

# **Machinima: digital performance and emergent authorship**

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### **ABSTRACT**

This workshop investigates the emergent online dramatic form of "machinima", the co-option of video game engines or off-the-shelf software for dramatic production in a rapidly developing digital performance form.

Workshop participants will engage with short examples of popular machinima productions. There will be discussion and demonstration of the machinima production process. The nexus between dramatic conventions, gameplay and traditional video production techniques will be explored. Participants will work with a short piece of a machinima, in the form of a scene created using the *Sims 2* game. Participants will improvise, script and perform dialogue to provide meaning for the action.

This workshop applies the insights of process drama, a field well developed in educational settings, to the development of machinima. It includes demonstration and participation in dramatic role, focusing on how the conventions of Role Distance and Role Protection apply to this developing field of digital game-based performance.

### **Keywords**

machinima, performance, agency, role distance, role protection, process drama

### **WORKSHOP BACKGROUND**

One of the biggest hurdles facing designers of digital game-based learning materials is the elusive relationship between the user and their agency within the digitally designed context. Murray describes agency in gaming as happening, "when the world responds expressively and coherently to our engagement with it" [20]. Researchers have struggled to define the nature of the interaction that occurs between the player and the video game, tending to rely heavily on

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models drawn from literature, theatre, cybernetics and cinema to extract understanding of the screen-based interplay between author/designers, players, characters, and narratives.

Despite some early work that examined the computer as a theatrical medium [15], there has been a tendency to examine computer and video games from a narrative or storytelling perspective [19]. The aesthetic similarities between games and cinema have fuelled this trend. As Frasca [10] notes, “the fact that the videogame industry became closer to Hollywood and not to Broadway, easily explains why developers feel more at ease with seeing the computer as a medium for narrative rather than drama”. More recently ludology and simulation [1] has developed as a distinctly different cybernetic approach to the problem.

Whatever the approach, theorists have tended to look at the shifting roles operating within the game as an awkward or even negative influence on the game player’s emotional learning experience, rather than an opportunity for the player to experience agency from within the game. Perlin [23] argues that traditional narratives such as theatre or cinema engage us emotionally because we relinquish agency to the characters and become absorbed in the paths they take, whereas video games force us to exert agency and become the character. This can often necessitate moments where the player steps in and out of role while negotiating the mechanics of game play, choosing a new weapon, for example, or checking an inventory. Similarly, some games allow players to toggle views between a subjective first-person perspective and a more objective third-person view. This role-shifting perspective is a highly useful dramatic device in a learning context, and is used in educational drama contexts as well as video games.

The concept of Interactive Drama originated by Bryan Loyall [16] and colleagues as the Carnegie Mellon OZ project in the late 1980s attempted to combine high interactivity with immersion and agency within a narrative framework. These concepts are relatively well known in the field of interactive media described by Laurel [15], Kelso [14], Murray [19], Ryan [24], and McGonigal [17]. For game designers, and especially those seeking to produce instructional tools, there is also a wealth of knowledge that can be drawn from perhaps less well-known, but parallel, developments in drama in education research and practice that utilises these dynamic role shifts.

Process drama is a form of improvised role-based drama with a history that draws on the educational drama work of Heathcote [13], Haseman [12], O’Neill [22], Bolton [3], and many others. For example, the dramatic conventions of process drama allow participants to use role-distance and role-protection in an episodic way. By moving in and out of role in order to provide emotional distance for themselves, drama participants engage in a learning process that is emotionally engaging. Far from being an obstacle, this ability to toggle roles and perspectives becomes a critical tool in the learning moment.

To illustrate how the role-based improvisational conventions of process drama might be connected to the elements of agency, immersion and dramatic interaction within video gaming we can examine the emerging digital performance form known as machinima.

### **The Rise of Machinima**

The term machinima emerged in the late 1990s and is most likely a blend of “machine” and “cinema”, though it is sometimes referred to as “machine animation”. It describes the use of

computer game technology to produce animated movies in real-time. Computer and video games, particularly those characterised as first-person 3D games, rely on a software “engine” to control game play and generate the complex interaction of virtual landscapes, characters and objects in real-time. Machinima producers use these engines to devise and record animated movie sequences “on-the-fly”. It is this real-time element that primarily distinguishes machinima from traditional animation, which is rendered frame by frame to create a sequence of action.

