, banal theming, consumerism and indifference to the growth of players. Fortunately, as is the case in many other design fields, game design also offers more personal, avantgarde and critical approaches that creates opportunities to produce original visions of our future, encouraging individual reflection and performances through which critical insights may emerge.

Game design is a particular, complex and multilayered design activity that takes place in a specific domain: the aesthetics of interactive systems, whereby systems of meaning are established by rule sets resulting in play. Beyond this field, many inquiries corollary to game studies such as ludology's early epistemological deliberations or filiations to scientific or humanistic traditions sound like echoes of former design disciplinary debates. Such knowledge should transcend design domains and academic boundaries to pervade contemporary design studies and instruction.

Keywords: Design research, Digital humanities, Game design education, Game studies, Interdisciplinary design discourse.

1 INTRODUCTION

In the artefactual universe of technology, most game design fields began as offshoots of video game development and programming, not as established crafts and design practices. Even in the flourishing field of game studies, key design aspects are ignored or belittled, just as video games are by the design study community, being, for them, a mere grain of sand on the beach of design culture.

This communication gap is small in comparison to the larger issue of interactions between disciplines, sometimes derided as "academic silos" and seen as a hindrance to the development of innovative ideas or the exchange of ideas between scholars who work on similar matters. Design and games as objects of study thus follow similar transcendent trajectories in terms of academic interest and consulted. Both are inherently interdisciplinary by nature as well as actual—and more than ever, necessary—research components in contemporary knowledge production within the digital humanities.

Not surprisingly, some design work is taking place in game studies, as games or

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PARIS DESCARTES UNIVERSITY PARIS SORBONNE UNIVERSITY PARIS COLLEGE OF ART ISTEC PARIS play are now associated with work on design practices on the outskirts of the game design domain. Furthermore, video game studies have been historically aligned with techno-industrial standards, adopting or directly criticizing their proximity or relevance. This frame of reference may lack some significant insights that contemporary design studies and research have revealed over the last decades. This headway could greatly contribute to the advancement of game studies, notwithstanding the fact that contemporary design values can practically improve game design education.

2 DESIGN AND "STUDIES" ACADEMIC MOVEMENTS AS REWARDING TRANSDISCIPLINARY DEEDS

Multidisciplinary collaboration in nothing new in design practices: the extent and grade of such relationships are however reorganized. The increased complexity and multifariousness reflected in the realm of design research gained ground in academic contexts as design education became progressively grounded in design theory and reflexive practices. Still, according to Jacobs (2014), dialogues now characterized by "interdisciplinarity" raise suspicion about fashionable subjects that attract more fee-paying students than the less employment-focused and often more intellectually challenging traditional subjects. Short-cuts may be taken to meet governmental priorities and to receive funding on the grounds of "knowledge transfer", "economic relevance" or other dubious criteria. In short, this is a demonstration of the instrumentalization of knowledge.

In such circumstances, the difficulty of establishing a disciplinary framework around design or games becomes evident, since into account that the disciplinary nature of academia is deeply rooted. In ancient times, the term "universities" referred to associations or corporations, and more specifically to the community of teachers and scholars (universitas magistrorum et scholarium) (Encyclopædia Britannica, 1911) where the organization of learning and knowledge were traditionally taught under customary divisions. At the time, mystical concerns mingled with speculation on numerals: a group of seven mystic categories of liberal arts where regrouped under the trivium (the power of language: grammar, rhetorics and dialectics) and the quadrivium associated with the mathematical sciences (the power of numbers: arithmetic, geometry, music, and astronomy). Following Nelson and Stolterman, in this context design may be understood as a "tertium quid-a third way-distinct from the arts and sciences" or a "reconstitution of sophia-the integration of thought and action" in the shadows of the traditional Western division between science and craft, sciences and humanities and even the everyday dichotomy between thinking and doing, theory and practice (2012:11).

