

# The Gameplay Gestalt, Narrative, and Interactive Storytelling

Craig A. Lindley Zero Game Studio The Interactive Institute Skeppsbron 24SE-621 57 Visby Sweden craig.lindley@interactiveinstitute.se

#### Abstract

This paper discusses the relationship between concepts of narrative, patterns of interaction within computer games constituting gameplay gestalts, and the relationship between narrative and the gameplay gestalt. The repetitive patterning involved in gameplay gestalt formation is found to undermine deep narrative immersion. The creation of stronger forms of interactive narrative in games requires the resolution of this conflict. The paper goes on to describe the Purgatory Engine, a game engine based upon more fundamentally dramatic forms of gameplay and interaction, supporting a new game genre referred to as the first-person actor. The first-person actor does not involve a repetitive gestalt mode of gameplay, but defines gameplay in terms of character development and dramatic interaction.

Keywords

Gameplay, interactive narrative, gestalt.

# INTRODUCTION

A central issue in the development and study of games is the relationship between gameplay and narrative. This issue is not straightforward, since the nature of narrative is complex and the term has been used in different ways in narratology (the study of narrative; see [7]). The study of gameplay has historically been the study of competitive systems (see http://williamking.www.drexel.edu/top/class/histf.html for an extensive historical bibliography), more recently associated with economic theory than with play. Traditional board games, often referred to as puzzle games, typically model competitive situations in a very abstract way, involving little or no story context, game world, or characterization. It is only with the advent of computer games that the distinctions between games/gameplay and narrative have become unclear, and the study of games has become refocussed upon computer games (eg. http://www.ludology.org/, www.game-research.com). With this shift of attention, the gameplay versus narrative question has emerged as a central issue. However, gameplay has not been well defined in these discussions, and it is not clear how well traditional abstract concepts of competitive gameplay capture the essence of the term as used to describe computer gaming experiences. For example, simulation games involve challenge without competition with another (computer or human) player, although it may be argued that in a simulation game a player competes with themselves or with the computer in a less explicit form; strategy games can be played as simulation games, and action games can turn into explorations. Competition, in any case, does not appear to be the factor that creates tension with narrative in computer games.

Rather than dwelling upon this issue in an analytical way, this paper explores an alternative conception of gameplay as an interactive gestalt formation process. This is placed in the context of the manifestation of narrative in games, and it is the *gameplay gestalt* that we identify as the cause for the tension perceived between gameplay and narrative in computer games. This is *not* an issue of narrative versus competition in more traditional conceptions of the game, since competition can be seen to drive narrative in widespread conflict-driven narrative forms. After characterising the gameplay gestalt, we describe an approach to gameplay that does not rely upon the gameplay gestalt, and thereby creates a more fundamentally narrative gameplay experience. This approach is being investigated in the Purgatory Engine, a research project of the Zero Game Studio.

#### NARRATIVE STRUCTURE IN COMPUTER GAMES

A simple view of narrative in computer games suggests that through the mechanism of gameplay, the player experiences an interactive narrative. Whether this is true or not depends upon one's interpretation of the notion of narrative. In it's broadest sense, a narrative may be regarded as an experience in time that has some kind of feeling of unity or integrity. In this sense, however, the notion of narrative is too broad to be analytically useful. Dramatic narrative captures more specific meanings, encompassing forms having systematic variations. For example, the central notion of narrative in modern commercial cinema is that of a form having a beginning (the first act), in which a conflict is established, followed by the playing out of the implications of the conflict (the second act), and completed by the resolution of the conflict (the third act). This three-act restorative structure includes a central protagonist, a conflict involving a dilemma of normative

morality, a second act propelled by the false resolution of this dilemma, and a third act in which the dilemma is resolved by an act that reaffirms normative morality [4]. Each act within the three-act structure culminates in a point of crisis, the resolution of which propels the plot into the following act, or to the final resolution. Continuity of action within the representation of the story world of a film, theatre play, or computer game, representing causal interconnections within the *diegesis*, or story world (see [7] for a discussion of the concept of diegesis in cinema), is a primary technique for the construction of the central conflict form at a detailed level. Dancyger and Rush [4] have demonstrated how the restorative three-act structure may be systemmatically violated, while remaining within the broader category of those forms of narrative dominated by continuity of action.

