Agency as commitment to meaning: communicative competence in games
Karen Tanenbaum; Joshua Tanenbaum
* Simon Fraser University, Surrey, B.C., Canada

Online publication date: 26 May 2010
Agency as commitment to meaning: communicative competence in games

Karen Tanenbaum and Joshua Tanenbaum
Simon Fraser University, Surrey, B.C., Canada
ktanenba@sfu.ca; joshua@sfu.ca

Abstract
Agency has long been considered one of the core pleasures of interacting with digital games. Recent treatments of agency in games culture and game design have grown increasingly concerned with providing the player with limitless freedom to act. While this describes one form of pleasure, in narratively focused games it has the unfortunate consequence of pitting the agency of the player against the will of the designer. We contend that for narrative games it is valuable to refocus our definitions of agency on the notion of meaning, and propose a treatment of agency that emphasises communicative commitments. This form of agency draws on ideas from speech act theory, and relies on a degree of ‘communicative competence’ on the part of both the game designer and player in order to function. We discuss mechanisms for training players in the necessary literacies needed to commit to meanings in games, and provide an example analysis of a game that successfully accomplishes this task.

Keywords: game studies, agency, game design, interactive storytelling, narrative, speech act theory

1 Introduction
Agency is a contested term in the field of game studies, frequently held to be a core component of gameplay but lacking an agreed-upon definition and no shared formula for how to design for the experience of agency. The commonly held assumption that unrestricted self-agency is a core pleasure of game experiences can create particular problems for narrative-based games. It positions game narrative as being inherently in conflict with the player’s desire to act within the game world. This so-called tension between narrative and interaction has given rise to a vast array of design techniques, intended to either control the actions of the player via various guidance strategies or to shape the evolution of the story via intelligent drama managers (Riedl et al. 2003, Nelson et al. 2006, Roberts et al. 2009).

We propose that an alternative solution lies in the careful examination of the idea of agency itself. In our 2009 Digital Arts & Culture (DAC) paper, we examined the concept of agency within game studies and game culture. We proposed a shift from the notion of agency as representing choice or freedom to one of agency as representing commitment (Tanenbaum and Tanenbaum 2009). This opens the door to understanding game experiences where player action might be limited or constrained but the player’s engagement remains high. While the unrestricted freedoms present in the games typically referred
to as ‘sandbox’ games have their own pleasures, our focus is on the pleasures of narrative-oriented game play. We suggest that when play and story intersect, agency is better understood as a commitment to meaning instead of a desire to act freely.

This new perspective on agency builds upon our previous work in exploring the utility of treating interactive narrative and game experiences as improvised performances between the player and the experience designer (Tanenbaum and Tanenbaum 2008). Most interactive drama theories have an idealised notion of the interactor as a performer in the story. However, most state of the art interactive storytelling systems are designed around the assumption that participants will act selfishly and in contradictory ways. This results in games and storytelling systems which exert various levels of control on the actions of the player in order to bring them in line with the story. We proposed using the social contract between participants in an improvisational scene as a model for designing interactive dramas (Tanenbaum and Tanenbaum 2008). Mateas and Wardrip-Fruin also tackled the question of agency, drama and narrative in a recent conference paper, arriving at complimentary conclusions while taking a different path (Wardrip-Fruin et al. 2009).

In this paper, we review and build upon our notion of agency as commitment to meaning, showing how the concept can be applied as an analytical lens to understand aspects of the game Fable II (Lionhead Studios 2008). We explore the notion of ‘communicative competence’ as a necessary component for meaningful player interactions, and discuss how future designs might build on this concept in order to provide richer narrative interactions in games.

2 Agency

2.1 Agency as choice

One of the most well-known definitions of agency comes from Janet Murray, who describes it as ‘the satisfying power to take meaningful action and see the results of our decisions and choices’ (Murray 1997). Murray identifies agency as one of the central pleasures of interacting with digital environments (along with immersion and transformation), but is careful to qualify her definition, reminding the reader that ‘interactors can only act within the possibilities that have been established by the writing and programming’ (Murray 1997). This clause is important to Murray, as she is invested in the notion of the author/designer as a privileged role, distinct from the creative roles available to interactors.

More recently, Salen and Zimmerman write: ‘Playing a game means making choices and taking actions. All of this activity occurs within a game-system designed to support meaningful kinds of choice-making’ (Salen and Zimmerman 2004). Like Murray, Salen and Zimmerman describe a relationship between making choices and taking actions, placing the emphasis on player activity. Both definitions also have some notion of meaningful actions, which we will return to later in this paper.

It has been more than a decade since Murray published her definition of agency, and in that time one of the things that has changed most dramatically in games has been the rise of simulated worlds in which no author or designer could possibly anticipate all of the actions that a player might take. Today, not only is it possible for unanticipated and emergent player actions to occur, in many games it is expected. These expectations have given rise to a shift in the notion of agency, away from choice and toward freedom.