As may be expected, the aptitude for design and the desire to innovate are commonly seen at work in areas at the cutting edge of knowledge or fields cultivating emergence and novelty. Often, they are found on the frontier between recognized disciplines and this led some innovation-oriented thinkers to call for the rejection of traditional disciplines altogether. Frequently called "transdisciplinary", this way to do scholarship involves operating more or less permanently at a stage "beyond disciplinary boundaries" (see Thompson Klein & al. 2001).

In fact, design culture (concomitant to design studies) and design research (as a formal procedure or an investigative methodology) are now concepts commonly associated with many different disciplines and fields of study where topics and

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PARIS DESCARTES UNIVERSITY PARIS SORBONNE UNIVERSITY PARIS COLLEGE OF ART ISTEC PARIS approaches are mixed together. Game studies also remain a highly interdisciplinary field, and as such tend to bring together scholars from a wide variety of fields and analytical practices (e.g. Stobbart & Evans, 2014). Taking this distinctive path, many "studies" interdisciplinary academic fields concretize symptomatic traces of academia's post-structuralist crisis: when universities could no longer confine knowledge into existing "structures". Fortunately, while embracing this "impossibility", new fields spun off existing ones and blossomed into organized research.

3 GAMES, PLAY AND DESIGN: CUSTOMARILY INTERTWINED MATTERS

As many everyday things, the many items in our day to day existence, games appear as deceivingly simple objects for analysis. For a long time, they represented the most overlooked field of knowledge. This may explain why cultural studies, social sciences and many other fields took so long to engage them in a proper manner from different perspectives. It noticeably contrasts with gamers that discuss the various aspects of video games, critiquing storylines and fictional worlds, graphics and video performance, audio and music, but more often its dynamic interactions, its "core": the gameplay (see Mäyrä, 2008).

As a possible explanation, Shepherd and Wallis (2004) point out that, as a cultural construction, playing has had a "pejorative status" in the Western tradition, being disregarded as regressive, unreasonable, childish and wasteful. This mind set may also explain why game designers were isolated from interface designers and human-computer interaction experts for such a long time. In 2000, designer Chuck Clanton (p. 301) noticed that hardly any software designers attended game design conferences, and that few game designers knew much about the human-computer interface (dubiously acronymed as "HCI") design community:

Almost every game I play has one or more flaws that HCI designers know how to remedy. Yet, I suspect that few HCI designers could design a great game. Likewise, few software applications show any awareness of techniques of game design that could make them easier and more fun to learn and use.

At the time, the human-computer interaction community had already seen empirical evidence that showed the value of user testing and iterative design, but these techniques were still meeting some resistance in "serious" software companies. Ironically, playtesting—paired with quality assurance testing—was already a well-accepted technique used during video game development.

Today, most game design academic curriculums introduce ergonomic aspects. Game designers usually expect the quality of a game to improve as the design evolves during repeated cycles of prototyping, playtesting, evaluation and revision (Fullerton, 2008), the projects' lifecycle tending to be built around the concept of iteration (Nielsen, 1993). Still, it can be argued than it is playtesting expertise, not HCI, which eliminates the most crippling user interface mistakes. Many design practices such as information design, "the translating [of] complex, unorganized, or unstructured data into valuable, meaningful information" (STC, 2012) or interaction design, the "focusing on the fit between human actions and system responses" (Murray, 2012: 10) are also part of the game development process (for more details: see Mauger, 2014).

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4 (VIDEO)GAME STUDIES: BRIEF RESEARCH OVERVIEW

As games studies investigate play and games in the broadest sense of the term, video game studies look more closely at video game technology, industry, conventions and recent history. It borrows elements from traditional game studies and incorporates an ever-widening range of fields of inquiries; as illustrated by the appendix "Video Games through Theories and Disciplines" (Perron and Wolf, 2008: 331-388), which provides many starting points for interdisciplinary research. That list includes:

Anthropology, Art and Aesthetics, Artificial Intelligence, Business/Industry (includes Marketing), Communication Theory, Computer Graphics, Computer Programming, Cultural Studies, Design, Economics, Education, Ethnography, Film Studies, Game Theory, Gender Studies (includes Feminism), Genre Studies, History, Human-computer Interaction, Interdisciplinary Studies, Law, Literary Theory, Ludology, Media Ecology, Medicine, Methodology, Narratology, New Media (includes interactivity), Phenomenology, Philosophy, (included Morality and Ethics), politics, Psychoanalysis, Psychology, (includes Cognition, Emotion, and Pleasure), Reception Theory, Semiotics, Sociology, Subcreation Studies, Television Studies, and Theater and Performance Studies.

