

From Pushing Buttons to Play and Progress: Value and Interaction in *Fable*

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Abstract

A *value* can be understood as a belief that one mode of conduct is preferable to others. The user-interface of computer games mediates all player conduct in the game and is therefore key to understanding how values are expressed both by and to the player. How the interface affects player's expression and understanding of value in computer games is a relatively unknown quantity. We performed a qualitative case study of the game *Fable* to investigate connections between interface and value in gameplay. The concepts uncovered allow us to better address the computer game interface in both design and analysis.

Keywords: computer game, user interface, value, activity theory

1 Introduction

Value has been influentially defined by Milton Rokeach as "an enduring belief that a specific *mode of conduct* or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach 1973, p.5, emphasis added). In considering computer games, it is clear that inasmuch as values are tied to conduct or action they must be expressed through the *user-interface*. Players input commands via a controller or keyboard and thus express values that motivate the associated action. As such, the study of values in gameplay falls partly within the domain of human-computer interaction (HCI) research and can be studied from that perspective.

In this paper we present a qualitative case study of the computer game *Fable* (Microsoft Game Studios 2004) investigating how its user-interface relates to player expression and interpretation of value in gameplay. We provide evidence from multiple sources of data to illuminate how the interface influences and facilitates particular kinds of interaction, and how players use the interface to express values they adopt during gameplay.

Computer games are the most popular and influential form of software in use today. Sales in the US topped seven billion dollars in 2004 (Entertainment Software Association 2005). Norrath, the world of *EverQuest*, was estimated to have the seventy-seventh largest economy in the *real* world based on buying and selling in online auction houses (Castronova 2001). Games are also being used more "seriously" such as for the sexual health awareness *No Rubba No Hubba*

Hubba game in New Zealand (New Zealand Ministry of Health 2005).

A particular point of interest regarding computer games is the way in which they express and allow the expression of *values*. Thus, for example, moral debate has raged over the "hot coffee" sexual content in *Grand Theft Auto: San Andreas* (BBC News 2005). Although this level of discourse is important, it is important to see that the values in gameplay do not have to be strictly seen as involving issues of "moral goodness" or "violence," although they certainly can involve these issues. As per the definition above, values are beliefs pertaining to the preferability of *conduct*, and so we might consider "scoring points" and "completing the game" as being specifically game-related values. Our interest is in investigating *how* values such as the above are expressed and even enforced by the user-interface.

We first present the methodology used to collect and analyse the data for our case study. We then present a grounded theory analysis of the data (Glaser & Strauss 1967), illuminating the relationship between player and interface as regards particular expressions and interpretations of gameplay values. Next, we show how the emergent concepts and relationships fit within the literature of activity theory and game studies. Finally, we indicate future work and summarise the paper.

2 Method

In our approach to *Fable* we chose the case study methodology as described by Robert Stake (Stake 2003) and others. We used the qualitative analysis strategy of coding (Miles & Huberman 1994) based on the more specific philosophy of grounded theory which emphasises the *emergence* of theory from data (Glaser & Strauss 1967). All this means that our approach is purely *qualitative* and aims to present rich evidence to illuminate aspects of value in *Fable's* gameplay, rather than to produce statistically conclusive assertions.

2.1 Describing the Case

Fable is a single-player combination role-playing (RPG) and action-adventure game. It includes traditional RPG-elements such as advancement of a central avatar quantified by statistics and a series of quests. It also involves free-form activities such as exploring a world and real-time combat, features of the action-adventure genre. Players take on the role of a young boy whose family is torn apart by a bandit attack on his village. The boy is taken to the Hero's Guild, trained to be a hero, and must then seek fame, fortune, and revenge.

The game was heavily publicised and greatly anticipated before its release in September of 2004, par-

ticularly as regarded its morality system which allows players to choose between good and evil in the game. “Choice” is the major point of emphasis in *Fable*, with marketing such as “who will you be?” and “for every choice, a consequence” underlining the importance of players’ actions. Further, the game’s “living world” was promoted as being central, with other characters going about their daily business in towns, reacting to the player’s exploits, and so on. Neither of these features are unique, however: *Knights of the Old Republic* is recognised for emphasising choices between good and evil, and the *Grand Theft Auto* series is the premier example of a world where the player can play as they wish.

