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In his introduction to the 2005 issue of the journal Game Studies, Jesper Juul describes computer game studies as being in "a state of productive chaos", populated by researchers who have come to the area from a variety of disciplines and who all hold "wildly contradictory assumptions" (2005b). In the light of Juul's assertion, it is appropriate to identify two central assumptions which I bring to the following discussion, neither of which is particularly contentious, but which indicate some of the reasons for this undertaking. My first assumption is that games, both digital and analogue, are a particularly unique aesthetic and cultural form with an as-yet untapped potential to "help us understand the reality that surrounds us and... what it means to be human" (Frasca 2001, 114). The interactive and simulative capabilities of the game form do, I believe, suggest new ways in which issues of critical and ontological significance might be addressed. In short, I have faith in the potential of so-called 'serious' games. The second assumption I bring to this article is that there is a relationship between digital and analogue games which is sufficiently close to warrant both being of ludological interest. Whilst the convergence of the computer medium with the game form is clearly a driving force behind the current upswell of interest in ludology, I believe it is far too early in the piece to dismiss the qualities of games which have persisted over centuries and whose media demands are somewhat less technologically dependent.

Quite naturally, some of the early theorising that has been undertaken in the field of ludology has attempted to draw together the varying types of game in order to answer the question of what exactly it is that we study. However, as the notion of a distinct ludological approach gains ground and sheds the limitations of a narrative interpretation, it becomes important to address the ways in which the objects of study differ, as much as it is to examine the traits which unite them. Therefore in this article I interrogate what is perhaps one of the most commonplace assumptions regarding digital games - the notion that single and multi-player games are essentially variants within a form wherein the role of the computer acts as a substitute for the 'other'. In pursuing this discussion I have found it productive to think of single player games as 'challenge' games and multiplayer games as 'social'. Whilst I understand that the latter phrase is complicated by the usage of 'social game' to refer to games within which social interaction is a primary component, taking up Katie Salen's & Eric Zimmerman's assertion that gameplay itself is a communicative act (2004, 89), I use the phrase here to describe any game in which two or more players interact. In drawing this distinction I discuss a number of common sense differences which, when examined together, suggest a significant divergence in the potential of each as a medium for communicating critical and ideological issues. In going to these lengths in order to separate multiplayer contest games from solitary play activities I challenge the emergent ludological stance which assumes that challenge gaming and social gaming can be theorised, evaluated, critiqued or analysed within identical frameworks.

### Playing with Each Other: Theorising the Social Game

In the relatively short history of game studies, a number of scholars have discussed the function, nature and philosophy of games. Although some deal more broadly with the notion of play activity, the discussions therein have proven valuable theoretical building blocks for ludology. In re-reading these texts, it is clear that there is a shift in perspective from one which sees games as a predominantly social experience to one which does not explicitly differentiate between solitary and multiplayer activities in the discussion of games. To return briefly to this well-trodden ground, in *Homo Ludens* Johan Huizinga provocatively suggests that play lies at the root of culture, preceding and informing the development of law, science and the arts (1950). In locating play, and specifically contests, as "civilising functions" operating in the realm of ritual, he suggests that all aspects of human culture are nourished and sustained by the shared instinct to play. However, when discussing this trait Huizinga is quite clear about the types of activities to which he is referring:

Naturally enough, the connection between culture and play is particularly evident in the higher forms of social play where the latter consists in the orderly activity of a group or two opposed groups. Solitary play is productive of culture only in a limited degree. (ibid., 47)

In *Man, Play, and Games* Roger Caillois, whose categorisation and schema have proved both flexible and durable in the analysis of games, is similarly dismissive of the potential of playing alone (1961). For Caillois such activities, constituting pure ludus, are "a kind of make-shift device intended to allay boredom"(ibid., 31). His appraisal of the significance of solitary play is further highlighted when he suggests that "[o]ne becomes resigned to it while awaiting something preferable, such as the arrival of partners that makes possible the substitution of a contest for this solitary pleasure" (ibid.). However, for Caillois, such activities are only superficially a solitary amusement – they are infused with an "atmosphere of competition" (ibid., 32) which creates the sense of *agon* without the presence of others. Without such a focus, observes Caillois:

It [Ludus] remains transient and diffuse, or else it risks turning into an obsession for the isolated fanatic who would dedicate himself to it absolutely and in his addiction would increasingly withdraw from society. (ibid., 32)

To the game scholar, indeed to the general public, such a description sounds awfully familiar. The image of the socially inept and isolated teenager hunched before the videogame console in the pursuit of mastery is one called upon all too often in the climate of media panic that surrounds digital games. Of course, experience, research and growing mainstream adoption have demonstrated that such claims are simplistic in the light of digital play. Still, for Caillois the sociologist, the principal interest in the study of games is the facilitation of interaction between individuals: "the different categories of play…presuppose not solitude but company" (ibid., 40). Obviously, given the time at which Caillois was writing, one cannot expect him to have anticipated the solitary playful potential of a truly interactive medium. However, it is apparent that before the advent of digital media, the notion of formal gameplay was broadly recognised as a social activity. Of course, this is not to suggest that solitary games did not exist, only that they had not received the degree of formalisation which surrounded social play and were largely marginalised in discussions of games.