After an initial development in the late 1940s and subsequently when Nolan Bushnell and Atari made commercial success in the 1970s, video games became subjects of descriptive analyses in consumer magazines. Over the next decade, detailed and rigorous academic analyses were relatively rare, and then some of the first scholarly studies of video games were published (e.g. Greenfield, 1984; Price, 1985). After which, their numbers increased, covering the key topics specific to video game research during the 1980s period, from the video game as learning tool (e.g. Malone, 1980) to the psychological and physiological effects of violent video games (e.g. Dominick, 1984) [for more details: see Myers, 2014].

These approaches to computer game studies can be thus understood by their focus on video games as an object of study, on their design, or their reception. Games may also be studied as an aesthetic, cultural or social phenomenon (Raessens and Goldstein, 2011: xii). Research on video game players is also burgeoning, using methodologies from earlier related mass media work. These include studies of video games as potential tools for educational use (e.g. Gee, 2004) or for ethical consideration (e.g. Sicart, 2011). Video game context, the video game play, is another broad category of work often related to cultural studies. Ethnographic methods have been used early in a role playing context (e. g. Fine, 1983). Since then, online game worlds have also been studied for their economies (e.g. Castronova, 2005), their relation to work (e.g. Dibbell, 2006) or the place they take alongside other consumer goods in the capitalist market economy (e.g. Dyer-Witheford & de Peuter, 2009).

Many new academic journals (e.g. *Games Studies*, 2001; *Games and Culture*, 2006; *Eludamos*, 2007) now publish videoludical work. Associations like the academic Digital Games Research Association (digra.org) or professional ones such as the International Game Developers Association (IGDA-SIG) or the Institute of Electrical and Electronics Engineers (IEEE-CIG) also network researchers through annual conferences and the publication of their proceedings. As in many other design fields, influential industry-related products

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PARIS DESCARTES UNIVERSITY PARIS SORBONNE UNIVERSITY PARIS COLLEGE OF ART ISTEC PARIS analysis oriented materials are now published online (e.g. *Gamasutra*). They usually combine critics, business and design practices overviews and their popularity affects academic publication in general. Not surprisingly, the recognition of video game studies and dominant research themes follow the economic growth of the game industry. Accordingly, many game scholars are theorists-practitioners that were once part of the business, who still participate in the game or are now vividly criticizing it, usually urging for thematic changes and gameplay innovation.

5 WHAT ABOUT LUDOLOGY?

From the Latin *ludo* and *ludus* ("play"), ludology is an ambiguous term in game studies and game research. Game scholar Jesper Juul (2013) pointed out that it appeared as early as 1951 with Per Maigaard's "About Ludology" and in 1982 with Csikszentmihalyi's "Does Being Human Matter – On Some Interpretive Problems of Comparative Ludology". However, the term only gained popularity in 1999 after Gonzalo Frasca's article entitled "Ludology meets narratology: similitudes and difference between (video)games and narrative."

At the turn of the millennium, approaches to play and game studies derived from multiple disciplines and did not form a unified field as the multidisplinary (video)game studies is today, rallied around a recognized but diverse core of academic knowledge. As Espen Aarseth summarizes, ludology then referred to: "(1) the study of games in general, or (2) to a particular approach to game research, or (3) to a movement active in the years 1998-2001" (2014: 185).