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling

The narrative structure of computer games<sup>1</sup> is typically constructed according to the conflict-driven model of dramatic narrative. In considering game form, it is also useful to distinguish the concepts of story and plot. A story is the set of significant events within the narrative world. A plot is the subset of those events that are actually explicitly represented, in their order of presentation [7].

In computer action games, the central conflict form usually has a recursive structure. It is useful to consider this in some detail, since many aspects of the narrative structuring principles involved can be seen to apply across genres (although a detailed study of different genres will not be attempted here; nor will any attempt be made to address the problematic question of what game genre amounts to). The overall restorative three-act model is applied to the action game experience as a whole, and the dramatic arch is completed when the user finishes the game. At this level, however, the story is usually not interactive, since act one, containing the initiating conflict, key scenes within the story of act two, and the playing out of the consequences of the final resolution in act three, are typically achieved by cut scenes, sequences of conventional, non-interactive video material. The next level down within the recursive structure is that of the game level. The game level is designed for the pursuit of a goal, that of the player reaching the end of the level, that serves the purpose of progressing the player through the second act of the higher level three-act structure of the game narrative. Conflict is achieved by resistance to the player achieving that goal, in the form of opposing enemies, puzzles, barriers, and the like. There is rarely if ever a one-to-one correspondence between game levels and acts; more typically, the first act and the end of the third act are presented via cut scenes, with game levels summing to form a highly extended second act followed by the final resolution of the third act as the end of game play (e.g. by overcoming the final and toughest enemy, usually a demonic character at the heart of the central conflict in the story). The sense of a level-specific conflict can be enhanced by increasing difficulty through a level, or by a dramatic structure that emphasizes the point of completing the level, such as the defeat of a level boss, the big barrier creature at the end of the level. The false resolution that drives act two of the three-act restorative model at

the highest level may be seen as a repetitive phenomenon at the end of each non-terminal game level; when the game level is resolved (completed), the player only finds themselves at the beginning of the next game level full of conflicts.

At the next level of the recursive decomposition of computer action game structure, we see a series of smaller scale conflicts and challenges within a game level, which may include monsters to be defeated or avoided, puzzles to be solved, or treasures, clues or keys that must be found in order for progress in the current or future game levels, etc. These are simple conflicts of survival, prosperity, and progress, similar to those of the game level as a whole, and generally lacking any significant and explicitly acknowledged moral aspect (it's always ok to kill a monster, by definition) beyond the background moral imperatives inherited from higher structural levels. Of course, one can usually save a game state and return to a previous state in the event of death or failure, so the nature of the conflict is not actually one of survival, but one involving tradeoffs within cognitive, emotive, and performative effort. This point will be elaborated below.

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling

Usually it is only this lowest level of the action game plot that is highly interactive. The linear and non-interactive cut scenes framing the game play are revealed in a predefined order, and within a level all players usually start in the same place and must have completed the same specific set of tasks in order to complete the level. This is not necessary, but is usually the case, since it minimises the production effort required to create the gameplay experience. A set of level goals might be completed in different orders, but in considering the overall level, the same goals must usually be achieved. In this case, the plot may be interactively ordered, but the events of the plot are not interactively defined, and variations in order of occurrence do not change the nature of the events.<sup>2</sup>