David Parlett's *Oxford History of Board Games* (1999) is a recent, predominantly taxonomical work which discusses the nature of games without being burdened by the weight of philosophy or developments in digital media. Parlett specifically seeks a definition of a formal game as opposed to the broader notions of play which are included in Huizinga and Caillois' exploration. A game, suggests Parlett, is comprised of a simple two-fold structure of means and ends (ibid., 3). By means, Parlett is referring to the equipment and rules which players must act upon and within in order for the game to progress to its end. Interestingly, when he chooses to discuss the ends of a game we can once more infer participation of multiple players:

It [a formal game] is a contest to achieve an objective... Only one of the contenders, be they individuals or teams, can achieve it, since achieving it ends the game. To achieve that object is to win. Hence a formal game, by definition, has a winner; and winning is the 'end' of the game in both senses of the word, as termination and as object. (ibid.) Despite this clear definition, Parlett also includes in his discussion activities such as peg solitaire and card patience by suggesting that participants in non-competitive games are not without competition but are merely competing against the vagaries of luck or the game structure. However, Parlett limits his discussion of the game form to non-computer based media, thus avoiding some of the complications which arise when discussing such a distinction within digital games. In his attempt to create a broader classic model of games which can embrace the developments of the digital form, Juul echoes Parlett in discussing the conflict inherent in gameplay:

a conflict presupposes mutually contradicting goals between two entities or, in a broader sense, between a player and the difficulty of reaching goals. (2005a, 31)

In Rules of Play, Salen & Zimmerman adopt a similar stance:

All games embody a contest of powers. The contest can take many forms, from co-operation to competition, from solo conflict with a game system to multiplayer social conflict. (2004, 80)

Here then, in the four decades that have seen the development of digital games, the role of the competitor has been replaced by an "entity", presumably contained within an analogue ruleset or a dynamic algorithm. Whilst it makes little sense to challenge this view given the evident popularity of engaging in a conflict with a game system, this change in the way of seeing games is, I would argue, a direct result of the emergence of the computer as a playful medium. Despite the fact that the earliest digital games exhibited the social context of competition or contest to which Huizinga and Callois allude, developments in digital media have transformed the way games are defined, experienced and analysed.

In his book *The Grasshopper: Games, Life and Utopia,* philosopher Bernard Suits famously asserts that games involve the subjugation to limited means in the pursuit of goals purely because they make possible play of the game (2005). Suits also explicitly discusses the nature of the solitary challenge by referring to mountain climbing as a game, suggesting that the limitations of the game structure are limitations in principle as much as in reality, and that there may exist "a state of affairs which is in its natural condition sufficiently challenging" (ibid, 86).

It would seem that single player digital games constitute exceptionally effective mountains. No longer are solitaire activities on the periphery of game studies. Indeed, single player games have become one of the most popular forms of digital gameplay. In this time our understandings of formal games have altered and expanded to allow not only play against a game itself, but against a virtual competitor. It is worthwhile then to reconsider the traits of the computer that enabled so radical a shift and the assumptions which allow the very rules and structure of the game, against the majority of ludic precedent, to replace a human opponent.

### Playing with Yourself: The Artificial Adversary?

In constructing a functional relationship with our machines, it may be that it is enough that computers are seen to 'simulate' consciousness and that our imaginings and projections 'fill in the blanks'. Through projection, then, opacity appears to lend itself to the potential creation of a 'conscious' entity behind the screen precisely because of that which is hidden. (Merrick & Woods, 2002)

In the evolution of play it is clear that the computer did not merely augment existing types of games and play experience, but facilitated entirely new ways of playing which have, perhaps merely by convention, been termed games. The digital machine has proven itself an ideal medium for the development and implementation of games which deviate from the social model of games described by early theorists of play in a number of important ways. In discussing this transformation, Salen & Zimmerman suggest specific ways in which the medium of the computer supports play. They describe the "narrow but immediate interactivity" afforded by the computer, the automation of complex systems, the ability to manipulate information and, finally, the communication enabled by networked play (Salen & Zimmerman 2004, 87-89). Whilst the latter communicative characteristic applies specifically to social games and the interactive potential Salen & Zimmerman describe is applicable to virtually all computer mediated experiences, it is the automative and manipulative traits of computers which have largely enabled the growth and maturation of the single player game form. Specifically, the combination of automation and information manipulation has enabled the computer to take on various 'roles' in the play of single player experiences, and it is these roles which imbue solitary play with the sense of agon inherent in contestual games. Whilst the maintenance of this illusion is most certainly responsible for the remarkable popularity of such games, in terms of ludic analysis, the computer as active player has become a site of slippage which enables ludologists (and all who study games) to discuss games as a homogenous form by sidestepping critical distinctions in both aesthetics and player experience.

