How to Say Things with Actions I: a Theory of Discourse for Video Games for Change

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ABSTRACT

This paper proposes the interpretation of video games as discourse (in the explanation of discourse commonly used in linguistics and studies of natural language, not as understood in semiotics or cultural studies) to explore further the dynamics through which video games can propose structured meaning and articulate an argument. Such topic is especially relevant for video games with an agenda, whose goal is not just to produce an engaging game experience, but also to convey a message and have some control over the desired outcome (persuasion, information, expression, aesthetic experience). The notion of discourse can help classify serious games according to their specific aim, and can help understand how meaning production in procedural rhetoric takes place.

Keywords

Procedural rhetoric, argumentation, serious games, games for change, argument, argumentation theory, persuasion, speech acts, experience, discourse, language

1 - INTRODUCTION

Video games for change are becoming increasingly popular as a way to produce complex discourses about concepts, ideologies and advocacy aimed to those segments of the population that respond better to interactive media, such as children and teenagers, but also a growing population of thirty-somethings who spend their time in social networks and online casual gaming.

Recent research is confirming that video games can be more effective in addressing issues in a persuasive way and encouraging attitude change: from joining the army to reducing sexual risky behavior, to changing opinions about immigrants laws, still it seems a long way before proving that video games can be persuasive, not just in the same way that interior design and user experience can be (a red stripe on the floor can induce people to walk in a particular direction, or a chair shaped in a special form subtly coerces people to sit in a desired way), but also through what Bogost calls procedural rhetoric, the presentation of an articulated claim about complex topics and concepts through gameplay structures.

It will be useful here to distinguish between persuasive strategies that employ non-logical means, such for instance attractive elements, like physical attractiveness, bright colors or

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engaging interaction, and those recurring to the authority of an expert or institution to validate their message, and persuasive strategies that instead address reason through the construction of an argument. The notion of procedural rhetoric, "the art of persuasion through rule-based representations and interactions rather than the spoken word, writing, images or moving pictures" (Bogost 2007), maintains that such construction is possible, and that it happens mainly by comparing "how things work and how things should work", through what Bogost calls "procedural claim".

The idea that video games are capable of complex content and rhetoric structuring is also sustained by Rusch's theory of game design as a metaphorical process, in which meaning production in video games takes place through the creation and the apprehension of experiential metaphors, and from "the discrepancy between the cognitive and immediate emotional comprehension of a game's concept" (Rusch, 2010). At first sight, it seems that both procedural claims and experiential metaphors can mainly be considered the kind of argument that Blair calls "non-propositional" and that Bogost, after Aristotle, calls "enthymeme", a rhetorical argument in which only the first part of a reasoning is proposed and the receiver has to "fill in the blanks" with a conclusion (such as for instance a picture of a dying cancer patient smoking a cigarette); this paper wants to explore other opportunities for articulation present in a video game.

The problem of meaning production in video games is at the core of the so-called dispute between ludologists and narratologists, where the implicit wedge issue is: can video games present a narrative, or are they a non-representative medium that may or may not express complex ideas? Such discussion is based on a misunderstanding of the tenets of narrative and narratology; Frasca rightly noticed that the interpretation of narrative used in game studies couldn't be found in any other discipline (Frasca 2007), and that both sides in fact meant "expression of complex content", that doesn't necessarily has to be a narrative. Such a discussion seems to be ending nowhere, mostly for lack of better terms to define the issue.

This paper would like to suggest how the issue of meaning production is completely disjointed from the notion of narrative, and to propose the alternative angle of an analogy with linguistic discourse to allow more theoretical space in the direction of further evolutions of the notion of procedural rhetoric, and to contribute to the conceptualizing of video games with an agenda as a fully recognized expressive form.

The analogy with language is a difficult and dangerous one, because many narratological interpretations of video games are based on a similar analogy or on interpretative categories borrowed from post-structuralist semiotics; it will be explained later how narratological interpretations often unconsciously relate to the idea of a written, closed text that is always implied in the all-purpose idea of textual metaphors. Such analogy is used here in the meaning of an articulated flux of communication in real life experience, without any relation to the notion of text.

The goal of this paper is then to clarify a number of points in relation to linguistics and narratology, and to understand: 1) what are the premises for making an argument (aka the structuring of discourse for persuasive purposes) in natural language, and 2) if such premises can be retraced in video games for change.