Interaction at lower levels may include choices of which enemies to try to defeat or avoid, how to defeat or avoid them, which treasures to find or pick up, what sequences to try for solving puzzles, which particular paths to traverse, etc.. This is also the level of the core gameplay experience. Productions that do not support interaction at this level, such as multipath movies in which the viewer chooses from a range of possible pathways representing different plots or stories (see http://www.brilliantdigital.com/ solutions/movies/), count as very marginal examples of games (they are better regarded, perhaps, as hypertexts). But the typical gameplay experience can be seen to have little or no influence on higher levels of plot. In terms of the strong senses of narrative form, such as the restorative three-act structure, gameplay has little impact. For games in which the higher levels are achieved by cut scenes, game play is actually suspended while the central structural elements are established. More strongly than that, however, the higher levels of narrative form could often be completely eliminated with very little impact upon the core gameplay experience; progress through the second act of the highest level of the plot impacts gameplay in terms of increasing performative complexity (e.g. more weapons or special moves)

and/or difficulty, but the essence of the gameplay remains the same. It must be asked, then, what this essential gameplay experience is.

## THE GAMEPLAY GESTALT

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling Kücklich [5] has argued that playing a game is a matter of learning the rules of the game by interaction, and once the rules have been learned, then the game has been finished. Certainly, gameplay involves learning the rules of the game. The rules establish what as a player you can or cannot do, and what the behavioural consequences of actions may be within the world of the game. But this is certainly not the winning of the game, merely establishing the ability to play it, and successful play does not necessarily require learning all of the game rules, but only those necessary to support a particular playing style. Making progress, and, with persistence and basic ability, eventually completing the game, is a matter of learning how to interact in a way that supports progress given a useable subset of the rules of the game. It is the central point of this paper to suggest that this is a matter of learning a *gameplay gestalt*, <sup>3</sup> understood as a pattern of interaction. Playing the game is then a matter of performing the gestalt.

A gameplay gestalt can have many forms for a particular game, capturing different playing styles and approaches to progressing through the game structure. In general, it is a particular way of thinking about the game state, together with a pattern of perceptual, cognitive, and motor operations. A gameplay gestalt may capture part of the notion of nonsemiotic performance within gamespace identified by Tronstad [8], as a form of action without language-like semiotic encoding (perhaps the point here should be that it lacks the second articulation of textual language, as described in [7], being more like cinema in its means of semiosis), although the gestalt is more of an interaction pattern involving both the in-game and out-of game being of the player. Perhaps thinking as a self-conscious process is superfluous here, since being lost in a gameplay experience may involve being unselfconsciously involved in nothing but the performance of the gameplay gestalt. We propose that the nature of gameplay gestalts should be a core area of study for better understanding games. For example, we hypothesise that the complexity and performative demands of a gestalt must lie within a particular range for a specific person in order for a game to be engaging and immersive. That range is likely to increase in complexity as a player becomes increasingly familiar with a game, or with the same gameplay gestalt performed in different games, with the effort required for a given complexity correspondingly decreasing.

The notion of a gameplay gestalt may capture the strong learning potential of many game forms, capturing the skills they impart in the abstract and portable form of the gestalt set that can be learned to successfully complete them, an abstraction that carries across many potential realistions in particular game experiences, and into contexts that may go well beyond that of games. The notion of a gameplay gestalt also clarifies the tension, noted for example by Aarseth [1], between gameplay and narrative. Gameplay in itself has remained a very vague notion in the literature to date, making it difficult to understand what is being juxtaposed with narrative. A gameplay gestalt, however, as a pattern of perceptual, cognitive, and motor operations, is not only more specific, but could perhaps be measurable in terms of the perceptual, cognitive, and motor requirements of performing it. It may in fact be possible to classify games according to their required effort in the gestalt dimensions of perception, cognition, and motor performance. For example, a game like chess is not very demanding in perceptual or motor skills, but can be extremely cognitively demanding, while a fast shooting (classic *Starwars* style) game requires very fast perceptual and motor coordination, and leaves very little time for deliberative cognition). More interestingly, we can hope to develop much finer distinctions within these dimensions, referring to the specific forms of motor, perceptual, and cognitive skills that a particular game requires, and in what relative proportions.