The ability of computers to automate complex systems is as evident in the primordial Tennis for Two (1958) as it is in contemporary games. William A. Higinbotham's apparently simple game automated the calculations required to simulate the effects of velocity, gravity and solid objects on a projectile which enabled players to experience something akin to tennis in the digital realm. Although it is possible to create a sedentary analogue game which attempts to simulate Tennis (e.g. Pro Tennis, 1977; The Tennis Game, 1985; Homecourt Tennis, 2001), the pseudo-accurate modelling of these forces is an exemplar of the type of automation possible in early games. This ability of the computer to model interactive systems rapidly and effectively is evident in the early development and popular embrace of single player arcade games. These games are the fluid manifestation of Suit's "state of affairs which is in its natural condition sufficiently challenging" (2005, 86). The computational and representational abilities of the computer make possible the development of dynamically shifting sedentary challenges of virtually limitless variety. As Erkki Huhtamo notes (2005), single player arcade games are broadly reminiscent of the 'proto-interactive' entertainments of the early twentieth century and the successful mechanisation of the Victorian 'bagatelle' which arises in the form of the pinball machine. Like the pinball machine, solitaire arcade games operate as an automated skill-tester, over which a player may attempt to achieve a level of mastery through repetition. It is unsurprising then, that in order to infuse such games with the "atmosphere of competition" to which Caillois alludes, high score tables were added early in the evolution of arcade games as a meta-game which allowed the valorisation which players might expect from a traditional contestual experience. Clearly, in some of these games the similarity to the pinball machine is more apparent than in others. In a game such as Breakout (1976), the computer offers little or no active resistance to the efforts of the player. However, with the inclusion of an (apparently) active opposing entity such as the infamous antagonists of Space Invaders (1978), isolated gameplay takes another step towards achieving the illusion of contest.

Tetris (1986) is perfect example of the pure abstraction of which the computer is capable in offering a dynamic challenge whilst the persuasive anthromorphosism of *Doom*'s demons (1993) demonstrates how effectively a machine is able to represent an oppositional force against which the player strives for victory. In many contemporary single player games significant weight is placed upon the need for immersion in the simulated world, partly in order that this illusion of active resistance not be broken. Whilst one might know that the demons which just appeared from behind a door are, in actuality, carefully crafted algorithmically controlled pinball 'drop targets', this knowledge can distract from player enjoyment - hence the ongoing call for more sophisticated artificial intelligence to mask such limitations and, presumably, enhance immersion. It is this function of the computer that creates most convincingly the illusion that solitary play is contestual and to which contemporary scholars refer in describing conflict between an individual and a game system. The dynamic nature

of the automated challenge imbues the experience with the feel of active resistance, suggesting a contest where none is actually present.

This role of active challenger is most literally realised, however, in the inclusion of direct automated opponents or 'bots' wherein the automated functions of the machine provide apparent competition in the form of a direct opponent. In many multiplayer games, both action and strategy based, the option to include automated opponents extends considerably the options for gameplay by making possible the inclusion of simulated players. Clearly, as a solution to Caillois' problem of awaiting partners, such a development has proven extremely compelling. Indeed, the introduction of an automated virtual opponent, whether inferred and literal, has transformed our understanding of the game form more than any other trait enabled by the computer. Ironically, the act of single player gameplay no longer seems a predominantly solitary one. As the pixellated hordes of Space Invaders have evolved into the sophisticated AI-driven antagonists of contemporary games, the manifestation of this active opposition has led to increasingly elaborate puzzles and challenges within virtual worlds of astonishing graphic beauty. Still, it would seem that the suggestion of an active competitor facilitated by the computer is not enough, in itself, to provide sufficient motivation for extended play. Fortunately, the capacity of the machine to manipulate information has led to another significant motivation for play as manifest in what Juul terms "games of progression" (2005a, 67).

### The Art of Selective Revelation

Like pinball machines, simple arcade games remained limited by the lack of inherent competition as a motivation for play, leading to the rise in popularity of implementing incremental progression in solitaire games as a motivational element. In arcade games such as *Space Invaders* and *PacMan* (1980), the introduction of 'levels' of increasing difficulty provided further motivation beyond the acquisition of score. This technique is further developed in examples such as *Gorf* (1981) wherein each level contains differing gameplay possibilities.

The motivation to play is here increased by the desire to see 'what happens next'.

Significantly, this same motivational element also appeared in an analogue form in the shape of the early role-playing games of the 1970's. Similarly lacking the competitive element of adversarial games, early role-playing game scenarios constituted a series of challenges to be undertaken by players in an attempt to progress through the game environment. Additionally, role playing also brought to games an entirely new method of motivation for progression which has had a profound and lasting influence upon the development of solitary video-games – the narrative. Without a winning condition which valorises one player above another, the sense of progressive narrative provides a strong and instinctual motivation for the continuation of play.

The pleasure of traditional narrative<sup>2</sup>, of course, hinges upon the unpredictability of upcoming events. In a typical role-playing game, this unpredictability is maintained by the authorative figure of the game master who holds information about upcoming scenarios and challenges to be selectively revealed to players. It is here, then, that the abilities of the computer are again brought to the fore. Whereas in role play, the information concerning progression through the game is held in the game master's head or, more often, in a reference document created as an aid to facilitation, computers are able to store, manipulate and selectively reveal vast quantities of information about the subjective state of the game. In this way, the possibilities for play, the rule structures and, indeed, the point of completion of the game can all be withheld and/or selectively revealed to the player.