Answering these questions will allow a parallel between the flux of experiential matter (actions and events) and the structuring of meaning in verbal discourse or other kinds of experience-based discourse, such as for instance film, rejecting instead existing

comparisons of procedural rhetoric with visual and digital arguments (Bogost 2007). As explained in parts 4 and 5, it is debated if propositional claims are actually real arguments, considering that arguments need some premises and conclusions in order to exist (Blair 1996, Walton 2002); this paper will take a closer look at which logical elements are necessary in order to produce an argument, and if that can take place through a video game.

Another point of debate that hinders the study of rhetorical structures in video games, together with the ludology-narratology issue, is the question of "what" is the actual object of study, at what level in a video game is the procedural rhetoric visible, if at the level of design or at the level of the player experience.

Already in 2007 Frasca noticed how usually the focus on one element would exclude the other, and that ideally all research on game rhetoric should consider instead "how do the game and the player collaborate – communicate – in order to reach those interpretations" (Frasca 2007). Such interaction is composed by the *experience* of *design*, that is only a part of the player experience, or otherwise said the structures of the communication system, a concept comparable to language but not classifiable as language; the fact that the term "communication" is so rarely used in games research points out that video games as a communicative tool, such as serious games, are but a subgenre of video games, and require separate handling and specific investigations. Interpreting the game experience in such a way provides a minimum of stability in meaning regardless of who the player is, in the same way that the visual strategies of cinema are accessible to the whole world regardless of their culture because of its grounding in cognitive structures that are common to all human beings (Carroll 1993).

Current methodologies that highlight the player experience often don't take too much into account design structures, but focus mostly on the player's reaction and contextual experience: for instance Mayra's popular model of player experience considers different kinds of immersion and context, and while it is very useful in understanding some internal interpretative processes of the player (such as identification, immersion, cultural framing) it doesn't seem to consider the relation between structures of design and meaning production (Mayra, 2008).

Other approaches focus on the experience in the sense of a flux of sensation and understanding (Lindley 2004) (Rusch 2010 after Lakoff, Johnson) but the relation between very abstract conceptualizations such as "gameplay gestalt" (a particular way of thinking about the game state, together with a pattern of perceptual, cognitive and motor operations), and design specificities are not obvious.

A slightly different angle is proposed by Grodal, who, unlike other research on experience focused on the differences in the individual interpretations of an experience, considers organized experience as an objective, verifiable phenomenon; even if one player finds the experience depressing while another finds it empowering, and even if each game experience is different as gameplay is very personal, still all the players go through similar patterns of actions in similar sequences (Grodal 2006). Such angle is also maintained here; the focus of this paper then won't be on design as alternative to player experience, but on the objective elements of what happens in a game experience, the recurrent patterns of actions and events that might organize meaning.

2 - METHODOLOGY

The three theoretical issues outlined above (is argument possible, what is the relation between argument and narrative, where is the argument visible in a game) will be approached though a parallel with speech act theory, argumentation theory and informal logic, all studies that explain how meaning is constructed through the succession or juxtaposition of elements that produce meaning through logical associations and how (and why) some arguments are stronger than others.

The relation of these rather recent disciplinary fields with rhetoric is very strong, although their pragmatic orientation often clashes with the common understanding of rhetorical scholarship. Since Quintilian, through the middle ages all the way to modern scholarly rhetoric, the focus of rhetorical studies has been rather on style and "pretty form" rather than on effectiveness of persuasion; only in recent times during the 20th century rhetorical studies experienced a renewed passion for pragmatic goals as a reaction to the rhetorical achievements of totalitarian regimes during World War II (Burke 1966, Kinneavy 1971).

Argumentation theory, born only a few years later (1950ies and 1960ies) takes the pragmatic approach one step further, providing guidelines and techniques to improve the strength of an argument, such as argumentation schemes (Walton 2002) and has mostly been used for practical goals, such as health communication, political communication, advertising, enhancement of social policy.

Another reason that makes argumentation theory more desirable than rhetoric as a theoretical backup here is that rhetorical *topoi* and figures are often purely verbal and relate to word play, while argumentation refers to logical structures and can then be more easily transported to multimodal communication.

Informal logic is a philosophical discipline "a branch of logic whose task is to develop non-formal standards, criteria, procedures for the analysis, interpretation, evaluation, criticism and construction of argumentation" (Walton 2008); the relevance of informal logic in this context is that it can help defining the structures of an argument beyond media specificities. Speech act theory is a philosophy of ordinary language that maintains that as language is an intentional behavior, it should be treated like a form of action; this view can help the understanding of video games dynamics, that on the contrary take place through actions in order to express complex content (usually concepts and information are considered of a verbal order).