Significant excitement about *Fable* surrounded its designer, Peter Molyneux, who is well known for games such as *Populous* and *Black and White*. Molyneux made several bold claims in advertising the game, which had been an ambitious and long-term project for him. When *Fable* was released it did not include many of the features that had been promoted, which led to disappointment as players felt their gameplay options had been reduced.

We chose *Fable* for our case study of the connection between values and the user-interface for several reasons. The game is representative of two major genres in computer games today: role-playing and action-adventure. The excitement about *Fable* and its ensuing popularity with players mean much material was generated in online discussions and reviews. Finally, as described above, the game places an emphasis on players’ actions, which directly relates to issues surrounding the interface and value.

2.2 Data Collection

Case study methodology emphasises the use of multiple sources of data to gain a rich understanding of the case in question. In order to more deeply understand the connection value and the user-interface of *Fable* we collected five types of qualitative data.

Firsthand Experience Our first approach to the game was to play and become familiar with it. We played the game for twenty hours, completing it and experimenting with various options along the way while taking notes. We particularly focused on the nature of the control system and what commands were available.

Observation with Think Aloud Two participants who had already played and completed *Fable* were recruited to play for one hour each while thinking aloud about their play. Experienced players were selected to avoid any potential *learning* effects during the observation. Both players were male and in their twenties and were thus representative of *typical* users. Where necessary they were prompted with questions such as “what are you doing now?” and “why did you do that?” The screen was captured to DVD along with the audio which was transcribed. The think-aloud data and observation allowed a better understanding of the player experience *during* gameplay.

Semi-structured Debrief Interview After the play sessions each participant was interviewed for forty minutes on their experience of that session and of the game more generally. The interviews were transcribed and provided a reflective account of the experience of gameplay, as well as more general commentary.

Official Documents Official documents such as the manual, box art, advertising materials, and online resources such as the official website, were

transcribed or downloaded and added to the data set. These documents present the “official line” on the game, and represent media that players are exposed to before and after their play.

Unofficial Documents To complement the official documents, we collected unofficial documents such as walkthroughs, forum discussions, and reviews of the game. This form of data provided insight into the community of players of the game and pointed to more broad-ranging tendencies. As with the participants above, this data is largely representative of *typical* players of the game.

2.3 Analysis

Initial analysis involved the standard qualitative approach of “data coding” in which concepts such as “narrative” and “combat” were associated with chunks of textual data. In particular, we approached the data from a grounded theory perspective (Glaser & Strauss 1967). This meant allowing themes to emerge freely from the data, rather than imposing a predefined set of concepts. The software package *HyperResearch* was used to perform the data analysis, streamlining the process and making later groupings of the data far easier (Scolari Sage Publications Software 2003). Following the initial coding we used *axial* coding to relate the concepts identified to one another and to draw them into higher-level categories such as “community anticipation” or “application of real-world morality.”

The data yielded a great deal of material, but in this paper we choose to focus on two key insights concerning gameplay values and the user-interface. The first concerns the relationship between the *commands* issued by the player through their controller to the actual *conduct* of the avatar in the gameworld. The second key theme concerns what might be termed two gameplay values: *play* and *progress*. In particular, these values characterise activities identified as being absolutely central to play in *Fable*, and their relationship to the user-interface is explored in depth.

3 Command and Conduct

In this section we present a detailed examination of the control system of *Fable*, showing through evidence how it affects gameplay values. The connection between player and game takes place through the X-Box controller (Figure 1). The key data presented is the actual set of commands available:

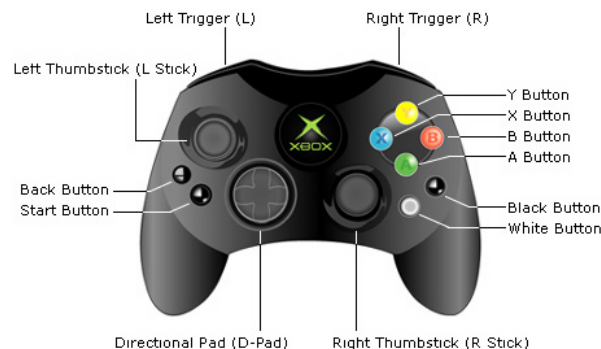


Figure 1: The X-Box controller (image from <http://www.gamelender.com>).