2.2 Agency as freedom

The above definitions of agency do not say anything about providing the player with unlimited freedom to act. If anything, each of them provides room for agency to operate within highly constrained parameters. However, many discussions of agency overlook this, instead construing agency as freedom from restrictions. Barry Atkins suggests that the pleasures of play are rooted in a sort of ‘cause and effect’ relationship in which the player is actively testing the boundaries of the simulation. His notion of agency construes the player as a ‘creative investigator’ whose central interest is in uncovering new responses from the system. The player in this case is
primarily interested in taking actions and experiencing their outcomes.

There is a growing trend within both game design and academia of idealising games which are ‘open source’, i.e. that allow players direct control over the rules, environments and other structures that constitute the game, as a way of expanding the players’ freedom (Rushkoff 2005). This idea of ‘creating the rules’ pushes the notion of agency to the point where the distinction between player and designer collapses. Game designer and theorist Ernest Adams writes: *the player and her actions are the most important things in the game. In computer gaming you subordinate the player to the plot at your own peril. It’s not our job to tell stories. It’s our job to build worlds in which players can live a story of their own creation* (Adams 1999).

This perspective is seen in many of the current generation of games which rely more on simulation than on linear scripting. They aim to enhance player enjoyment by expanding the range of available choices, construing agency as the ‘freedom to act upon the world without restriction’. The ultimate game from this perspective becomes nothing more than an empty game engine wherein players are invited to build their own worlds and stories. While there is undoubtedly some appeal in this notion, it is not the same as engaging in a fictional world constructed by someone else, and this notion of agency does not help understand the pleasures of interacting with authored content. This focus on freedom needlessly forces an opposition between player agency and the designer’s ability to author a compelling work, be that work primarily ludic or narrative in nature.

2.3 Agency as illusion

In spite of the freedom-based rhetoric that has been constructed around agency, there are plenty of examples of ways in which games limit player actions in order to support a richer experience. Some games, such as *God of War II* (SCE Studios Santa Monica 2007) and *Kingdom Hearts* (Squaresoft 2002), do this by introducing ‘quicktime events’ or other mechanics of interaction which afford the ‘illusion of agency’ but serve as a mechanism for limiting player choices. While the term ‘illusion of agency’ has a negative flavour, it has also been noted within the gaming community that this illusion is often quite convincing. In our 2009 DAC paper, we discuss two specific examples of how this plays out in the games *Half Life 2* and *Metal Gear Solid 4* (Tanenbaum and Tanenbaum 2009). Even when a player’s actions have no real impact on the world—in the sense that there is nothing she could have done that would have yielded a different result—players nevertheless come out of the experience feeling as if their actions were meaningful and the game was enjoyable. This leads us to the question: is this a violation of the player’s agency, or simply another form of agency? To address this question, we propose a redefinition of agency as *the process by which participants in an interaction commit to meaning*.

3 Agency redefined

Our new definition of agency is intended to be a way of analysing about how game design choices support (or fail to support) the experience of agency during gameplay. It is meant to apply specifically to the subset of narrative-oriented games and the pleasures associated with navigating them.

3.1 Commitment

Central to this definition is the notion of ‘commitment’, an idea that has its roots in speech act theory and the philosophy of artificial intelligence (AI). Winograd and Flores, in their critique of AI from a phenomenological perspective, argue that machines can never be intelligent because they cannot commit to meanings in the way that human interactors do (Winograd and Flores 1986). Each language act or utterance in a conversation between two or more people has consequences for the participants, typically related to actions they are about to take or will undertake in the future. Speech act theory categorises an utterance in terms of its *illocutionary point*, with each kind of point entailing different commitments or attempting to achieve different goals (Winograd...
and Flores 1986). For example, a **commissive** speech act commits the speaker to a future action, such as when a person makes a promise like ‘I will rescue the princess’. An **assertive** act commits the speaker to the truth of a statement, such as ‘There is a wolf attacking the sheep’. Commitment as entailed by the illocutionary point of an utterance is critical to establishing trust and communication between interactors. People who make assertive statements that are shown to be false or commissive utterances that they do not follow through on will be judged untrustworthy and unreliable. In a previous paper, we argued for a way of thinking about gaming not as players interacting with a system but as performers improvising within a story (Tanenbaum and Tanenbaum 2008). Under this conception, designers and performers are in a type of conversation with each other, mediated by the game, and their ability to commit to meanings and follow through on those commitments are crucial.