The title of this paper reverses the title of J P Austin's book on speech acts "How to do things with words" (1962), that explains how verbal expressions can have performative effects and can be used to actually "do" things only by saying something aloud, for instance like in the acts of marrying two persons, naming a ship, christening a baby, reading a life sentence to a prisoner. Such reversal wants to suggest that video games, meaning structures composed by acts and events, (in the realm of "doing") can actually "say" complex things, and it refers to the subtle relation between verbal thought (words) and non-verbal thought (actions and events) to possibly enlighten the procedures by which complex content, usually verbal, can be transmitted through mainly (mainly is a key word, as text is all but absent from many serious games) non-verbal strategies.

The reference to Austin is mainly a philosophical one: Austin coined the expression "how to do things with words" to explain conceptually how speech could provoke real life consequences just as turning a door knob or firing a gun; this work, and hopefully others to follow, could open the path for conceptualizing a language for experience, composed of sensorial inputs (gestalt, in Lindley's words), actions and events, capable of expressing

ideas in a way closer to cinema and face-to-face conversation, rather than visual rhetoric composed by still images and digital rhetoric based on database navigation and ergodicity.

The analogy with language is meant in the sense of the logical structures behind utterances in natural language, not with language in the sense of signs and symbols such as in the semiotic interpretation of language, that is more focused on the single word and instances rather than on the articulation of sentences and the logical relations between different parts of a speech (in the largest possible sense of expressive instance or utterance, if verbal). This paper would benefit by a further explanation of the cognitive processes involved in the reception of rhetoric and discourse in video games and of the subtle connection that transforms actions and events in verbal concepts and vice versa as a key moment in meaning production during lived (and organized) experience. For length reasons it is not possible her to explore that part except than for some brief remarks.¹ some more extended material is available in a different paper (Rao 2011).

Finally, another main reference behind this paper is the works of the rhetorical scholar Kinneavy, in particular his "Theory of Discourse"; although Kinneavy's activities took place within the scholastic rhetoric field aimed at composition and other areas of English literature, he viewed rhetoric as a humanistic philosophy of practical action, a powerful "art and craft" that needed to be used to improve social reality and not for purely academic purposes.

Kinneavy's work transported classical rhetorical concepts, such as *kairos*, *phronesis*, and *praxis* into discussions of quite contemporary, controversial topics such as feminism, citizenship, and the relations of humanistic reflection and debate to deliberative action, connecting modern communication theories such as McLuhan to classical rhetoric (Kinneavy 1971). The term "discourse" has very different meanings according to contexts, the following part will explain which interpretation of discourse is used here.

This paper is part of a PhD thesis being developed at Utrecht University about ethical persuasion and argumentation in video games for change; in order to confront the presence of argumentation in video games, it seemed necessary to understand first if an argument was actually possible or not, and how; these reflections are then a work in progress.

3 - VIDEO GAMES AS DISCOURSE

The term "discourse" is heavily charged of different meanings from its use in cultural studies, semiotics and discourse analysis; J P Gee distinguishes between Discourse and discourse (minuscule), discourse meaning usage of common language, while Discourse refers to the combination of language with other social practices (behavior, values, ways of thinking, clothes, customs, perspectives) within a specific group (Gee 2002)².

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¹ More material on this topic is available in an upcoming paper (Rao 2011)

² J P Gee, renowned author of books on educational video games, published extensively on the rules of discourse; it would be interesting to know what he thinks about this analogy

The second interpretation (with a capital D) echoes Foucault's vision of discourse, that organizes "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak", and is considered rather in the sense of a cultural construction or practice than as an expressive (in the sense of meaning and style) stance. Discourse analysis considers the usages of natural language, and also the non-verbal cues in discourse structures (Cassell in Noth 1996) and how language, both spoken and written, enacts social and cultural perspectives (J.P. Gee 2002), but usually discourse analysis doesn't discuss the notion of language in the philosophical sense and how (if) it can be expanded to other fields, such as audiovisual communication and organized experience.

The difference (very roughly) between the interpretation of discourse in semiotics and linguistics is that the latter adopt a larger, more intuitive notion of language, in the sense of general "communication system" or "structures of meaning", while in semiotics the focus is transferred from communication to the *enunciation* (Benveniste, Greimas, in Noth 1995) and language is a the center of a complex conceptualization that doesn't concern us here.