The second and third refer to the "ludology vs. narratology debate" that revealed the very early stage that game studies were in, "where the struggle of controlling and shaping the theoretical paradigms [had] just started" (Aarseth, 2001), this state of affairs led to a prevailing desire for more institutional autonomy for the field of game studies (independent departments for game research). Thus, proponents of "normative ludology-as-criticism" were skeptical before the attempted marriage between game design and storytelling in the application of archaic models as "ludology as methodological critique" frowned upon academic attempts to theorize games based on a misconceived conflict (Aarseth, 2014: 187). Ultimately:

Ludology is not a discipline. It is not even a paradigm, but mostly a reaction to bad scholarship and a critique of untenable positions, as well as critical response to the aesthetic problems of game/narrative hybrids of the 1990s. As the former, it is still relevant [...], but as the latter it has been overtaken by game designers' considerable ludo-narrative advances over the last decade. (p. 188-9)

6 DESIGN RESEARCH FOR GAME STUDIES: REFINING GAME DESIGN PRACTICES AND CRITICISM

Design is an important point of convergence in game studies, where theoristpractitioners try to conceptualize video games with the intention to facilitate game development and understand the intricacies of a medium that is at once art form, technological assemblage and a multipurpose social, communicational and learning tool. Frans Mäyrä (2008) argued that games are best conceived as multi-layered systems and processes of signification that merge representational

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In methodological terms, for most uses and purposes, the analysis of a game as an abstract structure without any consideration of its playing practices would be deemed insufficient, as would a study of game players not informed by some system-oriented analysis and understanding of the ludic nature of this particular game and its gameplay. (Mäyrä, 2009: 314).

Chris Crawford (1982) was one of the first game designers to adopt this approach. However, most of the books that purport to be about game design theory with titles like *Game Design: Theory and Practice* (Rouse III, 2005), focus much more on the latter than the former. Such practical guides look more like an instructions manual in the context of commercial computer games than aesthetics or critical theories (e. g. Guardiola, 2000; Rollings & Morris, 2000; Laramée, 2002; Rouse, 2005; Genvo, 2006; Kerbrat 2006; Bateman, 2008; Despain, 2008 & 2009). This trend was followed by another generation of game designers-theorists and academics working along similar lines but according different goals and concerns about the improvement of the video game medium (e.g. Mateas, 2001 or Bogost, 2008).

Such stance may also be incorporated into larger educational concerns. For game designers, scholars and teachers Katie Salen and Eric Zimmerman, (see: 2005) the goal of successful game design is a "meaningful play" that "occurs when the relationships between actions and outcomes in a game are both discernable and integrated into the larger context of the game" (2004 : 34). Their seminal *Rules of Play* is both a reference book and a theoretical guide structured around core concepts and detailed discussions related to a conceptual triad of rules, play, and culture. Comprising guest contributions, including one essay and four commissioned games discussed alongside prototype materials, this publication is a milestone of game design study and teaching.

Brenda Laurel, professor and interaction design consultant, started using games for her work back in the early 1980s as a member of Atari's research team. In the 1990s, Laurel was one of the strongest voices in virtual reality research and co-founded one of the first American software companies to specialize in developing games for girls: Purple Moon. In 2003, she edited *Design Research: Methods and Perspective* a book that introduces "designers to the many research tools that can be used to inform design as well as to ideas about how and when to deploy them effectively" (Laurel, 2003: dust jacket). Of 45 designerly contributions, it is noteworthy that eight texts discuss games or video games and that two more address play activity, enlightening how game creation is well suited to provide a model of research through design.

If here, design researches uphold game design and studies, video game may also reveal new difficulties awaiting design discipline in the near future. As Anthony Dunne (2005) suggests, while adopting a "critical design" stance questioning the "mainstream view of industrial design serving the narrow commercial interests of industry as opposed to a more general social role for design" (p. 149); "[t]he most difficult challenges for designers of electronic objects now lie not in technical or semiotic functionality, where optimal levels of performance are already attainable, but in the realms of metaphysics, poetry, and aesthetics, where little research has been carried out" (p. 20).