The history of machinima is linked to the inclusion of recording modes in 3D games, notably [id Software's DOOM](#) released in 1994. This enabled players to record and share recorded sequences of game play. These developed from a collection of action replays into more deliberate or scripted narratives – often fan-oriented parodies or commentaries on the game or game play itself. Marino [18] notes that “at this point a critical shift occurred – *the viewpoint of the player became the viewpoint of a director*”. Increasingly, companies such as id Software also began releasing the tools used to design and build these virtual game worlds, creating a culture of “modding” (modifying) existing or new game levels. These gave players the additional creative powers of art directors, set builders and costume designers.

Machinima production has widened to incorporate elements of virtual performance, where human operators manipulate the game characters – like virtual puppets with in-role performance. Some producers, such as New York’s [ILL Clan](#), have used this process in live performance, but most record the results and rely on post-production to complete the project. Using more traditional film/video production techniques, takes are edited together and voice over, music and effects are added to produce the finished movie. Two currently popular examples of this form are *Red vs. Blue: The Blood Gulch Chronicles* (based on the game [Halo](#)) and *The Strangerhood* (made using [Sims 2](#)), both produced and distributed by Roosterteeth Productions ([www.roosterteeth.com](http://www.roosterteeth.com)). Both are ironic existential stories, following an episodic sitcom and drama form that is familiar to television audiences. The material is distributed freely over the Internet, with the weekly episodes also compiled into seasons and sold on DVD.

### **Machinima and Digital Role-Based Performance**

*Red vs. Blue* is made using human actors to manipulate the on-screen movements of the characters, and to provide voice-over in the post-production phase. The action is seen through the “eyes” of a *Halo* game avatar in multiplayer mode, which functions as a camera rather than on-screen actor. The producers can use normal game controls to move this camera/character to gain a range of traditional camera movements (pan, tilts, tracks, zooms). *The Strangerhood* also relies heavily on post-production, but differs slightly in that the *Sims 2* game itself contains tools specifically to allow players to make small movie clips. The producers are able to position actors and objects, and use the game’s own camera mode to design shot sequences. The *Sims 2* characters are the ultimate method actors, with their performances shaped by the “moods” generated by different game situations. More information about the production processes can be found in the director’s commentary accompanying the *Red vs. Blue* DVDs, or in forum discussions posted at the Roosterteeth Website.

The appropriation, deconstruction and creative reuse of elements from video games such as *Halo* and *Sims 2* into new forms such as *Red vs. Blue* and *The Strangerhood* is a highly dramatic and creative activity. For example the *Sims2* machinima episodes developed as *The Strangerhood* created original role-based dramas from the game by appropriating the personalities of the game

characters and turning them into the role-based avatars of the machinima performers. This is a far more deliberate and dramatically focused approach to the game, which usually functions "as a kind of story machine generating unexpected narrative events out of complex playful simulation" [25].

As Ken Perlin [23] asks about digital interaction, "can there be a form between a game and a story"? The answer seems to be in the positive and the results can be seen in emergent authorship evidenced in machinima. This new form functions because it can provide a plausible psychological agency for characters by using elements from within the interactive narrative of the game for dramatic effect.

As a subversive dramatic form, machinima breaks down the structure of commercial video games, changing the explicitly iterative system of formal play into a form of meta-interactivity and cultural appropriation of an existing software program. It is a variety of emergent digital authorship that modifies the narrative and textual structure of the video game through the technological agency of the player/director. This appropriation of existing creative work fits within the existing fan culture, and neatly within the social shaping of technology framework useful for examining such forms.

### **"Kill the platypus": Emergent Authorship and the Social Shaping of Technology**

One of the lessons to be learned from machinima, particularly for the designers of digital game-based learning materials, is that users will appropriate these virtual tools in ways not imagined by the creators. The development of machinima points to a valuable critique of the prevailing media attitudes towards video games, based on technological determinism. From this determinist view, technological advances within video games are seen to shape the world of the player and society but are not reciprocally influenced by the players themselves. In the media, video games are often portrayed as existing outside of society yet at the same time they are seen as influencing social change, usually for the worse!

This has been one of the motivating factors behind the emergence of the "serious games" movement – a push to make a distinction between games as consumer entertainment products, and games as educational tools shaped by the needs and preferences of a digital generation. A social shaping of technology approach asserts that technological development in any field, including gaming, is dependent in part on cultural usage, which is always open to modification and shaping to the needs or desires of the end users [9].