The notion of discourse employed in this work is instead derived from rhetoric and informal logic, and refers to discourse simply as "a coherent and reasoned treatment of a subject or merely an extended treatment of a subject (though not necessarily rational) and conversation". (Kinneavy 1971), or in the sense of "the totality of an oral or written situation", and we can add audiovisual or experiential. The idea of a totality does imply some kind of closure or boundaries around it, but it is by no means restrictive as the even implicit notion of text.

While discourse in such a sense can be quite general (we are going to see in a minute the different categories for discourse, and how that can be applied usefully to serious games), this paper limits itself to the analysis of persuasive discourse, as that is the only form of discourse that presents an argument such as those treated by argumentation theory.

The term "discourse" has appeared a few times in games research, with rather different meanings: Aarseth's article "Quest games as post-narrative discourse" seems to rely on the common sense notion of discourse as organized meaning and, aside from the title, never clarifies the term discourse in the text, apparently implying the common-sense understanding of discourse as "expressive stance about a topic" (Aarseth 2004).

Other authors refer to discourse in the sense of dialogue (Steienkhueler), or in the Foucaultian meaning of set of practices or discoursive practices around a topic (Klastrup, Tronstad), in the semiotic sense of text of Genettian's narrative discourse (Ferri). This reflects the difficulty in finding alternatives to the narrative framework to understand video games as a communication medium, instead of just a playful experience.

The rhetorician Kinneavy created a bridge between literary studies, the pragmatics of communication and classical rhetorical theories with his broadly influential book "A theory of discourse" (1971), in which he develops a philosophy of the aims of discourse.

Such a theory is particularly important for our goal of understanding some of the structures by which video games convey persuasive meaning, because it provides a larger background for the different rhetorical strategies described in rhetorical theory, strategies that focus on verbal detail and that often are very much related to the written or verbal

word, instead of logical structures, which makes these strategies less immediately useful in the case of rhetorical systems that are mainly non-verbal, like video games.

The notion of discourse can provide paradigms for forms of meaning making alternative to speech, such as visual, multimodal and procedural rhetoric. Although Kinneavy worked mostly in the field of English education, that is focused on written rather than spoken language, and he is referred to in the case of written discourse and rhetoric, his known concern for pragmatic goals and the ethics of discourse in society make his model quite adaptable to a more general notion of discourse that includes non-verbal discourse.

For Kinneavy, the aim of a discourse determines everything else in the process of discourse - what is talked about, the oral or written medium which is chosen, the words and grammatical patterns used, all of these are largely determined by the purpose of discourse. Kinneavy's model included an encoder and a decoder, and while it is quite possible that the intentions of the encoder are completely misunderstood, or that the decoder decodes the message very personally and doesn't really get the intended message, Kinneavy suggest that some structures that are related to the aim are embedded in the message itself, and that such structures are recognizable within certain cultural and situational contexts. For instance, "the train is coming" can signify an information statement in the railway station, or entertainment in a comedy routine, or as a warning or as a question in a face-to-face conversation.

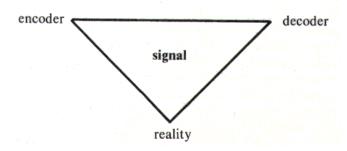


Figure 1: Kinneavy's model of discourse

The dialogic situation is another point that distinguishes discourse from narrative: even if in all semiotic models of narrative there is also an encoder and a decoder (a reader or model reader), still interactivity poses some problems to the application of narrative categories to experiential media; the concept of discourse can allow more space in considering expressive gameplay as a statement of some kind (as opposed to a narrative account), which is superfluous in "normal" video games but is instead very important in video games with an agenda.

Kinneavy's proposed to classify all communication into four main aims:

- a) to inform
- b) to be beautiful

- c) to persuade
- d) to express
- a) when the primary aim is to inform, the discourse is *referential*, that is, it tries to acquire an impersonal tone to demonstrate the validity of such a representation; a discourse can then be exploratory, scientific or informative, such as scientific pamphlets or journals, or the news;
- b) when the primary aim is to be beautifully, the discourse is *literary*: it can take the form of stories, songs, dramas or jokes;
- c) when the primary aim is to persuade, the discourse is *persuasive*: it can take the form of advertising, political speeches, religious sermons, legal oratory, or editorials.
- d) when the primary aim is to express, the discourse is *expressive*: it can take individual forms, such as conversations, journals, diaries, or prayer; or social forms such as protests, manifestos, contracts, constitutions, myths, or religious credos.