Movement The *left thumbstick* controls the avatar’s movement in the gameworld, and the *B* button

can be used to make him run. Additionally, the *right thumbstick* controls the movement of the in-game camera.

Combat The *left trigger* button is used for targeting enemies with a *mêlée* or ranged weapon. Weapons are drawn and put away with the *black* and *white* buttons. The *X* button is used to swing a weapon or to fire a ranged weapon. The *Y* button is used to block attacks and is part of the avatar's ability to roll away from attacks also (with the *left thumbstick*). Finally, the coloured buttons are used to cast spells (*X*, *A*, and *B*) and to cycle through available spells (*Y*) when holding down the *right trigger* button.

Social The *A* button can be used to interact with other characters who are highlighted in green. This often brings up a menu system for more complex interactions in the gameworld, such as trading or playing mini-games. The key commands for social interaction are the "expressions" accessed via the *D-Pad* when appropriate, or via the "favourites" which are accessed by holding the *right trigger* and using the *D-Pad*.

Inventory The player can access various items using the *D-Pad*, with *left* and *right* accessing quick options, and *up* accessing a menu.

Menus Various menu systems make more complex actions possible in the game. The core in-game menus involve viewing the avatar's statistics, managing the inventory, and changing the avatar's clothing. The other key menu system is the "Experience" menu which allows the player to "purchase" skills via the experience they have gained in combat. Finally, there is a menu providing the ability to save and restore games, etc..

While the player does *interact* by pressing the above buttons on their controller, there is plenty of evidence to suggest that this is not how they *think* about their gameplay. One participant's response captured this well when they were asked to discuss the controls they used most frequently:

In general it seems to be the *A* button, which is I think an action one, so that adapts to what you're doing, and in this game the *X* button, which is "hit." And... mainly the coloured ones here, and the left thumbstick. And, actually, without thinking probably I'm using the left trigger which helps me lock on to things. Tends to be a lot of reflex action, not really thinking about it. (Participant 2)

We see a great deal of uncertainty in this quote. In fact, the participant had to think very carefully about the question while pointedly looking down at the controller to remind themselves of the controls. As in the quote, they rely more on reflex and unconscious knowledge than on any explicit awareness of the controller. This is borne out both in our own experiences of playing the game, and also by the *lack* of discussion of the physical controls by the participants or in online forums. The basic commands are something to be absorbed and then not thought about consciously, often simply remembered from past similar games:

the beginning of the game has the obligatory tutorial of "use the left thumbstick to move around" ... which, if you've played a few videogames anyway you tend to just pick it up and use that. (Participant 2)

Instead of explicitly considering the commands they can issue in the game, players tend to consider the kinds of behaviour they can engage in, or the *conduct* that the game makes possible:

Get married, hit on other women with your wife, get the town drunk at the bar, sacrifice your wife to the dark chapel of Skorm. (Online review of *Fable*)

With the game beaten, you're free to explore the world, complete any of the side quests you haven't yet beaten, do some fishing, level up your character, buy some houses, get married, drink, play games, get rich, do what ever you want. (Online walkthrough and FAQ for *Fable*)

Because the commands available determine the possible actions in the game, we can examine them to provide a description of the available conduct in *Fable*. The game, therefore, centres around a limited number of behaviours, reinforced here by quotations from the data:

Combat "Every Hero must fight. Every Hero must face foes bigger and stronger than him and win. Every Hero must learn to kill. And so war came to the lands." (Official Website)

Exploration of the World "I tend to find myself just wandering around the map for a period of time. Just coming across wandering monsters and whatnot and just killing them and taking their shiny trinkets, the gold or whatever they leave behind." (Participant 1)

Participating in the Social World "In other words, you have an external life. Get married. Get divorced. Get your hair cut. Age. Flirt. Sneer. Laugh. Break laws. Break wind. Buy property." (Online review of *Fable*)

Customising the Avatar "The point of the game is really to uncover the story in the end. And part of that as well is building up the character to how you want, which is part of the role-playing game." (Participant 2)