The relative openness of the technological form of digital games is often neglected in a determinist critique. The ability to change the meanings inherent in the digital form through hacking and appropriation means that the consumption of meaning is often accompanied by the production of meaning as well. One example is *Save the Platypus*, an ecological game created by student designers at Charles Sturt University. The project had the worthy aim of promoting ecological awareness about the diverse biosphere and unique animals of the Australian bush. This was immediately translated by other student users into a search and destroy mission to see who could kill the rare and endangered platypus in the fastest possible time. While arguably they were still learning something about the fragile nature of the platypus population, the players had subverted the product into the game *they* wanted to play. So giving agency to players is problematic, unless a role based performance structure is provided with a strong contextual and

performance frame.

It is clear that end users can reject the conceptual framework, redefine the functional purpose as well as customise games for their own purposes. This production-consumption relationship is a complex one especially for relatively open technologies based on digital gaming. The symbiotic relationship between producers and consumers of currently evolving interactive gaming is moving even closer, with the designers of *Sims 2* including a machinima-like movie making function as part of the software. Creativity and role based performance is a developing demand by end users, and the game’s software designers are responding to this shift from a functionalist approach to gameplay to a more open and creative use of the software resources available.

Outside of the gaming world, and within the non-digital drama continuum of arts practice, the dramatic form that occupies an equivalent space to machinima is process drama. It is a useful analogue to compare with the developing form of machinima, as it has an established history of experimentation with role performance conventions.

**Lessons from Process Drama**

The dramatic contexts of both process drama and video games are not static, they require constant interpretation and articulation to shape and re-shape the experience into dramatic form. Gee [11] notes that in role-playing games you can design your own character - and the same is true for process drama. Both forms exhibit the episodic form that alternates in-role behavior with out of role activity. Table 1 matches some of the obvious similarities that exist between these two forms.

**Table 1:** Comparison of process drama and video games [6].

| <i>Process drama</i>          | <i>Video games</i>                     |
|-------------------------------|--|
| Group narrative orientation   | Video intro/cutscenes                  |
| Teacher in role               | Instructions from superior, helper etc |
| Discussion of role attributes | Selecting role attributes              |
| In-role, attitudinal drama    | In role, playing                       |
| Out of role research          | Handbook, cheats, history              |
| Exercise focus                | Speed challenges, custom games         |
| In role, character            | In role, experienced character         |
| Discussion, debrief           | Online chat, web user groups           |

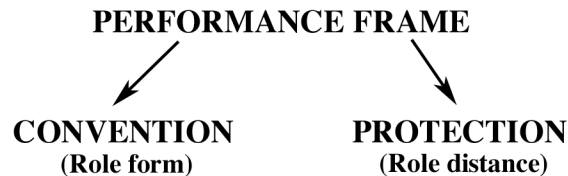
Both process drama and video games require the participants to enter a dramatic frame - that moment where “a willing suspension of disbelief ” [7] is established. In the case of process

drama this is through the negotiated agreement of the participants, which is then formalised by the facilitator often using narrative or context as a focus. Video games have a similar formal context expressed in cutscenes and narrative overlay, which establish the dramatic world.

Often instruction or guidance is provided by characters that exist within the narrative and dramatic frame of the game. This function operates as teacher-in-role in drama, and commonly as a non-player character in video games. There are also out-of-role tasks that occur that are nevertheless part of the activity, including selecting role attributes or engaging in research. As well as these activities there are different levels of playing involvement in both dramatic forms as well as out of frame discussion.

Of particular significance is how closely learning concepts drawn from process drama, such as Role Distance and Role Form [5], apply to video games learning. The performance frame for both is composed of two elements; firstly there is the nature of the conventions operating on the screen or within the drama. Secondly there is a level of Role Protection, expressed as Role Distance, present that allows the adoption of a new identity within the penalty-free area of the dramatic frame.

Figure 1 shows these elements in a less metaphorical way:



**Figure 1:** Elements of the performance frame

The conventions operate as creative forms for both video games and process drama by developing non-naturalistic ways of presenting material and adapting roles within the performance frame. The protection of Role Distance allows what Erikson [8] calls a “psychosocial moratorium” to operate for the participants within the performance frame. Within stand-alone video games it is the penalty-free nature of this interaction that allows the character to constantly learn by mistakes. However while providing high levels of Role Distance and Role Protection stand-alone video games are still able to allow participants to experience the performance frame from alternate positions. For example, by initially ignoring a game’s manual most players appear to have a learning experience that closely mirrors the process of experiential learning that occurs in role based process drama [4]. In many role-playing video games, such as Sony Online’s *EverQuest*, a player’s continued interaction with game elements and tasks is rewarded with points for experience. In this way the player can shape the character’s growing expertise in certain areas.