Although these categories have been originally created with written and oral examples in mind, in fact the author conceived them after a general model of human communication and conversation; because of this, they can be more easily transferred to other kinds of media that depend on the same model.

Kinneavy's classification can greatly help the definition of serious games; in fact, under the umbrella term of "serious games" are included video games with completely different aims or rhetorical strategies, such as newsgames, (persuade, express, or inform), art games (to be beautiful, to express), educational games (to inform) health games (to inform, to persuade), persuasive games (to persuade), training (to inform), advergaming (to persuade), political games (to inform, persuade, express).

The term "serious games" is source of confusion more often than not: the original definition by Charles Abt as "games to inform, train and educate" has been expanded by various satellite definitions. Bogost criticizes the use of the term "serious" as it resonates "high brow" or "grave" (Bogost 2007) and proposes the alternative term of "persuasive games". The term "newsgames" is used for video games about current affairs, without really taking into consideration what is the video game strategy or purpose: advocacy, irony and satire, persuasion for fundraising. Both "persuasive games" and "newsgames" indicate a small portion of all video games and are related respectively to advertising/advergaming and political subcultures; both terms don't resonate the ethical concern behind "serious games" and the yet different definition of "games for change".

The alternative term "video games with an agenda" is useful to differentiate between games with a specific purpose and without, but fails to offer instruments to differentiate and classify video games according to their goal, and the term is usually employed only in relation to political games, out of habit (Frasca's company Powerful robot and past blog Watercoolergames with Bogost are both involved with political games), so this definition has successfully substituted "serious games" only in those circles.

Current classifications of serious games take into consideration to their educational content, learning principle, target age group and platform (Renhan et al., in Ritterfeld et al 2009) but seem to blend indiscriminately aims, content themes and distribution sector: for instance by including the game *Darfur is Dying*, whose aim is to persuade rather than education, as an example of educational game.

Some serious games, such as games aimed to training specific skills and other games that facilitate the performance of an action, such as games to facilitate group work, social cohesion in specific settings, games for asthma, for children to be distracted during painful therapies, don't seem to have any discoursive purposes, just as many commercial games for entertainment, although many of them aspire to be beautiful, in a non-argumentative, non-structured way, and to provide engaging experiences and to tell good stories, without the necessity of making a point about something.

A classification by aims of discourse can also help understanding various design issues, as design for one purpose (for instance education) forcibly employs strategies different from other purposes (for instance expression of a personal point of view); by putting together video games with similar purposes, maybe it will be easier to recognize the common patterns in design.

4 - THE LANGUAGE OF VIDEO GAMES/RELOADED

Even when approached in the largest possible sense, the term "discourse" is always strictly correlated to the idea of "language".

It is quite clear that video games have nothing to do with verbal language and that they express meaning through other strategies, in Bogost's words: "video games express processes with other processes (...) rather than language" (Bogost 2007); still, the idea that video games can be a language, in the sense of organization of meaning, is by no means new. The undervalued book of Duke "Gaming: the Future's Language" first conceptualizes video games as a kind of language, in which the rich flux of sensorial experience that composes our understanding of things, what Duke calls "holistic thought", is translated into a sequential string of concepts (Duke, 1974). Duke wished for some new communication standards that would allow the transmission of very complex fluxes of information, necessary to keep up to date "in our increasingly fast and complex world"; according to him, the solution was to think in terms of "Gestalt communication modes", ways to transfer meaning from words to experience, just like meaning is usually processed by humans as images and sensations, a gestalt, and only later is translated into words.

The aim here is not to develop some "grammar rules of video games", but to understand how the mere idea of language can be of use to the development of new design concepts for serious games; the quest for a grammar is a recurrent theme in art, design and communication, and while the analogy is always a bit stretched, still the idea of finding a grammar or the "rules" of expression has brought up the potential in developing art. For example, in film history, with the emergence of a conscious film language after Griffith's "Birth of a Nation", several attempts to produce grammars of films see the light: while it is not possible to describe them here in detail, it is to note that for the first 50 years of cinema such grammars where produced by authors for authors, and the term "grammar" was intended in the sense of "style" and as a support for creation (Pasolini). Russian Formalists reference to film as language (cine-language) as connected with the quest for

minimal units: "any art which is perceived in time must possess a certain articulateness, since it is to some degree language"; all that is communication then, it is a kind of language.