Prior to the arrival of the computer with its ability to accurately store and selectively display the state of the game, the notion of imperfect information in games had been largely restricted to emergent card and tile based games. In such games the central mechanics of play involve the development of strategies given imperfect knowledge of the game state (eg. *Hearts*, *Mahjong*). A computer, however, is able to hide any element of the game from the player (including the winning condition), a development which has led to the dominance of games of progression over those of emergence in solitary play. Indeed, despite frequent claims of its demise, the adventure game implementation of a progressive narrative has become a dominant motivational element in single player activities. Examples as diverse in their manifest gameplay as Neverwinter Nights (2003), Half Life 2 (2004) and Prince of Persia: The Sands of Time (2003) all rely on player desire for skill mastery coupled with narrative completion to maintain interest. Moreover, even games which harbour complex emergent properties such as real time strategy games (e.g Warcraft III, 2002), often offer narrative threads in the single player form; presumably, none is required in a multi-player implementation where the attainment of mastery is superseded by the desire for victory. Narrative completion, then, becomes a motivational framework which operates as a part-substitute for the absent contest. The single player videogame presents challenges to the player in a progressive manner whilst the ongoing narrative provides a sense of coherence between differing challenges. In this way, the computer acts in a similar way to the game master in role playing games. Of course, many examples of solitary videogames contain no narrative thread, suggesting that, whilst supportive of the experience, they are in no way integral to game play (Eskelinen 2001; Juul 2001). A cohering narrative does, however, provide an important and popular element in offering players a motivation beyond mere mastery. Indeed, as Raph Koster notes, the vast majority of contemporary single player digital games draw on the "interactive movie" form as a model for progression (2005).

In typical single player games, then, the computer not only maintains and represents the playing field, but provides automated intellectual and skill-based dynamic challenges. The implementation of narrative in such games is often used to provide additional motivation for play whilst providing separate challenges within a cohesive framework. So prevalent has this become in single player games that it is easy to see why scholars are interested in the role of narrative in interpreting these digital 'texts'. Still, it would be a mistake to treat the interactions with such a world as constituting contestual play. The ability to interact with a videogame 'world' is comparable to the configurative practice that occurs when physically manipulating a puzzle or altering the relationship between cards in a game of solitaire. The undertaking of the task is a solitary challenge -an exercise in skill and instrumental reasoning that offers the player the possibility of mastery reinforced by incremental progression and, eventually, completion. The myriad of different forms of challenge involved in single player games and the complex worlds in which they occur are evidence of the attractiveness of this style of solitary play. However, the complication here is that we tend not to view such activities as mere puzzles since they offer the type of dynamic resistance discussed earlier.

If we view digital games as merely an opportunity for exploring notions of fun and entertainment, the distinction for the player or observer between an artificial and a real opponent is not necessarily an important one. On an operational level, there is little or no difference between exploring a world inhabited by computer generated antagonists and exploring a world in which these antagonists are other human beings. From the perspective of those who study the critical potential of games, however, the differences here are profound and far-reaching, suggesting that these two forms of play have available a differing set of rhetoric possibilities which demand exploration. The central assumption which enables us to treat solitary games as being contestual in nature is founded in the notion that computers are able to play games. Once this simple assumption is overturned, the similarities between contestual games and their solitary cousins quickly unravels to reveal significant differences in form and critical potential.

#### The Unique Pleasures of Being Beaten

Obviously, we are never merely playing a game. Or, to say it another way, we are never playing only one game. We are always conscious of the game's relation to the world in which we live, the world in which that game is one small part. (Sniderman 1999, 4) It is quite apparent that computers offer a powerful medium for the development of games. Still, when discussing the role of the machine in the play of such games it is important to recognise that the computer is limited to the role of either the mediator of interpersonal play or the facilitator of automated challenges. Despite somewhat persuasive appearances to the contrary, computers are unable to participate in the play of a game since social play clearly involves far more than the considered deliberation of a number of voluntary 'states of mind' which contextualise play of the game in order to proceed. As suggested by Stephen Sniderman in his excellent discussion of chess computers at play, this broader context of gameplay is wholly inaccessible to the computer:

To a human, a chess move is (usually) part of a carefully designed pretense, a system of orchestrated assumptions, an artificial structure that can bring stimulation, competition, camaraderie, fun, and a variety of other good feelings. In general, the chess-playing human voluntarily accepts a particular challenge that involves a specific goal and specific constraints and which s/ he can abandon at any time. The chess-playing computer, on the other hand, does not choose to start and cannot stop on its own. The human is aware of the voluntary and "non-serious," conditional nature of the activity, but the machine is not (and probably can never be). (ibid., 6)

Whilst such an assertion has a ring of common sense to it, the understandings which flow from this suggest a deep divide between social and solitary play. Play activities, particularly formal games, temporarily suspend the constraints of the everyday precisely because they operate in a space of voluntary "non-seriousness". This trait is evident in Suits' description of the "lusory attitude" which contributes to the play of a game by binding players to a set of arbitrary constraints purely because such constraints make the game possible (2005, 40). Within this state of mind players seek to achieve victory, recognising that such a victory, whilst lacking serious intent, is the goal of the game. The computer, of course, is unable to work consciously towards such a goal since, in lacking the requisite consciousness, its role is limited to the facilitation of play. Following this, it is apparent that computers can neither win or lose games, and that play against a computer adversary results not in a victory but merely in a degree of success or failure. Huizinga clearly encapsulates this distinction:

Closely connected with play is the idea of winning. Winning, however, presupposes a partner or opponent; solitary play knows no winning, and the attainment of the desired objective here cannot be called by that name. (1950, 50)