Understanding the kinds of conduct possible in the game is important for a number of reasons. The first, and most important, is that these modes of conduct are *grounded in the control system*, the input side of the user-interface. As such, the conduct possible is very much dependent on the available *commands*. The predominance of combat in the game, for instance, is certainly reflected in the large number of controls devoted to it. Following from our earlier definition of value, these commands are the only ways a player can express their *values* in the game: the player can certainly kill a bandit to express their valuing of justice and also of achievement, but they cannot, for instance, try to talk the bandit out of their wicked ways. The available commands, therefore, not only facilitate value expression of values, but also *determine* the kinds of values that it "makes sense" to hold in *Fable*. In this way, the game's control system *promotes* particular gameplay values: fighting, not peacemaking, for instance. Understanding how the user-interface not only facilitates, but also *proscribes*, the expression of player values is of key importance to its analysis and design.

4 Progress and Play

In this section we present the results of a detailed examination of all the available sources of data which revealed players' focus on two central gameplay values: *play* and *progress*. We define these values and their relationship to one another, then show how the user-interface is related to their adoption and expression via four specific themes.

4.1 Definitions and Relationships

Play can be thought of as conduct in the game in which the player “tries things out” or “experiments.” That is, there is a value of “play” which motivates more or less undirected conduct for its own sake, to see what happens or to pass time pleasurably:

[kicks a chicken] And that's just random chicken-kicking fun. [laughs] [*Why would you want to do that?*] Just basically because I'm waiting for that bell to ring ... (Participant 2)

Mostly it's... you can do some things by... it's like if you walk up to a girl you can flirt with her [does so] or give her a gift [does so] and ultimately if you stick with it you can get her to fall in love with you and marry you and so forth, but otherwise it's just a mostly [farts in game]... it's amusing basically, it has very little impact on the game in the long term, it doesn't really affect the storyline. (Participant 1)

The participants enjoy options such as kicking chickens and flirting purely on an “amusement” level, not because it is “important” in the context of the game. Instead, what is regarded as important in the gameplay is the value of *progress*.

The point of the game is really to uncover the story in the end. And part of that as well is building up the character to how you want... which is part of the role-playing game. (Participant 2)

From this quote we see that the progress value is made of two key aspects. The first is to make progress in the *narrative* of the game:

You're meant to be doing the quests, obviously. And that's pretty much the main thing you're meant to be doing to advance the story on, and basically to lead you to the next cut scene, which will advance the story a little bit more. It's kind of what you're looking at with the game is “do this quest, get another cut scene” to tell you... fill in the story piece of what's happened. And then go off and do another quest... (Participant 2)

At the same time as this, however, the players wish to progress their *avatar* by making him more and more powerful and formidable. They wish to keep a balance between these two progression values:

I think when I sit down to play Fable the things that I'm trying to do is... firstly advance forwards in the story, advance the story. But not so quickly that I... that my character evolves too slowly by the time the game's over. I want to be able to take my time along the way. And build my guy up. To an impressive or respectable standard. (Participant 1)

As is hinted at in the above quote, there is a potential antagonism between the values of progress and play: if you progress completely in the game it will be over and there will be no more time for play. Thus, on completing the game, one researcher felt completely directionless because there were no more quests to perform: the ability to simply play in the game world (after watching a full twenty minutes of credits) was not nearly as appealing as it once had been. Without some opportunity for progress, it is arguable that play will not be as enjoyable, a suggestion confirmed by the game's creator, Peter Molyneux:

Fable is set in a simulated world which is linked to non-linear gameplay, but there still has to be a central story-based core which is totally linear—it's up to the player whether they divert away from the central story or stick rigidly to following it. ... We've found that, ultimately, too much freedom confuses players; most people want to have goals to achieve. (Interview with Peter Molyneux)

What this suggests is that progress and play are *symbiotic* values in the gameplay of *Fable*: they are both necessary and appreciated by the players. The potential for progress makes players feel more interested in taking breaks to simply play in the environment, while still having access to goal-oriented conduct as above, and in the following quote:

One of the good things about this game is that you can just go along for a long time and just do completely different things, but you don't necessarily advance your character as far... like you don't get a lot of the cooler weapons, or the cooler... you've got the carrot to keep you going along the actual storyline. (Participant 2)

Progress even directly *facilitates* play by introducing new forms of conduct and action into the game as the player progresses their avatar and the narrative. Thus, the game issues messages such as “you are now renowned enough to use the “sneer” expression,” or warns that “you are not renowned enough to take this quest.” It is important to progress in the game at least in part because it opens up further options for *play*.