Often the linguistic analogy is ideal more than factual, to highlight the creative role of the author and emancipate films as a form of art and expression, when they were seen as a lower form of popular entertainment (does this resonates at all with video games' today status?), such as in "Bazin's Evolution of Film Language", or in Astruc's idea of "pencamera", a camera that writes a film like a pen writes a book, main concept behind the revolutionary French Nouvelle Vague cinema. For others, the term "film language" refers to the "language of nature" as revealed by still photography and moving pictures (Pasolini); such "language of nature" is the almost transcendental idea of the richness of experiential flux, in opposition to mechanical reproduction; for others film language was meant in the sense of a rigid formalism over stylistic features. The connection between cinema and a language of experience is very strict, as cinema is seen as the "universal language", understood beyond culture and class (Balasz, in Elsaesser 1992).

In the 60ies a different understanding of "language" arises, and the model is no more natural language and communication, but the textual metaphor from post-structuralist semiotics; in Elsaesser's words: "as long as the object of attention is the film, attributed to an individual, the "film language/ film grammar" model predominated. When attention focused on the spectator as "reader" of the text, more properly linguistic models found favor since they provided a perspective on language as a set of rules valid irrespective of individual input and constructing not merely an intelligibility, but an intelligibility for someone" (Elsaesser 1992). It is to note that sustainers of the post-structuralist interpretation of language were mostly not film-makers themselves, but film critics and essayists; possibly because of that, their reflections didn't do much for the development of film art, although they opened many new perspectives for the understanding of spectatorship and the psychology of the spectator.

While the comparison with language never really "cut it" and all those prescriptive rules were just a single author's opinion against the other (Pryluck, in Elsaesser 1992) it is possible that the "idea" of a language, the idea of the structures behind the experiential flow, brought much benefit to the development of cinema as an art in its quality of inspiration to find new expressive solutions; in other cases instead, the linguistic analogy carried to the limit has proved as a kind of "kiss of death" for media practice and artistic creation. Such was the case for semiotic film analysis in the 70ies and responsive television and interactive media systems in the late 90ies, both of which forced a strict formalism on content, and proposed a parallel between images and words and editing as punctuation or syntax while seeking to retrace the smaller parts of discourse, such as conjunctions, verbs, nouns, in multimedia content, with the only result of making creation sterile and meaning impoverished (Agamanolis 2001).

To conclude, current game research that relates to the notion of video games as language or expressive construct is mostly dependant on narratological categories that, beneath all superstructures, still view all things as text, with a continuous implicit reference to the modalities of the written text, that is the original sin of narratology, when it comes to media based in lived experience. It is suggested here that a reference instead to the ideas of language, composition, style, discourse, argument, structures of meaning, can be of greater inspiration for discussion about game design for specific discoursive aims.

The "language of experience", the design structures of organized experience for a specific communicative purpose, although still a utopia, is a debated topic in experience design and experience economy and it will only increase its importance considering the number of non-computer based games that develop in reality (alternate reality games, augmented reality, pervasive games, locative games) (Rao 2007); perhaps it makes sense to include this concept in the games research agenda for future development.

5 - THE PARTS OF AN ARGUMENT

To understand if the notion of argument is applicable to serious games, it is necessary to consider if video games possess the basic elements that allow the articulation of meaning in natural language, in the sense of logic structures and categories. Austin and Searle in speech act theory see as the basis of meaningful communication not the sign or the word, but the sentence, also called "illocutionary act" or "utterance", that constitutes the primary unit of meaning and communication in the use and comprehension of language, such as assertions, promises and orders.

Again, speech acts theory is not just a linguistic theory, but it is also a philosophy of language, and it is used here in this quality of philosophical concept, not in a strict analogy.

A basic definition of an argument comes from Walton: "the basic building blocks of arguments are (a) propositions. Propositions, in contrast to questions, commands, challenges, and other moves made in arguments, are units of language that are (b) true or false. Real arguments are more often (c) macrostructures made of many smaller arguments, or sub-arguments." (Walton 2008).

According to this definition and others, then, the basic ingredients necessary to create an argument are:

a) a minimal unit of elocution

This is a part of discourse bigger than isolated words and performed with intentionality to convey meaning; Searle and Austin call this a "illocutionary act".

In speech acts theory different acts can be performed by uttering sentences (performative language) but the focus here is rather on the paradigmatic use of language to illustrate a concept, and how performed actions and events can manage to do the same.