In looking at examples of early table games we see a myriad of variations on the zero-sum contest which results in the identification of a clear winner and loser. That is, the winning condition of the game states that the player to achieve the goal is the winner, her opponent the loser. In later examples of card and dice games more players are involved and whilst the winning conditions often fail to declare a loser we can consider that in most cases, those who do not win - or those who fail to achieve the winning condition first - are deemed to have lost. In some cases, players are unable to continue play if they achieve a defined losing condition before the winning conditions of the game are met. Indeed, in examining multiplayer games we do not need to look hard to find players who are losing. In virtually all contestual games there are winning and losing states and it is expected that players will experience each over repeated iterations. The uncertainty of the game's outcome and the possibility of losing are a part of the lusory attitude which surrounds the play of the game. Of course, this uncertainty is also infused with the potential to emerge from the game as victor and to achieve the valorisation that constitutes the objective of the game - to win. In the vast majority of single player games, the objective is not to win, but to traverse or complete the game. In discussing the retrospective narrative of Max Payne (2001), Jonas Carlquist observes that "[y]ou cannot win, only do your best" (2002, 21), an observation which is essentially true of all single player games.

The winning condition of a single player game is more accurately the point at which there is no more of the game to emerge, when the challenge (or series of challenges) is complete. Whilst in early arcade-style games it was financially prudent to avoid such a conclusive state, in any non-contestual game the play is ended by completion of a designated goal. In the vast majority of single player games there is only one point of completion. In the case of early arcade challenge games this is the point at which the computer can no longer generate new challenges for the player, a situation which the use of cohering narratives does little to mask. The single player videogame The Legend of Zelda: Ocarina of *Time* (1998) ends when the player has traversed all of the game space and destroyed countless enemies to finally defeat the evil Ganon and (presumably) walk into the sunset with the Princess Zelda. This is the way the game ends -there are no other ways for it to conclude. While we can see many individual puzzles within this game and an almost infinite number of permutations of action to arrive at this ending, the actual play of the game is complete when the conditions above are met and the player views the final cutscene. In one sense this is the right solution to the game, there is no alternative way of completing it. In some cases we may re-play the game in order to view a different narrative conclusion or we may buy the sequel to the game that is hinted at by the lack of closure. The game, however, is complete; it has been surmounted. If I am unable to progress past a given level of a single-player game the fault is clearly mine since the rules of a challenge game must, by definition, allow its own completion - the lack of a solution to the challenges presented by the game would render the game unplayable. So in challenge games, the moment of victory is supplanted by moments of successful completion and mastery.

Just as it is problematic to compare this completion with the victory condition of contestual games, similarly failure to complete a single player game constitutes a different state than that occupied by the losing party of a multiplayer game. For Suits: Failing to win a game by virtue of losing it implies an achievement, in the sense that the activity in question – playing the game – has been successfully, even though not victoriously, completed. (2005, 83)

As Parlett suggests (1999, 3), the moment of completion in a social game corresponds to the states of victory and, correspondingly, loss. Challenge games in their present form are essentially devoid of a losing state due to the implementation of save games, lives and the unlimited replayability of a given game. Clearly, failure to complete a single player game is not, accurately speaking, a loss since there is no opponent over whom we have sought to achieve victory, but a series of automated challenges over which we have sought to achieve mastery. Due to the replayable nature of game rules, failure to achieve this mastery can be interpreted as a temporary setback which can be overcome by repeated practice. Thus you cannot win, cannot lose, yet you are still playing a game?

### Machines in the Magic Circle: The Limitations of Simulation

Closely related to the notion of winning and losing in games is the ability to manipulate the circumstances around which victory is achieved by undermining the rule structures of the game to one's advantage, a practice commonly referred to as good old fashioned 'cheating'. In a single player game the notion of cheating is rendered obsolete since there is no 'other' over whom we achieve victory. Consequently, the proliferation of strategy guides and walkthroughs which enable completion without mastery do not constitute cheating in the contestual sense but are perhaps more accurately compared to the informational sources which make easier the completion of any creative, intellectual or skillbased pursuit (eg. Cookbooks, Automobile manuals etc.). Whilst it is possible to view drawing on such information as 'cheating oneself', the act is not imbued with any of the ethical complications which make cheating such a site of interest in multiplayer games. Examples such as MMORPG 'grief play' and the act of 'camping' in first person shooters exemplify the ethical concerns which are brought up by differing interpretations/manifestations of the lusory attitude. These activities challenge the magic circle, the "temporary worlds within the ordinary world" (Huizinga 1950, 10) which are brought into being by the voluntary act of gameplay. The stepping into this magic circle constitutes an understanding between players which can be seen as a result of the shared lusory attitude. The variation in lusory attitudes of players renders the magic circle somewhat fragile and it is when these attitudes collide that the unspoken rules of social gameplay are brought to the fore and the complex ethical dimensions of creating a subset of reality in the form of a game are most evident.

In the single player challenge, however the requirements for entry to the magic circle are far less demanding than in the realm of social play – indeed, it is questionable whether Huizinga's term is truly applicable to such activities. Whilst the interpretative and configurative elements of solitary play may outwardly appear to mirror their social counterparts, the adoption of a lusory attitude towards gameplay is hardly a requirement. Instead, the single player game operates as an exercise in instrumental reasoning and skill mastery which only ostensibly involves the adoption of a lusory attitude. The imperative of this mastery is reinforced by the inflexibility of digital rule systems which negate the requirement for conscious submission to an arbitrary set of constraints. The magic circle then is only 'magic' to the extent that it lives in the disposition and imagination of the individual player.