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7 TO CONCLUDE: DESIGN AS CONTEMPORARY PARADIGM FOR HUMANISTIC EDUCATION

Just as play activity and videogames become prevalent objects of study in the digital humanities, the "ludic turn" envisaged by twentieth century play theorists such as Johan Huizinga (1955), Victor Turner (1982) and Brian Sutton-Smith (1997) has taken over the world. As Bayliss and McKinney (2007) observed in their interdisciplinary exploration of the fruitful relationships between design and performance:

We live in an increasingly ludic society where understanding of play, its place within culture and the values we attach to it are becoming ever more significant, not only in the leisure industry and within the creative field but also in the work place and in everyday interactions between groups and individuals. (p. 357)

This particular setting also plays a role in the rising experimental model of the digital humanities. Clearly engaged in design practices, it represents new opportunities for scholarly knowing through making. According to the authors of *Digital_Humanities* (see Burdick & al. 2012), "[d]esign emerges as the new foundation for the conceptualization and production of knowledge" (p.117). It engages with a striking variety of endeavors, pushing the boundaries of work, thus moving "design—information design, graphics, typography, formal and rhetorical patterning—to the center of the research questions that it poses. It understands digital and physical making as inextricably and productively intertwined." (p. vii)

By virtue of this rethinking of the basic forms and norms of education, "[d]esign methods inform all aspects of humanistic practice, just as rhetoric once served as both its glue and compositional technique" (p. 118). As such, "[a]Il future scholarly projects that do not aspire to the highest design standards are unlikely to achieve public impact or enduring results" (p. 119). A manifest demonstration of the contributions to knowledge and society is now necessary, and this signifies to concretely shaping, not repeating or simply using, the language of the current era: design.

New training needs in scientific or technological areas are continually assessed, as references to interdisciplinary and newly emerging supra-disciplinary fields are now part of all appropriate academic curriculums. Nonetheless, these should now include basic design skills and values to allow imaginative thinking, personal growth and social thoughtfulness. As examples, design culture and studies should further influence game design education through its criticism of the consumer goods and the larger designer's role in developing tools and delights for a better life. In return, if game studies may inspire the design research

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8 **REFERENCE LIST**

- Aarseth, Espen (2014). "Ludology" in Wolf & Perron (eds.) *The Routledge Companion to Video Game Studies*, New York: Routledge. 544 p.
- Aarseth, Espen (2001). "Computer Game Studies, Year One", *Games Studies 1, no. 1*. <u>http://www.gamestudies.org/0101/editorial.html</u>
- Bateman, Chris (ed.) (2007). *Game Writing: Narrative Skills for Videogames*. Boston, Thomson Learning, 308 p.
- Bayliss and McKinney (2007). In Inns, Tom (eds.) Designing for the 21st Century: Interdisciplinary Questions and Insights. Hampshire: Gower Publishing, pp. 150-65
- Bogost, Ian (2008). *Unit Operations: An approach to videogame criticism*. Cambridge, MIT Press.
- Burdick, A. Drucker, J. Lunenfeld, P. Presner, T. & Schnapp, J. *Digital_Humanities* (2012). Cambridge, MA, MIT Press. 152 p.
- Castronova, Edward (2005). *Synthetic worlds: The business and culture of online games*. Chicago: University of Chicago Press. 344 p.
- Clanton, Chuck (2000). "Lessons from game design", in Bergman, E. (ed). *Information appliances and beyond. Interaction design for consumer product*, San Francisco: Morgan Kaufmann. pp. 300-34.
- Crawford, Chris (1982). The art of computer game design. Retrieved October 1st, 2014: <u>http://www.vic20.vaxxine.com/wiki/images/9/96/Art_of_Game_Design.pdf</u>
- Csikszentmihalyi, Mihaly (1982). "Does being human matter? On some interpretive problems of comparative ludology", *Behavioral and Brain Sciences*, Volume 5, Issue 01, p 160.
- Despain, Wendy (2009). *Writing For Video Games Genres: From Fps to Rpg*. Wellesley, A.K. Peters, Ltd., 300 p.
- -. (2008). Professional Techniques for Video Game Writing. Wellesley, A.K. Peters, Ltd., 225 p.
- Dibbell, Julian (2006). *Play money: Or, how I quit my day job and made millions trading virtual loot.* New York: Basic Books. 340 p.
- Dominick, Joseph R. (1984). "Videogames, television violence, and aggression in teenagers", *Journal of Communication*, *34*(2), pp. 136-147.
- Dunne, Anthony (2005). *Hertzian tales: Electronic products, aesthetic experience, and critical design*. Cambridge, MIT Press, 192 p.
- Dyer-Witheford, Nick and de Peuter, Greig (2009). *Games of empire: Global capitalism and video games*. Minneapolis: University of Minnesota Press. 320 p.