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling

An example of an instance of a gameplay gestalt could be particular to a person, a game, and a playing occasion. More generally though, recurrent gameplay gestalts can be identified across games, game genres, and players, and it is to be hoped that a suitable language can be developed for generalizing gestalt descriptions as a basis for analysis and comparison. Informal gameplay gestalt descriptions may typify genres. For example, in strategy games, gameplay typically includes setting up resources to feed a supporting population, establishing the infrastructure to create various forms of military forces, defending against and initiating attacks, and directing the player's side of any battle that occurs. Single player games generally progress through increasing numbers of resource, new military facility, or unit types. Gameplay is a combination of resource management, strategic and tactical decisions. It is a matter of building up an economic system that can be sustained through repeated enemy attacks, while building the strength to counter attack, defeat the enemy, and win the game.

Battles involve a common gestalt in computer games concerned with balancing mixed forces: long range, low power archers must be supported by higher power but slower crossbowmen, and these are supported by infantry or cavalry without missiles. This is a manifestation of a very general pattern in games, the paper-scissors-rock pattern of elements with a cyclic relationship of relative capability (see [6]). This pattern is manifest in the relationships between player or unit types, weapons and defences. Resource management involves another kind of gestalt based upon chains of technical and productive dependency. The patterns involved in resource management generalize across strategy games, and involve the creation of production chains of sufficient scope to keep the economy running and supporting whatever virtual military system the games support. Complexity is typically a function of the number of resources involved, the length of the production chains, and interdependencies among resources and production units. Some production chains are not ones involving the transformation and transportation of raw materials, but represent a kind of existential dependency (e.g. you need a university before you can develop machines).

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling

In strategy games, resource management feeds into military capacity, since one must have the appropriate production forms to create different types of military units, and enough production capacity to maintain or expand military forces despite ongoing losses through battle. This creates a more complex gameplay gestalt in which the rhythm of military operations must be synchronized with the rhythms of resource management. This frequently involves the development of a game state to the point where a specific repetitive pattern emerges and remains stable, allowing the virtual gold to slowly accumulate while repetitively regenerating and deploying military units that are in turn slowly consumed by repetitive battles. Once this system of feeding battles has been established, it can be maintained by the player's repetitive interaction in a cyclic pattern of attention until the level goal has been achieved. It would be interesting to study variations in the gameplay gestalt for such a level. There are undoubtedly many different ways of completing a strategy game level, but these may have more to do with variations of spatial layout than differences in the basic interaction pattern or gestalt required to complete the level. This also illustrates different gestalts applying at different levels of abstraction, genre definitions deriving from higher levels, and with far more variations in gestalts being possible at lower levels (move x archers to tower y every n minutes to head off the enemy camel musketeers from the east who arrive every n+1 minutes).

### THE GAMEPLAY GESTALT VERSUS INTERACTIVE NARRATIVE

The question of the relationship between gameplay and narrative can now perhaps be phrased in different terms. In particular, we may suppose that the apprehension of an experience as a narrative requires the cognitive construction of a narrative gestalt, a cognitive structure allowing the perception and understanding of an unfolding sequence of phenomena as a unified narrative. The three-act restorative structure is one example of a narrative gestalt, a pattern for organizing a sequence of events into a unified whole that can only be understood as a whole, and not by taking its parts as an unrelated collection of events. In the context of a computer game, one must learn and then perform a gameplay gestalt in order to progress through the events of the game. To experience the game as a narrative also requires the creation of a narrative gestalt unifying the game experiences into a coherent narrative structure. The tension between gameplay and narrative can now be viewed as a competition between these respective gestalts for perceptual, cognitive, and motor effort. Within the range of effort required for immersion and engagement, if gameplay consumes most of the available cognitive resources, there will be little scope left for perceiving complex narrative patterns, and little point in terms of adding to immersion and engagement. Conversely, focusing on the development of the sense of narrative (eg. in the case of multipath movies) reduces the player's need and capacity for a highly engaging gameplay gestalt.