Gameplay in *Fable*, therefore, appears to be a balancing act between play and progress, especially apparent in discussions on how long the game takes to complete:

Sure it can be finished pretty quickly, but that's not the point of the game. I love this game, there is so much to do. You have to just relax and enjoy this game and not rush through it. Also do the side quests. It's amazing watching your character evolve over time. (Forum posting)

Given the central importance of the play and progress values in *Fable* gameplay, we decided to further investigate and analyse the role of the user-interface in this, particularly as related to our discussion of command and conduct above. In the following sections we identify four key themes that emerged connecting the user-interface of *Fable* as regards commands and conduct with values of play and progress.

4.2 Doing It All

The first readily apparent theme that arose when we considered the role of the user-interface was that

many players want to do *everything* in the game. Players learn about what will be possible in the game from marketing and rumours, and then, as they explore the game, they set out to do all the things they possibly can. That is, to *exhaust the interface*.

Also during the missions I was saying to myself I can't wait to get really drunk, go fishing get married, start renting out houses, and the list goes on. The thing like is that Fable makes you want to [have] done all that neat stuff. (Forum posting)

[What sort of things influence the way you personally decided to play Fable?] Probably the availability of rewards for completing certain tasks. That little cookie that it throws to you for kind of bothering to do certain things, whether it be complete the inconsequential missions... or the little easter eggs that have no consequence, like the whole marry or whatever. It can be a bit of a nuisance, there's not very much point as far as developing the game or getting to the final levels go... but just to ... I think to have done it... is a slight reward in itself. (Participant 1)

In extreme cases, this desire to "do it all" can lead to a strategy of simply pressing all the buttons (commands) in order to see what happens:

[Looking at tall standing stones] Examining said objects... also pays to... if nothing happens from examining them, to go through all the other options available to you, whether you hit it, or talk to it... (Participant 1)

Further reflecting the desirability of "doing everything" are the available quantifications of what "everything" is. Thus, for example, *Fable* provides various statistics from "furthest chicken kick" to how good or evil the player's avatar is. Similarly, online FAQs and walkthroughs often provide comprehensive accounts of everything that can be done in the game at varying levels of specificity:

So lets move on to why you're looking at my guide.....all the things to do and how to beat the game. (Introduction to an FAQ)

In the context of progress and play, quantification can have different roles. From a play perspective, quantification allows the player to explore the limits of a particular statistic. For example, players can experiment playfully with how good or evil they are in the game:

I mean, a lot of what I was enjoying doing was customising what the character looks like and what he's... trying to get him to be good with the butterflies, to be as good as possible and seeing what happens... or as evil as possible... (Participant 2)

At the same time, the quantifications in the game and in the walkthroughs and FAQs allow players to understand exactly what is needed to *progress* in the game by maximising particular statistics, such as experience:

The purpose of this guide is to give you as much information relating to the experience system in the game as is possible for me... the author. (FAQ on the experience system)

In addition to their interest in what *can* be done in the game, players always want *more*, too. There are forum topics such as "Fable 2 my ideas" and "Mannn this game is awesome but....." where players discuss what they would like to see added to the game. Interestingly, most of their suggestions simply concern more *opportunities* for conduct (e.g. contexts), rather than new *forms* of conduct or (e.g. commands). Thus, a classic demand is "more land to explore" or, as one participant quite firmly stated, "there just needed to be more [missions] to draw out the game, make it last a little longer" (Participant 1). The fixation on "doing it all" relates both to valuing progression through missions and upgrades of the character as well as to playfulness within the interface's possibilities.