According to Blair (1996), asserting or claiming is the default function of spoken or written language, while images and things, unlike words, "just are" (Burke 1966). One alternative idea is that the default function of images and experience is to express the idea of "being" ("existing", "present", "true"), similar to the "ontological realism" that Bazin attributed to the photographic image, as normally we interpret the simulation of reality with the same categories that we employ for everyday reality. Such "irrational power of photography to carry away our belief" (Bazin 1975) is much stronger in simulation, where the visual illusion is reinforced by other elements such as haptic involvement, attention and will.

c) verifiability

Statements need to be verifiable in order to be used in an argument, they must correspond to the status of true or false; the reason for this is of a logical order, that a if a statement at the beginning is clearly false, (for instance, someone says: "let's go walk in the sun" when it's raining) it will put the whole speech situation in a specific context (for instance: the speaker is crazy, or he is being sarcastic, or the whole situation happens within a theatrical performance, or reality is not what it seems and the context is a parallel world with different climate rules).

The idea of true and false then has to do with the question of the validity of an argument, but at the same time is what actually qualifies a statement as such: "validity is a semantic concept, that is a concept that can be defined as a unit of language that can be either true or false".(Walton, 2008) The simple fact that a statement could be true or false (such as "there is life at the end of the galaxy"), even if we don't know which one is the case, makes it recognizable as a statement, unlike single words, that have no logic status as true or false unless they are together with other words in some kind of relation with reality.

So, as the status of true or false is relative and depends on the context, the question: "is the game experience experienced as fictional or as reality?" is quite pressing. The judgment of a statement as true or not is relative and dependant from the status of the message, if it is fictional or not, in Searle's words: fiction is "the name of a set of attitudes we take toward a stretch of discourse, not a name of an inertial property of the stretch of a discourse" (Searle, 1975), attitudes reminiscent of Goffman's "keying" that puts in perspective the meaning of each situation.

For instance, to talk about golden unicorns can be perfectly true in the context of a fictional discourse, whereas in the same discourse to say that only dwarfs can ride golden unicorns can be false, if such a notion is not recognized by (fictional) facts in the fictional universe. Moreover, video games always start from a fictional situation (it's just a game), only to integrate it along the way with the original "truthfulness" of experience (all experience is what it is).

d) a logical construction, built through the articulation of different parts

By definition, an argument is characterized by the presence of premises and conclusions (Blair 1996); the conclusion draws our attention to the fact that the arguer has reached a definite state in his reasoning (Walton 2008) and encourages us to make our own mind on the matter.

The following chapter will explore how visual arguments made through images and cinema pose some problems with regards to this because it is not always clear which part is the conclusion; the same problem is shared by visual, spatial or procedural arguments like video games that happen in a single setting or through repeating a single situation. In fact *articulation* seems to be more related to temporal development, while *statement* can be expressed well by visual and spatial alone.

6 - STATEMENT AND ARTICULATION IN OTHER MEDIA

Bogost (2007) indicates visual and digital rhetoric as the nearest relatives to procedural arguments, and the considerable part devoted to visual rhetoric in his book "Persuasive Games" explicitly sets the grounds to counter the "logocentrism" present in rhetorical studies. Bogost builds his argument after different examples from other theories of visual

rhetoric, especially Blair's, stating that the only kind of argument possible in images and video is the non-propositional argument, the argument in which only one side is shown ("the way those two people dress is an argument that opposites attract").

In the field of rhetoric and argumentation often visual arguments produced by still images and moving images are considered as examples of the same kind (Blair, Birdsell et al. in Bogost 2007); on the contrary, it could be that visual arguments from still images and visual arguments from moving images like film, television, and interactive media are completely different systems.

The notion of articulation in spatial systems (like still images) is based on the idea that the viewer "reads" the image one section at the time, following some ideal "vectors" that inspire such movements of the eye within the image (Arnheim 1971); the image itself is subdivided into different sections by what Kress and Leeuwen call "framing", "the way elements of a visual composition may be disconnected, marked off from each other, for instance by framelines, pictorial framing devices (boundaries formed by the edge of a building, a tree, etc), empty space between elements, discontinuity of colour, and so on" and "the ways in which elements of a composition may be connected to each other, through the absence of disconnection devices, through vectors, and through discontinuities and similarities of colour, visual shape, and so on" (Kress, Leeuwen 1996).