It was suggested above that the nature of the dramatic conflict involved at the lowest level of the dramatic structure of a game, the conflict within the detail of the gameplay experience, is not actually one of survival, but one involving tradeoffs within cognitive, emotive, and performative effort. Is it worth trying to jump over a ravine at the risk of falling and having to reload a past game state for the sake of a health pack that may help me to get past the tough enemy ahead without then having to reload and retry when the enemy defeats me? The conflict is an ergonomic one within the terms of the gameplay gestalt. And this has *nothing* to do with the higher level narrative context. So the tension between gameplay and narrative is more fundamental than being a simple competition for cognitive and performative resources: the player's investment in the low level conflict as an active participant is disconnected from any deep narrative significance understood in terms of the shape of the higher level narrative gestalt.

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling

# DRAMATURGICAL GAMEPLAY: DISSOLVING THE GAMEPLAY GESTALT

A major issue for game form is the current lack of narrative depth in games. Gameplay gestalts may be highly demanding, and therefore highly immersive, but tend to be very shallow thematically, and performatively repetitive. These are positive values for many game players, frequently leading to addictive playing. There is nevertheless a widespread desire for greater thematic depth, even among dedicated gamers. Better understanding and analyses of gameplay and narrative gestalts may present a way of achieving this by developing styles of gameplay in which gameplay and the narrative gestalt formation processes are more fundamentally integrated. To achieve this, gameplay must be more than a repetitive interaction mechanism for progressing through a larger scale but fixed and linear narrative structure.

The Purgatory Engine is an experimental computer game engine under development by the Zero Game Studio of the Interactive Institute in which this fundamental integration of dramaturgical narrative and gameplay is being explored. The motivation behind the Purgatory Engine is to create interactive gameplay experiences that achieve more varied, subtle, and deeper emotional experiences for players than typical computer games currently do, and to explore more diverse themes. One inspiration for the Purgatory gameplay experience is live action role playing (LARPing). A LARP is a form of improvisational theatre without an audience (see http:// weltschmerz.laiv.org/europa/sourcebook/eurochap\_1.RTF). The experience sought by LARPers is one of deep characterisation and intensity of emotional experience in character. One of the main questions being investigated by the Purgatory Engine project is that of whether and how it might be possible for players of a computer-mediated experience to achieve levels of immersion, engagement, and emotional intensity comparable to those of LARPers.

In seeking to answer this question, we are led to a number of more specific topics of investigation:

- Can a computer-mediated LARP be effective, and what tools are needed to make it effective, where effectiveness is understood in terms of the quality of experience obtained in a LARP?
- Can non-player characters (NPCs) in a computer-mediated experience be constructed that have effective functions in dramaturgical terms? Can we, for instance, define roles for NPCs that may be realized in relation to the kind of objectives and motivations used by human actors following the Stanislavsky acting method [2]?

Craig A. Lindley: The Gameplay Gestalt, Narrative, and Interactive Storytelling

• What is the basic language of interaction in such a system? What kinds of messages can be delivered by players and by what means such that interaction is fundamentally dramatic, and not a repetitive cognitive interaction pattern referred to above as a gameplay gestalt?

Of course, the notions of game and gameplay here are not straightforward, since the meanings of those terms are conditioned by dominant game forms, and a new form may take time to fall under the concept of a game. That is, the gameplay gestalt may be central to experiencing something as a game. In this case, moving beyond such a gestalt may be to move beyond the boundaries of a game. If so, we are at a loss as to what to call such an experience. But in any case, two major approaches will be investigated in the Purgatory Engine:

- The system is an intercommunication technology for geographically separated LARPers engaging in free improvisation.
- The system actively enforces dramaturgical progression, in terms of overall narrative goals or goals of character development.

The first alternative is comparable to on-line, shared virtual worlds (e.g. *Active Worlds*, *WorldsAway*, and *Onlive Traveler*, described in [3]), providing a form of themed chat space. This is the baseline for the Purgatory Engine with which we will provide a virtual setting designed for dramatic action, with voice-over-IP technology and player avatars facilitating computer-mediated LARPing.