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Vincent Mauger

11TH EUROPEAN ACADEMY OF Design conference	Encyclopædia Britannica (1911). "Universities", 11th ed, public domain:				
APRIL 22-24 2015	 <u>http://en.wikisource.org/wiki/1911_Encyclop%C3%A6dia_Britannica/Universities</u> Fine, Gary Alan (1983). <i>Shared fantasy: Role-playing games as social worlds</i>. Chicago: University of Chicago Press. 298 p. 				
PARIS DESCARTES UNIVERSITY INSTITUTE OF PSYCHOLOGY	Flanagan, Mary. (2009). Critical Play : Radical Game Design. Cambridge, MIT Press, 336 p.				
BOULOGNE BILLANCOURT FRANCE	Frasca, Gonzalo (1999). "Ludology meets narratology: similitudes and difference between (video)games and narrative". Finnish version originally published in <i>Parnasso</i> #3, Helsinki, 1999. Retrieved on October 1 st 2014,				
CONFERENCE ORGANIZERS:	http://www.ludology.org/articles/ludology.htm				
PARIS DESCARTES UNIVERSITY PARIS SORBONNE UNIVERSITY	Fullerton, Tracy (2008). Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Burlington (MA): Morgan Kaufmann; 2 nd ed. 496 p.				
PARIS COLLEGE OF ART ISTEC PARIS	Gee, James Paul (2004). What video games have to teach us about learning and literacy. New York: Palgrave Macmillan. 256 p.				
	Genvo, Sébastien (2006). <i>Le game design de jeux vidéo : Approches de l'expression vidéoludique</i> . Paris, L'Harmattan, 376 p.				
	Greenfield, Patricia Marks (1984). <i>Mind and media: The effects of television, video games, and computers</i> . Cambridge (MA): Harvard University Press. 232 p.				
	Guardiola, Emmanuel (2000). <i>Écrire pour le jeu : Techniques scénaristiques du jeu informatique et vidéo.</i> Paris, Dixit, 256 p.				
	Huizinga, Johan (1955). Homo Ludens. [1971] Boston: Beacon Press. 240 p.				
	Jacobs, Jerry A. (2014). <i>In Defense of Disciplines: Interdisciplinarity and Specialization in the Research University</i> , University of Chicago Press, University Of Chicago Press. 288 p.				
	Jull, Jesper (2013). "First use of 'Ludology': 1951", The Ludologist, personal blog: http://www.jesperjuul.net/ludologist/first-use-of-ludology-1951#comments				
	Kerbrat, J-Y. (2006). Manuel d'écriture de jeux vidéo. Paris, L'Harmattan, 348 p.				
	Laramée, François Dominic (2002). <i>Game Design Perspective.</i> Charles River Media. Hingham, Massachusetts. 420 p.				
	Laurel, Brenda (ed.) (2003). <i>Design Research. Methods and Perspectives</i> . Cambridge, MA: MIT Press. 336 p.				
	Malone, Thomas W. (1980). "What makes things fun to learn? Heuristics for designing instructional computer games", <i>Proceedings of the 3rd ACM SIGSMALL Symposium</i> . Palo Alto, California. pp.162-169.				
	Maigaard, Per (1951). "About Ludology", International Congress Of Sociology, 14th, Rome: 30th Aug3rd Sept. <u>http://issuu.com/larskonzack/docs/maigaardludology</u>				
	Makkreel, Rufolf A. (1990). Imagination and Interpretation in Kant: The Hermeneutical Import of the Critique of Judgment. Chicago: The University of Chicago Press.				
	Mateas, Michael (2001). "A preliminary poetics for interactive drama and games". <i>Digital Creativity</i> , 12 (3), pp. 140-152.				