4.3 Doing The Right Thing

The second interesting theme we observed in the data concerns connections between the player's real-world values to the gameplay values they express via the interface. It is quite possible in *Fable* to push a button on the controller that leads to morally appalling conduct in the gameworld. For example, the player might press the *white* button to draw their sword, and the *X* button to swing at and kill an innocent villager. The game acknowledges this by assigning the player "evil points," but the reactions of the players themselves are interesting. They often feel a kind of remorse or guilt:

But once you go off the rails... and lose the... beating up on people... the consequence of that in game does tend to go away, but I think a slight tinge of evil [...]... that slight guilty feeling you're still aware of... (Participant 1)

Sometimes this feeling of guilt can even lead players to specifically avoid conduct which conflicts with their real-world value system:

[so you tried both ways?] Yeah. Didn't get so far through on the evil one... actually found that quite hard, cause... you just feel like you're being a bastard all the time. (Participant 2)

More often, however, the two core values of play and progress are used to justify this conduct in the game, effectively trumping real world moral values in this context. Appealing to their value of play, for example, Participant 1 noted that "sometimes you'll just be in a mood where you're not that interested in the consequences of it and you'll just kill people to see what happens." We experienced the favouring of the progress value over moral values when sacrificing an innocent trader solely to obtain a powerful weapon from an evil God (the Skorm Bow), a practice that is well-documented and recommended in walkthroughs and in forum discussions.

A final interesting reason that players occasionally cite is that *Fable* is "only a game" and therefore does not count morally. Participant 1, for instance, justified experimentally killing villagers by saying "It's not really killing people, I guess, it's just killing these soulless little computer generated people." This is especially interesting because the same participant did acknowledge a sense of guilt at times. The above explanation effectively appeals to stepping away from immersion and seeing the game *as an interface*, voiding real world morality.

4.4 Testing The Boundaries

A third way in which the interface relates to players' expression and interpretation of play and progress values involves testing its limits. This ties to the above discussion of wanting to "do it all": players want to fully explore the interface, and this can include attempts to "break" the game. Players' deep exploration of the possibilities in *Fable* has led to the discovery of a series of glitches in the interface, the most interesting of which is the "Digging Glitch":

By facing yourself away from anything which directly impedes your progress (by blocking your motion), you can (provided you're on bare ground) dig and take a tiny step backward through it. Tap your analogue stick very gently once on the other side to rotate yourself on the spot to face away from the direction you want to go and dig again. Repeat until you are through the barrier. (FAQ)

Players are always interested in these sorts of abilities in games. Interestingly, the twin values of progress and play are at work in the discovery and use of these glitches. Many players enjoy the digging glitch, for instance, simply because it is a playful exploitation of the game's interface: It is fun because it is playfully "taboo," not intended by the game's designers. In parallel, however, whenever an exploit exists, players will use it to pursue their value of *progress* by, for example, obtaining a powerful weapon early in the game:

If you have the skill with the digging glitch ... then nip round the back of the tavern and dig your way to Bowerstone North. Save yourself the trouble of doing it again by heading to Lychfield Graveyard and back, then buy the [Solus] sword from the shop. You won't regret it. (FAQ)

This attempt to push the interface as far as it will go helps show just how important it is to players' expression of the values under discussion. This is especially interesting because it shows the interface as the specific *target* of value expression, rather than its usual role as a facilitator.

4.5 Self-Limitation

The final theme concerning the interface and values of play and progress again relates to a focus on the interface specifically. In this case we see that players attempt to find ways in which to make the game last longer, which helps to balance the two values as already discussed in section 4.1. One way that this is done is to *limit* use of the user-interface in interesting ways.

A problem that some players have found with *Fable* is that it is not long enough, particularly because much of the game is regarded as too easy:

My other gripe is that it's too easy. I've fought two of the bosses so far, and I didn't even come close to dying because there are just too many healing and resurrection potions lying around. (Forum posting)

In order to combat this a number of players attempt to limit themselves in specific ways which makes the game harder and correspondingly longer. These techniques generally involve refraining from using particular items such as health potions, or, in more extreme cases, only using particular commands

in the game. Thus, for instance, there is an entire FAQ available which details how to play the game only as an *archer*, forgoing all magic and *mêlée* commands for combat. Similarly, one FAQ details how to play the game without ever "upgrading" the avatar's powers, meaning that at later stages of the game he will die if hit only once by any enemy and will take an extraordinarily long time to kill them.

As with the past themes, the values of progress and play are apparent in this use of the interface. In particular, this kind of handicapping is a way of pleasurable *retarding* progress so that the game will not be over too soon. These limitations are playful in that they involve a player exploring their own abilities in the gameworld, testing their limits in a manner akin to riding a bike with, "look, ma! No hands!"