The promotion system also allows for a penalty-free learning zone for the player. In *EverQuest* for example until a character is promoted to a skill level of 10, they can die and be re-generated largely without loss. They will be returned to a safe location, and will keep whatever items they

were carrying at the time. Restricting the risks for characters below level 10 experience allows new or less able players to indulge in high-risk behaviour, while at the same time being protected by their Role Distance from deep identification with the character so that his or her potential danger becomes a positive learning experience.

This penalty-free behaviour reflects Erikson's view, which James Gee [11] succinctly sums up as "a learning space in which the learner can take risks where real world consequences are lowered". One role convention understood within video games is that high-risk behaviour is sometimes rewarded on the early skill levels. For example, while playing *EverQuest* the authors learnt that attacking creatures of similar or higher skill level was a risky enterprise, but even if only occasionally successful in these battles the player can accumulate experience points much more quickly. While learning to play, 'death' is an inconvenient but often acceptable penalty for pushing the boundaries of the game.

In process drama this concept has come to be known independently as Role Protection, where the personal distance from the consequences of actually being in the event have been elaborated and structured for different learning outcomes. This Role Protection or psychosocial moratorium can be seen in a metaphorical way as an interface that frames the dramatic and performative event. In earlier times this 'frame' was seen as a proscenium arch framing the dramatic action. More commonly today it is the screen frame of the computer that performs that function. This role protection allows the characters within a game to experience and react in a spontaneous yet role-defined way that constitutes agency within the dramatic world. In machinima, the emergent form breaks the performance frame shown in figure 1 by moving beyond the confines of the game narrative.

### **The DIGRA Workshop**

This practice-led workshop investigates the emergent online dramatic form of machinima. Participants will firstly engage with short examples of popular machinima productions. There will be discussion and demonstration of the machinima production process. The nexus between dramatic conventions, gameplay and traditional video production techniques will be explored.

Participants will then work with a short piece of a machinima, in the form of a video scene created using the *Sims 2* game. Participants will improvise, script and perform dialogue to add meaning to the action.

Reading this emergent form dramaturgically, machinima is positioned within a continuum of performance modes that exhibit constantly shifting dramatic role personas that move between being a participant through to being a spectator. By toggling back and forth through a narrative collage of online dramatic experience a relationship is generated between the participants, cultural text, and electronic and archival representations on the screen.

This workshop applies the insights of process drama to the development of this video game-related performance form. As an example of interdisciplinary practice as research, it includes demonstration and participation in dramatic role, focusing on the conventions of Role Distance and Protection that can be applied to this developing field of digital game-based performance. Online drama narrative as part of this lived experience becomes public, and the drama experience is captured as a virtual commodity that can be examined in a way not previously

possible with live improvised performance

Seeing the performed machinima narratives in terms of interpretative ethnography allows for the rhythms of in-role participation and out-of-role spectatorship to be present and reflected on. By moving between the role positions of participant and spectator the dramatic identities of the participants and their virtual world are located within a newly developing digital cultural form.

This workshop investigates these dramatic forms and allows participants to engage in experimentation and the production of a new cultural product. In reading the online dramatic form in this way, the original textual product, the unique process drama construction of the machinima becomes the site for new interpretative work, and participant researchers as co-performers are inserted into the structure of the text and become part of it. Performance forms using emergent authorship, such as machinima, pose significant challenges and opportunities for the designers of role-playing game-based software, and for developers and artists who wish to investigate role-based digital learning techniques.

## Conclusion

Both process drama and machinima possess the kind of agency that Murray wants to build into the form she calls Cyberdrama [20]. Both of these forms lead to a type of dramatic creative work that is intermediate between dramatically "linear narrative" and functional "game" play. Role distance allows the required "psychologically present entity, which is somewhere between "me" and "other" [23] to operate within the framed context. Within process drama this position has come to be known as the "spectator" [2] and has a range of clearly understood conventions attached to it [21]. The relationship between these dramatic forms and their conventions may be a fruitful area to be investigated further by developers of games based learning materials for educational use.

In the growth of machinima we are seeing the rapid development of a new genre of performance, and this hybrid form "grows from a community of practice elaborating expressive conventions" [20]. There is an already existing body of work within process drama with a strong theoretical base and a range of conventions that can be tapped to help understand and develop this new form of digital performance.

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