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Mauger, Vincent (2014). "Interface" in Wolf & Perron (eds) The Routledge Companion to

Mäyrä, Frans (2009). "Getting into the Game: Doing Multidisplinary Game Studies" in

Perron & Wolf, The Video Game Theory Reader 2. New York: Routledge, pp. 313-

Video Game Studies, New-York: Routledge. pp. 32-40.

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329.

BOULOGNE BILLANCOURT FRANCE	Mäyrä, Frans (2008). <i>Introduction to Game Studies: Games in Culture.</i> London & New York: Sage Publications. 208 p.
CONFERENCE ORGANIZERS:	Murray, Janet (2012). <i>Inventing the medium: principles of interaction design as a cultural practice.</i> Cambridge (MA): MIT Press. 504 p.
PARIS DESCARTES UNIVERSITY PARIS SORBONNE UNIVERSITY	Myers, David (2014). "Research" in Wolf & Perron (eds.) The Routledge Companion to Video Game Studies, New York: Routledge. 544 p.
PARIS COLLEGE OF ART ISTEC PARIS	Nelson H. G. and Stolterman, Erik (2012). <i>The Design Way: Intentional Change in an Unpredictable World</i> , Cambridge (MA): MIT Press; second edition. 296 p.
	Nielsen, Jakob (1993). "Iterative User Interface Design". IEEE Computer vol.26 no.11 pp 32-41.
	Perron, Bernard and Wolf, Mark J. P. (eds.) (2008). The Video Game Theory Reader 2, New York: Routledge. 456 p.
	Price, John A. (1985). Social science research on video games. <i>Journal of Popular Culture</i> , 18(4), pp. 111-125.
	Raessens, Joost and Goldstein, Jeffrey (2011). <i>Handbook of Computer Game Studies</i> , Cambridge (MA): MIT Press. 472 p.
	Rollings, A. and D. Morris. (2003). <i>Game Architecture and Design: A New Edition</i> . Indianapolis: New Riders, 960 p.
	Rouse III, Richard (2005). Game Design: Theory and Practice. Plato, Wordware Publishing, 698 p.
	Salen, Katie, and Zimmerman, Eric (eds.) (2005). <i>The Game Design Reader: A Rules of Play Anthology</i> . Cambridge, MIT Press, 954 p.
	(2004). Rules of Play: Game Design Fundamentals. Cambridge, MIT Press, 688 p.
	Schön, Donald (1983). The Reflective Practitioner: How Professionals Think In Action. New York: Basic Books. 384 p.
	Shepherd, Simon and Wallis, Mick (2004). <i>Drama/Theatre/Performance</i> . London and New York: Routledge. 272 p.
	Sicart, Miguel (2011). The ethics of computer games. Cambridge (MA): MIT Press. 272 p.
	STC (2012). Society for Technical Communication, Information Design Special Interest Group. "Definitions of information design". Retrieved on October 1 st , 2014. http://www.stcsig.org/id/id_definitions.htm
	Stobbart, Dawn and Evans, Monica (eds.) (2014). <i>Engaging with Videogames: Play, Theory and Practice</i> , England: Inter-Disciplinary Press.

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PARIS DESCARTES UNIVERSITY INSTITUTE OF PSYCHOLOGY	Thompson Klein, J. Grossenbacher-Mansuy, W. Haberli, R. Bill, A. Scholz, R. W. Welti, M. (eds.) (2001). <i>Transdisciplinarity: Joint Problem Solving among Science, Technology, and Society</i> , [2013], Basel : Birkhauser. 332 p.
BOULOGNE BILLANCOURT FRANCE	Turner, Victor (1982). From Ritual to Theater: The Human Seriousness of Play. [2001] New York: Performing Arts Journal Publications. 128 p.
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