A more challenging task is to evolve from this baseline towards an environment that more actively manifests dramaturgical principles, without falling back into established gameplay gestalts with their associated weakening of emotional involvement, characterisation, and narrative. In the Zero Game Studio we refer to this evolved dramaturgical form as the *firstperson actor*, a new genre of computer game based upon dramatic immersion. Enhanced features for dramaturgical interaction in the first-person actor may include:

- Avoidance of computer game staples, such as treasure (or "easter eggs"), weapons, damage, and health.
- A language of interaction that extends basic movement functions currently found in computer games to an extensive repertoire of communicative gestures, expressions, and body language. Keyboard/ mouse actions have gained conventional uses for computer games.

Changing the standard set of functions away from weapon, instrument, and resource handling may require the development of a new set of conventions for interfacing with communicative and expressive actions. The ideal may be gestural and expressive interfaces, allowing natural expressions with the use of the face and body; in the near term these can only be expected for a small and specialised subculture of players.

• Provision of rich media material for access to character back story, scenario information, memories, personality hints, associations, and the like. Most of this amounts to creating databases representing the psychic history of characters. The challenge for making this material useful and interesting is in providing methods of access to it that don't work like boring point-and-click multimedia shows.

The avoidance of easter eggs and the other paraphernalia of combative games immediately shifts the emphasis of gaming to character interaction. Combat elements could be introduced into first-person actor scenarios, but initially we are exploring the meaning of the model in a more paradigmatic form to clarify the differences between this and other game models. A richer communicative interaction language naturally follows from the shift of emphasis from combative action to inter-character relationships. Such a language gives players better tools for improvisation within on-line LARP scenarios. Story and character information could provide briefing material for players, allowing them to play more in character and bring material into scenarios that has predetermined resonances and connections. With these tools, however, the nature and success of a gameplay experience relies to an increasing extent upon the skills and intentions of the players. Major questions arise of :

- how to bring the first-person actor experience to non-specialist players?
- how to create a coherent and successful multi-player experience for small groups of players in scenarios that require a fixed number of characters?
- how to bring an interpretation to a session, in the same way that a director can create coherence, meaning, and thematic depth for a film or theatre production?
- how to create character goals and communicate these to players? Goals and motivations are a major foundation of method acting, and can be varied to create major differences of interpretation, meaning, and impact.
- how to create character purpose and development within a scenario, and to make these meaningful to players? Variants of the first-person actor form may have various elements or degrees of narrative development. Techniques may be desired to enforce specific plot points, or options among several alternative high level plots. Even in scenarios where no high level narrative structure is imposed or encouraged, there still may be important concepts of character progression or development.

Approaches to address these needs generally involve moving away from highly improvisational first-person actor forms and more towards more constrained forms of experience. Some techniques that may be explored for doing this without the use of a strictly imposed, predefined linear or branching narrative structure include:

• Modelling of character state and progression in terms of character emotional and dramatic development. This may apply both to player characters and NPCs.

• Relating character state development to patterns of character interaction. For example, communicative options may be blocked or opened depending upon which other characters a player is relating to, their history of interactions with that and other characters, the emotional states of both, and the communicative and expressive methods that are used by the player.

This model creates a situation in which repetitive patterns of interaction constituting a gameplay gestalt will not work. Instead, movement through the game involves an ongoing and often subtle negotiation among the characters, who may be competing or cooperating with one another in terms of love, hate, faith, debt, pain and pleasure. Each player must move through a complex landscape of interrelationships in order to develop and realise their particular goals within a scenario. And those goals could change, depending upon what the character goes through, and the nature of her or his relationships with the other characters in the game. The first-person actor is a shifting labyrinth of verbal and visual language, perhaps more life-like than game-like.

#### CONCLUSION

In this paper we have proposed an informally defined notion of the gameplay gestalt as a pattern of perceptual, cognitive, and motor activity involved in gameplay and at the heart of the dominant gameplay experiences supported by contemporary computer games. We have proposed that the gameplay gestalt creates an opposing experiential force from that of the apprehension of unfolding events as constituting a strong form of narrative. The opposition arises due to the cognitive demands of gameplay gestalts, to the irrelevance of their detailed performance to narrative progression, and to their repetitive nature undermining any strong sense of narrative development. In a sense, a gameplay gestalt may function like a chant or mantra, creating a form of dissolution of consciousness into the moment, acting against the strong incorporation of moments into an unfolding story structure. The gameplay gestalt is a learned pattern, but it is an operational pattern rather than a mechanism for learning declarative facts (a process more suited to narrative mnemonics).