5 Discussion

We have presented rich qualitative evidence which illuminates two key themes in the gameplay of *Fable*: the relationship of commands in the interface to the expression of values, and the centrality of the symbiotic values of play and progress. In the process we have demonstrated various ways in which the user-interface influences and facilitates particular kinds of value expression. All the analysis has been solidly grounded in qualitative data drawn from personal experience, player observation, and the online culture surrounding the game.

In keeping with grounded theory, we now present a discussion of related work from existing literature. Specifically, we show how elements of both activity theory and game studies relate to and strengthen our analysis.

5.1 Activity Theory

Activity theory was originally developed in the 1930's by A. N. Leont'ev, a disciple of L. S. Vygotsky, whose work he drew on heavily. The core of activity theory concerns understanding the group or social nature of human activity and the theory offers various means of doing this. The theory has been adopted by HCI researchers and practitioners as a useful way of modelling and describing how users interact with software, as in Bonnie Nardi's edited collection, *Context and Consciousness* (Nardi 1996). The work of Yrjö Engeström has been especially influential in this sphere, providing a detailed model of "activity systems" (Engeström, Mietinen & Punamäki 1999).

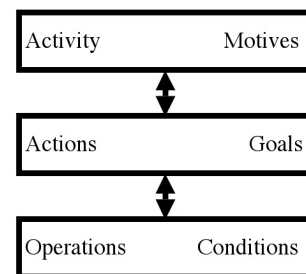


Figure 2: Leont'ev's model of the activity hierarchy.

One particularly interesting aspect of Leont'ev's work which has caught on in HCI is his model of the activity hierarchy, shown in figure 2 (Leont'ev 1978). In this model Leont'ev suggested that activities, which are large-scale, long-term concerns oriented toward shared group motives are made up of a series of individual human *actions* which are oriented toward goals. These actions only make sense when considered in the context of the activity itself. One step

further down are the *operations*, which Leont'ev defined as being the unconscious, reactive things we do in response to the conditions we encounter. Actions are made up of operations under this model and, once again, the operations make sense in the context of the actions they contribute to.

Various HCI researchers, such as Susanne Bødker, have adopted this model as a way of explaining levels of interaction with software. Bødker, for example, has used the concept of “breakdowns” as a way of discussing usability issues in software (Bødker 1996). A breakdown occurs when an unconscious operation becomes a conscious action because of some problem: the user has to *think* about what they are doing, rather than being able to work automatically. Bødker suggests we can learn a lot by studying these moments of breakdown.

It is clear that the activity hierarchy applies straightforwardly to the data we have discussed in this paper. In particular, the *commands* discussed above correspond to *operations* in an activity theory sense: As demonstrated, they are generally unconscious for the players of the game, coming to mind only when they are explicitly asked about. Likewise, the level of *conduct* identified above matches well to the *action* level of the activity hierarchy. These are the conscious things players do in the pursuit of goals: they fight bandits, dig for treasure, and buy goods in town. The existence of the *activity* level suggests another potential platform for analysis: Utilising Engeström's model to examine the broader social and motivational aspects of gameplay values, such as belonging to online communities of players or even positing the gameworld itself as a particular kind of community.

Following Bødker, we might expect to be able to focus in more on breakdowns, possibly creating problematic operations intentionally, to learn more about the value assumptions at play. Perhaps the most interesting aspect of operations in gameplay are that they represent *internalised* value judgements: If the player automatically swings their weapon at every bandit they see this suggests that they have internalised a link between the conditions (“there is a bandit in front of me”) and an action (“I swing my sword”). The link that joins operation and condition is a *value* judgement, and a particularly permanent one: “it is *always* good to swing my sword at bandits.”

As has already been discussed, the action, or conduct, level of gameplay is linked to value by appealing to Rokeach's definition, which states that values are beliefs about preferences for *modes of conduct*. Following our discussion above and supported by the analysis of the game commands in section 3 we can suggest quite uncontroversially that it is the operations or *commands* in *Fable* which facilitate value expression: the user-interface.

5.2 Game Studies

The academic study of computer games is still fairly young, coming into its own in the early to mid-nineties. Despite this, some excellent work has been done, some of which is relevant to the analysis of the data above.