### 3.2 Meaning

Focusing on the idea of meaning allows us to shift the emphasis in an interaction away from the **outcome** of a choice and towards the **intent** which underlies that choice. Most of the definitions of agency discussed above include some notion of meaning, but this is often overlooked in favour of construing agency as freedom. Paul Dourish points out that interaction is ‘not simply about what people do in the world, but about how those actions accomplish meaningful events’ (Dourish 2001). It is more important to provide the player with the ability to take a single, meaningful action than a dozen trivial ones.

Salen and Zimmerman view meaning as emerging as a result of discernable systematic responses to interactor behaviour. They write that ‘design is the process by which a designer creates a context to be encountered by a participant, from which meaning emerges’, and that ‘The meaning of an action in a game resides in the relationship between action and outcome ... Meaningful play occurs when the relationships between actions and outcomes in a game are both discernable and integrated into the larger context of the game’ (Salen and Zimmerman 2004). Meaningful choices, then, are the ones in which the illocutionary commitments entailed by the utterance/action are real: the player is held accountable for that to which they have committed. Simulational fidelity alone may afford unrestricted player actions, but is not sufficient for meaningful play.

It is important to recognise this property of meaningful behaviours as one which can (and should) be applied to the design and operation of the game world as well as the actions of the player within it. In discussing expressive autonomous agents, Phoebe Sengers introduces the notion of ‘action-expression’ instead of ‘action-selection’, arguing that it is more important to ‘do the thing right’ than ‘do the right thing’ (Sengers 1998). By this, Sengers means that agent behaviours in a simulation should be understood and described in terms of what they signify rather than their instrumental components. We can understand this argument as one in which an intelligent system’s emphasis is no longer on the actions which are taken within it, but on the expressed meanings of those actions. In some cases, committing to meaning may even involve sacrificing the ability to chose, or engaging in actions where there are no choices to be made.

### 3.3 Communicating meaningful commitment

#### 3.3.1 Communicative competence

In order to engage in the process of meaningful commitment, a player needs to trust that the game is correctly interpreting her expressed meanings via the often limited communication channels available to her. In our previous work we discussed a need for games and interactive stories to ‘train’ players to **perform** meaningfully within them (Tanenbaum and Tanenbaum 2008). We advocated for a game-specific vocabulary of interactions which would afford meaningful performance within the limitations of the system. A game designed in this manner would support a process of meaningful commitment through interactions that allow the player to express her meanings to the system, and to be confident that
the game was interpreting those meanings as intended. We do not consider this interactional vocabulary to be substantively different from the existing vocabularies and literacies required by games in order for players to succeed at ludic tasks. Designers of games do not expect players to automatically know how to successfully engage in their game worlds: training levels, tutorials and game manuals all exist to assist players in learning each game’s unique ‘procedural vocabulary’. It stands to reason that we should similarly train players in how to express meaning within a game, rather than relying on their intuition to guide them in the right direction. Other interactive narrative media, such as Interactive Fiction (IF), already grapple with the issue of training their reader to engage with them in meaningful ways. Jeremy Douglass writes, ‘In contemporary literary IF, the interactor’s progress in learning to interact is often paralleled by the progress of the protagonist within the work, who also struggles to understand something within the world of the story’ (Douglass 2007). Mateas applies this notion to the creation and understanding of new media artefacts, defining this ‘procedural literacy’ as ‘the ability to read and write processes, to engage procedural representation and aesthetics, to understand the interplay between the culturally-embedded practices of human meaning-making and technically-mediated process’ (Mateas 2005).

We connect these ideas to Winograd and Flores’s notion of ‘communicative competence’. They write:

Communicative competence means the capacity to express one’s intentions and take responsibilities in the networks of commitments that utterances and their interpretations bring to the world. In their day-to-day being, people are generally not aware of what they are doing . . . Consequently, there exists a domain for education in communicative competence: the fundamental relationships between language and successful action. People’s conscious knowledge of their participation in the network of commitment can be reinforced and developed, improving their capacity to act in the domain of language (Winograd and Flores 1986).

Games, like any communicative system, rely on the literacies and competencies of their participants in order to signify meaning. As with other methods of communicating, it is often necessary to educate the participants in the specific tools for meaning-making that exist within the system.

3.3.2 Learning the language of Fable II

One recent game that does an exceptional job of systematically training players in its own meaningful vocabulary is Fable II (Lionhead Studios 2008). Fable II situates the player’s character on two primary scales: good vs. evil and pure vs. corrupt. The NPCs respond to these parameters, but also rate the character along three additional scales: love vs. hate; scary vs. funny; and ugly vs. attractive. As the player interacts with the game world and its inhabitants, her actions slowly transform the main character’s appearance, and the responses of the game’s NPCs. Communicative commitments, within the bounded world of Fable II, can then be understood in terms of the player manipulating the encoded parameters indirectly though action (or inaction). The player is given a wide range of expressive opportunities, some transparent, and some much more opaque. For example, the player may choose to protect the innocent civilians in the world or go on a murderous rampage, resulting in the accumulation of corruption and evil points (and instilling fear in the NPCs). This particular mapping of action-to-meaning is common in open-world games, with precedents in games like Oblivion, Fallout, Black and White, and Grand Theft Auto.