In order to create more narratively involving forms of gameplay, we have proposed a new genre of game that does not involve the formation of gameplay gestalts for making progress within a story world. In this genre, which we call the first-person actor, the player drives a character through a rich experiential process in a scenario involving other human and nonplayer characters. In this case, actions become communicative acts, and the consequences of actions bear upon the state of development of a story. Actions may be available or not, depending upon the state of the characters in a scenario, their emotions and state of development, and the stage of the story. We hypothesise that this non-repetitive mode of game play will create a more narrative experience with deeper characterisation, and a game process capable of addressing rich, deep and varied themes. Players will need to engage with the character and nature of their own player character, and that of other characters through that character. Gameplay will be a process of negotiating through a varied emotional and thematic space of character interactions, where progress becomes a matter of developing emotional and thematic understanding, and repetitive action will no longer make sense, becoming an expression of neurosis rather than a means for making progress.

The Zero Game Studio is investigating this hypothesis in a practical sense by developing the Purgatory Engine, a reuseable game engine supporting the first-person actor model. The earliest version of the Purgatory Engine is likely to be little more than a themed audiovisual chat space, while ongoing evolution of the model will provide more specific mechanisms supporting player characterization and interaction. The first production to use the engine, *The Ruby Star*, is a scenario involving six player characters in a small location representing the interior of a building. Variants of *The Ruby Star* production should become available demonstrating different degrees of support for players, from free improvisation to a much more tightly constrained interaction space. We hope to make these demonstrators freely available as on-line games, to explore practically what might be possible and appealing in the form of games that do not rely upon a repetitive gameplay gestalt.

#### Acknowledgments

Many thanks to my colleagues for long and lively discussions within the Zero Game Studio that have led to the concept of the first-person actor, and many insights into the nature of games, gameplay and interactive narrative. Thanks especially to Martin Ericsson for coining the term, and for his wealth of insights from longstanding experience in LARPing.

# NOTES

- 1 Here we refer to the archetypical, multi-level first-person shooter game, role-playing games (RPGs), adventure games, and even strategy games.
- 2 When event ordering is important, as in some role playing games, going through events in the wrong order can result in a complete inability to progress in the game; in this case the correct plot order is predefined, and must in many cases be found by trial and error, with recourse to saved game states.

3 A *gestalt* may be understood as a configuration or pattern of elements so unified as a whole that it cannot be described merely as a sum of its parts.

#### REFERENCES

- 1. Aarseth E. J. *Cybertext: Perspectives on Ergodic Literature*, The Johns Hoplins University Press, 1997.
- 2. Cole T. and Strasberg L. Acting: A Handbook of the Stanislavski Method, 1995.
- Damer B., Gold S., Marcelo, K. and Revi, F. "Inhabited Virtual Worlds in Cyberspace", Virtual Worlds: Synthetic Universes, Digital Life, and Complexity, Heudin J.-C. Ed., Ch. 3: 67–94, 1999.
- 4. Dancyger K. and Rush J. Alternative Scriptwriting, Second Edition, Focal Press, 1995.
- Kücklich J. "Literary Theory and Computer Games", Proceedings of the First Conference on Computational Semiotics for Games and New Media (COSIGN), Amsterdam, 10–12 September 2001.
- 6. Rollings A. and Morris D. Game Architecture and Design, The Coriolis Group, 2000.
- 7. Stam R., Burgoyne R., and Flitterman-Lewis S. New Vocabularies in Film Semiotics, Routledge, 1992.
- Tronstad R. "Semiotic and Non-Semiotic MUD Performance" in Proceedings of the First Conference on Computational Semiotics for Games and New Media (COSIGN), Amsterdam, 79-82-12 September 2001.