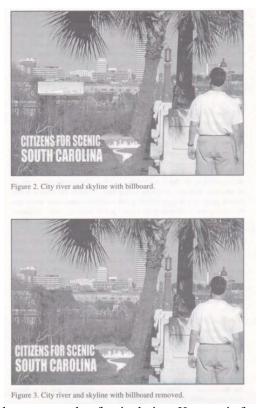


Figure 2: to make an example of articulation, Kenney is forced to show two pictures of the same image taken at different times (in Handa 2004)

While a visual argument through still images can rely only on spatial articulation and rhythm to convey meaning, in the end the whole image is taken in all at once as a whole (Groarke in Bogost 2007), which makes the existence of separate premises and conclusions more problematic (see **Figure 2**). Therefore, in visual arguments made of still images the three main elements of an argument: *statement*, *verifiability*, and *articulation*, are very difficult to retrace, and possibly only the first two (statement and verifiability) play a role.

On the contrary all moving images, and in general all experiential media: cinema, video games and other simulative systems of representation based on organized experience, can rely on temporal articulation and juxtaposition of different situations happening in time (Alcolea-Banegas 2009) as well as (modern films at least) on sound and the use of spoken word; new media or conceptual art also have the option of employing written text in addiction to visual content.

In this sense, the idea of enthymeme (non-propositional argument) as the preferential rhetorical tool for video games seems to not fully exploit the medium's potential, articulating the whole argument in one setting instead of an articulated succession of settings, which would allow the structuring of more complex arguments.

To continue with the film parallel, cinema offers a vast choice of rhetorical strategies to present and argument, in addition to the non-propositional: the most commonly used is indeed the story, (the *exemplum* in rhetorical tradition), but examples of many others can be found in film history. Meaning can arise from metaphorical camera movements, like for instance in Hitchcock's and Welles' extra long shots and depth of field; but also can arise from the organization of situations (processes?), such as in Renoir's "La Regle du Jeu" the frantic movements of the characters through various rooms reflect the characters' inner confusion. The argument can be embedded inside a film but independent, through a speech directed to the spectator (Charlie Chaplin's Great Dictator haranguing the masses to stop making war; the real Hitler in Riefensthal's documentaries), or through a conversation between the characters (in Woody Allen's "Match Point" the characters discuss the value of fate and free will, adding verbal reflection to the exemplar story of a murderer); through a first person simulation by subjective camera shots, like many video games also do, or through a dramatization of the issue, like Hamlet's play within the play.

To retrace statement, verifiability and articulation is more intuitive for film than in the case of still visual rhetoric: Eisenstein's comparison of the shot to a word and the filmic "montage phrase" to the sentence is a bit far fetched, still it is clear that films are capable of articulation, because they allow the sequential presentation of different moments in different meanings, something that is rarely exploited in video games.

6 - CONCLUSIONS: CAN GAMEPLAY MAKE AN ARGUMENT?

To understand if at least in theory a game is capable of making an argument, we need to locate the logical analogues of a statement that is verifiable and that can be articulated together with others statements to form the different moments of an argumentation.

In organized experience it is more difficult to find isolated items that can be used as foundation for different rhetorical strategies (juxtaposition, succession) that depend on some kind on (temporal) linearity in presentation; also, it is difficult to understand what

makes a moment or situation recognizable as a unit of some kind. Bruner (1990) suggests that, even if lived experience is perceived in a flux, there are some kinds of *canonicity*, modularity in reception, that derive from *breaches* (pauses, interruptions, in the largest sense of rhythm) happening in such experience. In the specific case of game experience, the notion of *game patterns* comes to mind (Bjork et al 2004), recognizable gaming situations, each one coming with a different symbolic baggage and rhetoric potential.³

Succession is somehow a linear concept, which seems ill placed in video games that based on ergodicity and often on repetition, still it seems a necessary element to conceive articulation in an experiential system.

While it seems sound that procedural rhetoric may be the "innate", most media specific way for representation in video games, it is by no means the only one⁴, and to conceive the difference between non-articulated arguments (like visual rhetoric) and articulated arguments can possibly help to visualize alternatives to it. In the same hope, the resuscitation of the forgotten analogy of video games with language - in the intuitive sense of the term also used by film directors, theorists and producers of art and design - is aimed to inspire new ways for creativity beyond the ludology-narratology framework.

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³ more on this topic to be found in the upcoming paper by the same author: "How to Say Things with Actions II: Cognitive Processes and Understanding in Games for Change"

⁴ Bogost in *Persuasive Games* never claims that enthymeme is "the only" way, but for some reasons no alternatives have emerged until now

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