The ways that certain game studies researchers have attempted to describe the differences between games is relevant here. In particular, the question of how a game such as *The Sims* is different from a game such as *Police Quest* has often interested researchers. Jesper Juul, one of the foremost game scholars today, describes two different kinds of games: games of *emergence* and games of *progression*. In his paper on the subject, Juul states that “most computer

games are the combination of two different ways of presenting the player with a challenge, one which I will term emergence (simple rules combining, leading to variation) and one of progression (serially introduced challenges)” (Juul 2002). A similar analysis is offered by Gonzalo Frasca (Frasca 2003) based on the work of Roger Caillois (Caillois 1961). This has been borne out in our analysis of *Fable*, in which the roles of play (emergence) and progress (progression) were seen to be the dominant interest of players. Although Juul and Frasca do discuss the combination of the two forms of play, the evidence discussed here provides a far deeper account especially of the *interaction* of play and progress, and introduces the specific consideration of the role of interface. Additionally, previous analysis has tended to focus on play and progress as characterising types of games, rather than representing particular gameplay values for players as discussed here.

Finally, we note that certain researchers have attempted to characterise the *motivations* of players in gameplay. Given that values and motivations are intimately linked, we can look to research on motivation as of interest when discussing value. Richard Bartle's article on the subject, *Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs*, is still being actively discussed today (Bartle 1996). In it, Bartle identifies four types of player motivation: *achievement*, *exploration*, *socialisation*, and *killing* or *grief-play*. The first two, achievement and exploration, correspond relatively well to our values of play and progress. Bartle defines exploration as being essentially experimental: exploring the gameworld and potentially playing with its “physics.” Achievement is seen as being heavily goal-driven, with players aiming to do quite specific things. Although Bartle is discussing online games here, the relevance to our discussion above is clear.

More recently, Nick Yee has provided empirical evidence for player motivations in massively multi-player online games (Yee 2005). Yee identifies three core motivational categories for players: achievement, social, and immersion. While the social element is largely dependent on the multi-player nature of the games he studies, the achievement and immersion categories connect well to our discussion of play and progress. In particular, the immersion category includes the concepts of “discovery” and “customisation” which correspond to some of the more playful aspects of *Fable* gameplay such as “doing everything” and creating the avatar in the way the player desires. The achievement category connects to our discussion of progress, with one of its subcategories being the specific concept of “advancement.” Thus, once again, our analysis aligns well with existing game scholarship and extends it with explicit consideration of the user-interface's role.

6 Summary and Future Work

In this paper we have presented a case study illustrating how the user-interface influences players' gameplay values as well as unpacking two of those values, play and progress, in detail. We have also shown how the research fits in with relevant literature from activity theory and game studies, particularly focusing on how activity theory may be of use in further analysis and to generate further potential studies, such as Bødker's notion of breakdowns.

As already stated, the positioning of commands and conduct within the activity hierarchy at the levels of operation and action raises the question of what is taking place at the *activity* level. Our future work will look specifically at this, utilising Engeström's model

of activity systems and Leont'ev's emphasis on aspects of activity such as *affect* and *form* to guide research.

While this paper almost exclusively covered the "input" aspect of the user-interface, there is much work to be done concerning the "output." In particular, we are investigating a semiotic framework to describe how representations in a game may relate to players' adopted values, as well as its *solicitation* of actions.

Our success in developing a grounded discussion of gameplay values in *Fable* suggests that the method can be applied to other games. Furthermore, inasmuch as *Fable* is exemplary of other role-playing and action-adventure games, certain of the conclusions drawn here may well apply quite successfully in those games, especially those concerning the fairly generic gameplay values of play and progress. Further investigation is necessary to confirm this, and perhaps to extend the analysis to other genres of games, comparing and contrasting them.

A final observation concerns the potential for the concepts developed here to be extended beyond games to other forms of software. The actions of some users of productivity software, for instance, may involve a distinction between play (trying out commands in a word processor, "playing" with document layouts) and progress (getting through the necessary work, advancing through dialog boxes). Performing similar case study analyses could help uncover such relationships.

For the moment, however, we offer the above insights into the game *Fable* specifically, and only within the natural delimitations and limitation of the case study as described. We have shown, in particular, how the user-interface of the game, and specifically the *commands* involved, can be analysed in depth. This has led us to a far more detailed understanding of how the game's interface both facilitates and limits players' expressions of value in the game, thus profoundly influencing the nature of the interaction as a whole.

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