I have suggested here that since it is (as yet) impossible for a computer to engage in the act of play, the challenge game cannot contain either a win or loss state, and that the nature of the magic circle is such that it excludes the participation of machines who are unable to enter voluntarily. Yet one of the strongest arguments put forward for the critical potential of games lies in the latent ability of simulations to offer an alternative to dominant representational modes of media. There are a large number of simulation/games which explicitly omit a win or loss state but with which players can engage in order to experiment with dynamic systems and assess their operation, either for educational or playful reasons. Whilst acknowledging the strength and utility of these designs, it is important to recognise the limitations of single-player simulation in effectively engaging with critical issues concerning 'the human condition'.

The simulative abilities of computer environments have enabled digital games to grow far beyond the simplistic physics models of Tennis for Two and to embrace simulation of a broad array of dynamic systems. Fuelled by constructionist educational theory, the notion that active experimentation might provoke reflection on the structure of a system has gathered significant interest. Games such as SimCity (1989), Civilization (1991) and even Grand Theft Auto (1997) have all been used as a basis for the discussion of some of the systems they appear to simulate (Burns 2002; Gillespie 2002; Kirriemuir & McFarlane 2003). Examples such as Gonzalo Frasca's September 12th (2003) and Wild West Bank (2005), an Israeli anti-settlement game, draw on this characteristic to foreground political concerns. The complication here, as Turkle points out, is that such (predominantly single player) simulations are constructed by individuals and are therefore likely to reflect the values and morality embedded in them by the designer (1995, 71). This knowledge, Turkle suggests, may lead to a dismissive or resigned attitude to the outcomes of a simulation when presented as an objective model of reality.

Of course, when similar assertions are made concerning other forms of single player texts they are inevitably open to accusations of intentional fallacy, and certainly there is no reason to think that challenge simulations should not offer possibilities for the reflective consideration of ethics in a similar way to which the 'reading' of linear texts can. As with books and cinema, multiple subject/reading positions make available a myriad of interpretations to the reader. Still, such reflective consideration is of an entirely different order than that offered by participation in interpretations play. To suggest that games might offer interpretative possibilities in line with those of narrative forms fails to acknowledge the inherent potential of games whose principle characteristic is the manipulation of the relationships *between* viewers. As long as challenge games are restricted to the abstract modeling of the artificial, they may certainly offer an insight into the systems they simulate. Indeed, immersive vehicle racing games and flight simulators demonstrate how effectively machines simulate the behaviour of machines. However, when the design of any computer simulation presumes to offer political, social, or ontological insight it must usually include the simulated behaviour of human beings. In doing so, the simulation is reduced to an exercise in morality – a reflection of the views of the designer/s which are too easily dismissed. Furthermore, when such simulations are embedded within the framework of a singleplayer game through narrative and/or representative elements, they are further rendered ineffectual as the imperative of mastery is inevitably foregrounded over reflective consideration of the system. Conversely, multiplayer games are particularly good at simulating the behaviour of groups of people, since they are formed by the dynamic interplay of human beings. In effect, social games are able to act as facilitators of modeled interpersonal goal-based dynamics. In this capacity they demand that players make decisions which, in a contestual game, effect the circumstances of other players. In doing so, they enter the realm of ethics, a space which the single player game cannot, by definition, explore.

The social game is a rich site for the exploration of ethical issues, not only because it involves human interaction, but because games themselves can be seen to be constructed upon certain ethical considerations. The most obvious of these is that games are – ideally – a field of indisputable fairness, the possibilities of playing with which offers an intriguing site for invoking more critical games (Woods 2004). Indeed a number of examples in both analogue and digital forms suggest that the idealised balance of social games can be challenged in varying ways. The traditional game Fox & Geese, the more contemporary Illuminati (1983) and numerous analogue wargames are just a few examples of how the assignment of varying goals can complicate the level playing field, restructuring contest in a way which does not afford each player equivalent paths to victory. In the digital realm this is evident in assaultstyle iterations of multiplayer combat games which assign differing goals to separate teams. The board game Cosmic Encounter (1977) brings players to the table with a variety of rule-breaking capabilities

which can render a play of the game staggeringly unfair in certain situations, a situation mirrored in the unbalanced species characteristics of the *Alien vs. Predator* videogame (1999).

Most infamously, the effectiveness of Allan Calhamer's *Diplomacy* (1959) hinges on a delicate balance of unequal power distribution and the negotiation of interpersonal dynamics. In these cases, of course, the imbalance is apparent to players at the outset of the game. However, Cathy Greenblatt's notion of 'multiple realities' in social simulations (1975) is evident in games such as *Starpower* (1969), *Barnga* (1990) and many other examples which involve the distribution of inaccurate and deliberately misleading information to players in the development of simulated systems – surely a possibility that lends itself particularly well to the selective revelation offered by computers. These differing approaches to balance and information manipulation are only possible in multiplayer games. As variations on unfair or unbalanced contestual play, they are inaccessible to single player challenge games.