Where Fable II becomes more unusual is in the numerous less obvious mappings of action-to-meaning. For example, food choices in Fable II result in direct changes to the character’s appearance (by adjusting the ‘fatness vs. thinness’ parameter), as well as gradual changes to the character’s purity or corruption: consumption of meat and alcohol is considered corrupt, while consumption of vegetables and water is considered pure. These less obvious mappings are significant because the game does not require the player to attend to them in order to succeed. Indeed, a pragmatic player may productively ignore this element of the game and still have a satisfying experience.
However, for players interested in expressing a particular meaning to the game, such as an inclination toward corruption, learning the various channels along which this meaning may be communicated results in a greatly transformed character appearance and game world response. By attending to the expressive tools embedded in the game’s design, players may learn to communicate using the idiosyncratic language of *Fable II*.

### 4 Conclusions

The notion of committing to meaning has utility as both an analytical tool (as demonstrated in our *Fable II* example) and as a design metric for new narrative game systems. By shifting attention to the meaningful mappings between player intention and system response, our definition provides theorists and designers with a tool for developing game experiences that are simultaneously narratively rich and interactionally satisfying. In this way, we contend that our reframing of agency helps to reconcile the purported tension between narrative and interaction.

In a recent paper, Wardrip-Fruin *et al.* also presented an argument against the assumption that narrative and agency must be in conflict with each other (Wardrip-Fruin *et al.* 2009). They discuss the way players approach a game with certain pre-established expectations which are shaped by the early stages of interacting within the game world. This is congruent with current theories of dramatic believability in mediated experiences, which frame believable situations as a function of the expectations of the viewer/interactor (Pasquinelli 2006, Magerko 2007).

Wardrip-Fruin *et al.* suggest that well-designed game-learning processes can lead players to understand the software model and interface material through which their actions take place and are interpreted (Wardrip-Fruin *et al.* 2009). They suggest that design should ‘entice players to desires the game can satisfy’ (Wardrip-Fruin *et al.* 2009). Similarly, Pasquinelli writes about mediated experiences ‘activating desired expectations’ and ‘deactivating undesired expectations’ (Pasquinelli 2006). In both of these examples, mediated experiences are enhanced by managing the expectations and desires of the interactor in such a way as to frame the experience comfortably within the capabilities of the interactive system.

This is very similar to our own notion of training players to interact not just on a procedural level but on a narrative level, by learning the ways in which they express and commit to meanings within each game world (Tanenbaum and Tanenbaum 2008). Training players to interact is a form of expectation management. A player who knows the limitations and affordances of the system is more qualified to express meanings within the bounds of the system, and also more prepared to accept any potential breakdowns in communication.

A recent study by Roberts *et al.* looked at using principles of Influence Theory from social psychology as a way of guiding player behaviour in an interactive narrative (Roberts *et al.* 2009). By adding carefully crafted influence statements to the story, the authors were able to increase the number of people who selected one specific action over another. In this example, the system went beyond simply managing the expectations of the player, and instead used psychological manipulation to attempt to control the actions of the player, without her knowledge. In the post-study questionnaire, players who got the control story and players treated with the influenced stories showed no differences in terms of reported agency or feelings of manipulation. Despite having their actions manipulated and controlled in this way, their engagement with the story and their own commitment and feeling of agency was unaffected.

We consider this significant because it points at a disconnect between the player’s cognitive experience of ‘being in control’ and the actual degree of control allotted to the player. We argue that when a player is allowed to commit to meanings which are not then rejected by the game system, that the entirety of the interaction is experienced as a form of agency. If we return to Murray’s definition of agency, we see that this is ultimately not incompatible. While game studies has chosen to emphasize the part of her definition that focuses on the ability to make choices and take actions, the other half of her equation—meaningful results and
consequences—has gone under-theorised for far too long.

Acknowledgements
Thanks to Jim Bizzocchi, Magy Seif El-Nasr and Marek Hatala for support in the development of the ideas presented here. Many thanks also to the attendees and presenters of the 2009 Digital Arts & Culture in Irvine, CA, for their thought-provoking work and interesting conversations.

References


Lionhead Studios, 2008. Fable II. Microsoft Game Studios.


Karen Tanenbaum is a PhD candidate at the School of Interactive Arts & Technology at Simon Fraser University. She has an MA in Linguistics from UCSD. Her work is on adaptivity for ubiquitous and tangible computing environments.

Joshua Tanenbaum is a PhD student at the School of Interactive Arts & Technology at Simon Fraser University, and has an MA from the same programme. His work is in game studies and interactive storytelling.