A large part of the work of video game designers has, for the last three decades, been concerned with the construction of ever more elaborate series of coherent challenges to offer the solitary player. The results of this experiment have been astounding in both a creative and cultural capacity. However, setting aside for the moment the long history of virtual worlds/games whose hybrid nature complicates this discussion, the ludic development of more intimate multiplayer environments has been limited, to say the least. With few exceptions<sup>3</sup>, the form has been dominated by implementations of traditional games, real-time combat simulations and collaborative challenge games. It is unsurprising then to find that the recent resurgence of interest in analogue board games, more specifically 'German' or 'Designer' games, sees a strong move towards social interaction in the facilitation of game play – perhaps as a reaction to the sterility of the challenge that has come to dominate digital games. Ultimately, the arrival of the computer and its ability to generate vast and complex worlds appear to have led to a disproportional amount of energy being expended in developing challenge games which move ever further from the social game model. It would seem that the potential of the computer as deceptive mediator has been overlooked in the excitement generated by the machine as a facilitator of play.

## The Ethical Fragility of the Magic Circle

Within the magic circle, a game is suspended between the ideal notion of a level playing field and the reality of inevitable unfairness, a reality which creeps into every game, even while the magic circle's borders hold it at bay. (Salen & Zimmerman 2004, 262)

The challenge game that occupies a dominant place in cultural and academic understandings of games is a relatively new development, at least in the formal sense, made possible largely by the ability of digital media to facilitate ever-changing dynamic challenges over which the individual can achieve mastery. Of course, this is not to dismiss single player games as anything less than the phenomenally rich, creative, and inspiring experiences they are, nor to underestimate the incredible amount of fun they provide. However, the intention of this article has not been to question the development of games for fun, but to consider the potential these two very different game forms have to transcend 'mere entertainment'.

Proponents of a narratological approach have effectively demonstrated how easy it is to force a pre-existing theoretical framework onto single player games, particularly those which utilise fiction as a cohering or motivating structure. The significant interpersonal aspect of the multiplayer game appears far less susceptible to such superficial interpretation. As players collaborate in the maintenance of the magic circle in a social game they are involved in a voluntary subjugation to a set of arbitrary rules in order to play out the pleasurable experience of the game. The fragility of the player-negotiated magic circle in the social game operates as a site for the exploration of ethics within a dynamic environment, whilst simultaneously constituting a space where the operational rules of everyday reality appear to not apply. This, I would argue, is play as it informs the development of culture - through the personal exploration of contestual/collaborative behaviour in a structured environment. It is this form of play which constitutes the vast majority of formal games before the arrival of the computer and which marks such games as unique from any other cultural form. In multiplayer games strategic reason is complicated by the collaborative imperative of play, along with communicative acts in which players form a part of a dynamic system which includes other human beings. A multiplayer game is not a simulation to be tinkered with, but a simulative experience that is upheld by player consent. The dynamics of each iteration of a multiplayer game are uniquely dependent upon the participants in the game to construct the lusory playing field. To the player, this is perhaps a self-evident and trivial observation. To the ludologist, however, it is a primary distinction between game forms, suggesting that the evolution of digital games is still in a somewhat challenge-focused stage.

Indeed, to study games primarily through the eyes of a single player and their involvement with a dynamic computer-generated environment is to overlook perhaps the most unique trait of the game form. Social networking and the (admittedly somewhat vague) promises of Web 2.0 have demonstrated that the potential of the computer as mediator offers a next step beyond the dynamic 'information repository' which characterised early attitudes to the personal computer. Similarly, the multiplayer computer game is a form in its infancy and the study of challenge games might ultimately be relegated to the footnotes of ludic history by the mediative potential of the network – a truth which is already being borne out by the success of virtual worlds and their playfacilitating kin. The magic within the magic circle lies in the shared understanding of gameplay as a mediating cultural form, one which transcends everyday reality 'by agreement'. It is the lusory attitude itself which most obviously informs the development of culture through the experience of circumscribed play. With no 'other', there is no shared understanding. With no shared understanding, there is no magic.

- 1. I am here referring to Willy Higinbotham's *Tennis for Two* and Steve Russell's *SpaceWar*.
- 2. By which I mean narrative as a 'story' as opposed to broader notions of narrative as the dominant way of experiencing reality.
- 3. Eric Zimmerman's *Sissyfight 2000* is an obvious innovative example which springs to mind.

### GAMES MENTIONED

- Alien Versus Predator (1999) Computer Game: Rebellion/ Electronic Arts.
- *Barnga: a simulation game on cultural clashes* (1990) Board Game: Intercultural Press.
- Breakout (1976) Computer Game: Atari.
- Cosmic Encounter (1977) Board Game: Eon Games.
- Diplomacy (1959) Board Game: Avalon Hill.
- Doom (1993) Computer Game: id Software.
- Gorf (1981) Computer Game: Midway.
- *Grand Theft Auto* (1997) Computer Game: DMA Design/BMG Interactive.
- *Half Life 2* (2004) Computer Game: Valve Corporation/Sierra Entertainment.
- Homecourt Tennis (2001) Board Game: Homecourt Games.

Illuminati (1983) Card Game: Steve Jackson Games.

Max Payne (2001) Computer Game: 3D Realms/Gathering.

Neverwinter Nights (2003) Computer Game: BioWare.

PacMan (1980) Computer Game: Namco.

- *Prince of Persia: The Sands of Time* (2003) Computer Game: Ubisoft.
- Pro Tennis (1977) Board Game: Gamesman Inc.
- September 12th (2003) Computer Game: Newsgaming.com.
- Sid Meier's Civilization (1991) Computer Game: Microprose Software.
- SimCity (1989) Computer Game: Broderbund.
- Sissyfight 2000 (2000) Computer Game: Http://www.sissyfight. com/ (Retrieved Nov 30th, 2007).
- Space Invaders (1978) Computer Game: Bally Midway.
- Space War (1962) Computer Game: Steve Russell.
- Starpower (1969) Board Game: Simile II.
- Tennis for Two (1958) Computer Game: William A. Higinbotham.
- Tetris (1986) Computer Game: AcademySoft.
- *The Legend of Zelda: Ocarina of Time* (1998) Computer Game: Nintendo.
- The Tennis Game (1985) Board Game: Walt Polzin Games.
- *The Wild West Bank* (2005) Computer Game: Http://brand.co.il/ unik/westbank/ (Retrieved July 4th, 2005).
- *Warcraft III: Reign of Chaos* (2002) Computer Game: Blizzard Entertainment.

### REFERENCES

- Burns, Alex (2002) "Civilization III: Digital game-based learning and macrohistory simulations", retrieved November 30th, 2007, from <u>http://www.disinfo.com/archive/pages/article/</u> id2273/pg1/\_
- Caillois, Roger (1961) Man, Play, and Games. New York: Free Press.

- Carlquist, Jonas (2002) "Playing the Story -- Computer Games as a Narrative Genre", *Human IT* 6(3), 7-53.
- Eskelinen, Markku (2001) "The Gaming Situation", *Game Studies* 1(1). <u>Http://www.gamestudies.org/0101/eskelinen/</u> (retrieved November 30th, 2007).
- Frasca, Gonzalo (2001) *Videogames of the Oppressed: Videogames as a Means for Critical Thinking and Debate.* Unpublished MA Thesis, Georgia Institute of Technology, Atlanta.
- Frasca, Gonzalo (2003) "Ideological Videogames: Press left button to dissent", retrieved 30th November, 2007, from <u>http://</u> www.igda.org/columns/ivorytower/ivory\_Nov03.php
- Gillespie, Thom (2002) "Grand Theft Auto, the Video Game Everyone Loves to Hate, Allows Ethics and Morality Lessons", *Technos Quarterly* 11(4). Available online:\_ <u>http://www.ait.net/technos/tq\_11/4gillespie.php</u> (retrieved November 30th, 2007).
- Greenblat, Cathy S. (1975) "Sociological Theory and the 'Multiple Reality' Game", in Greenblat, Cathy S. & Duke, Richard D. (Eds.) *Gaming-Simulation: Rationale, Design and Applications*. New York: Wiley.
- Huhtamo, Erkki (2005) "Slots of Fun, Slots of Trouble. An Archaeology of Electronic Gaming. In Raessens, Joost & Goldstein, Jeffrey (Eds.) *Handbook of Computer Games Studies*. Cambridge, Mass.: MIT Press, 3-22.
- Huizinga, Johan (1950) *Homo Ludens: A Study of the Play Element in Culture.* Boston: Beacon Press.
- Juul, Jesper (2001) "Games Telling Stories? A brief note on games and narrative", *Game Studies* 1(1). <u>Http://www.gamestudies.</u> <u>org/0101/juul\_gts/</u> (retrieved November 30th, 2007).
- Juul, Jesper (2005a) *Half Real: Video Games between Real Rules* and Fictional Worlds. Cambridge: MIT Press.
- Juul, Juul (2005b) "Where the Action is", *Game Studies* 5(1). <u>Http://www.gamestudies.org/0501/</u> (retrieved November

30th, 2007)

- Kirriemuir, John & McFarlane, Angela (2003) "Use of Computer and Video Games in the Classroom". Paper presented at the *Level Up Digital Games Research Conference*, Utrecht, Netherlands.
- Koster, Raph (2005) "The Pixar Lesson", retrieved December 7th, 2005, from <u>http://www.raphkoster.com/?p=193</u>
- Merrick, Helen & Woods, Stewart (2002) "Ergonomics for the Mind: Do Cyborgs Dream of the Transparent Interface?", in the Proceedings (CD-Rom) of the *Consciousness Reframed: The Fourth International CaiiA-STAR Conference*. Perth: Curtin University of Technology.
- Parlett, David (1999) *The Oxford History of Board Games*. Oxford: Oxford University Press.
- Salen, Katie & Zimmerman, Eric (2004) *Rules of Play: Game Design Fundamentals*. Cambridge: MIT Press.
- Sniderman, Stephen (1999) "Unwritten Rules", retrieved November 30<sup>th</sup>, 2007, from <u>http://www.gamepuzzles.com/</u> <u>tlog/tlog2.htm</u> Suits, Bernard (2005) *The Grasshopper: Games, Life and Utopia*. Toronto: Broadview Press.
- Turkle, Sherry (1995) *Life on the Screen: Identity in the Age of the Internet*. New York: Simon and Schuster.
- Woods, Stewart (2004) "Loading the Dice: The Challenge of Serious Videogames", *Game Studies* 4(1). <u>Http://www.gamestudies.org/0401/woods</u> (retrieved November 30th, 2007)