

# A Method For Discovering Values in Digital Games

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## ABSTRACT

In this paper, our research team demonstrates how groups of game designers can open the discussion on human principles in game design by using a tool we call “Values Cards.” Drawing on prior play experiences, participants identify examples of games or game segments that express the value represented on one of the values cards. This sparks deep analysis of how values are expressed through particular game mechanics and representational elements. The analysis can be posted to a collective wiki and shared amongst other designers who are interested in examining game mechanics and representational elements from a values perspective. These exercises can be considered first steps in a broader attempt to produce and implement a systematic methodology to better integrate human principles into the design process.

## Author Keywords

values, games, digital games, computer games, video games

## INTRODUCTION

Digital games are more popular and widely disseminated than ever before, and their popularity is extending across a broad range of social, economic, age and other demographic categories. Indeed, from casual games on mobile devices to high budget PC and console titles, the growth of the games market represents a revolution of considerable financial, social and cultural impact. As games become a larger part of the media landscape, more scholars are investigating the mechanisms through which they transmit their cultural impact.

Our work is built on the premise that, as with other media, games carry values and beliefs within their representation systems and mechanics. The idea that ethical ideas—or *human values*—may be embodied in technical systems, devices, artifacts, and processes has taken root in a variety

of disciplinary approaches to the study of technology, society, and humanity. Prominent social critics, artists, philosophers, social scientists, computer scientists, and legal theorists have deepened our understanding of the complex relationship between technology and human values [e.g. 2, 4, 6, 12, 13, 21, 23, 30]. Our research builds on the premise that, like other media, games carry values and beliefs within their representation systems and mechanics.

Through the design process, values and beliefs become embedded in games *whether designers intend them to or not*. For example, *The Sims* has been said to inculcate materialist values: players are encouraged to earn money, and spend it on acquiring goods. The *Grand Theft Auto* series was not created with the intention of propagating a particular worldview, but nonetheless, it portrays the world as a violent place, rewards criminal behavior, and reinforces racial and gender stereotypes. In *Okami*, the player takes on the role of the animal/goddess Amaterasu, and her job is to make plants and animals happy in the environment; the game fosters the values of empathy, nurturing, sharing, and caregiving.

In our work we build on prior research incorporating the study of ethics, science and technology studies, and design disciplines. It is not enough to stop at the point of recognizing that human principles (negative and positive) could be embodied in design, but to set forth particular principles as design aspirations. There is a will, not only among concerned observers but also those who play and create games, that existing games should be enhanced and diversified, or rather, that games should at least be developed in a way that they could include human values. Accordingly, our work urges designers and producers to include values as the set of criteria by which the quality of a given technology is judged, to strive actively for a world whose technologies are not only effective, efficient, safe, attractive, easy to use, and so forth, but that promote the

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values to which the surrounding societies and cultures subscribe. These values might include liberty, justice, inclusion, equality, privacy, security, creativity, trust, and personal autonomy<sup>1</sup>.

The Values at Play (VAP) project is concerned with the practical incorporation of these ideas into existing games; VAP researchers are developing various methods through which designers can most effectively embed positive values in the games they create. In our inquiry into human values and games, the goal is not to denigrate existing games, as our team recognizes that censorship and scapegoating are problematic and ineffective methods through which to promote positive social change. Rather, we seek to study existing work, learn from these examples, and provide tools so designers may help offer alternatives that challenge the dominant paradigms of game design. In this, we are inspired by the significant contributions of other initiatives that share deep connections and commonality of purpose with ours. These include Participatory Design [e.g. 8, 11, 19]; Value Sensitive Design [e.g. 5, 18]; Reflective Practice [e.g. 27]; and Critical Technical Practice [e.g. 1, 10, 24], and Brenda Laurel’s pioneering work on developing games for specific underprivileged groups [22], which has set the stage for projects such as ours.

VAP’s principals and affiliates include game designers, educators, philosophers, artists, and social scientists collectively working towards a systematic methodology for embedding positive social values in games. The VAP methodology consists of three stages: discovery, translation and verification. First, designers *discover* the values relevant to their project, and decide which values should be integrated into the design. Then, they *translate* those values into concrete design features. Finally, they systematically *verify* that those values have indeed been embedded in the game. In order to use the methodology effectively, it is beneficial if designers are already alert to the values embedded in various existing games. In this paper, we demonstrate how groups of designers can begin the discussion on values using a tool we call “Values Cards.”

The bulk of this paper is devoted to two case studies of Values Card exercises, one of which was run for veteran designers, and the other in which design students were the participants. In Values Card exercises, designers draw on prior play experiences to identify games and game segments that demonstrate the embodiment of particular values in design features. Our experience has been that these exercises are an effective catalyst for deep analysis of game mechanics and representation systems from a values-conscious perspective. First, however, we discuss why we’ve chosen particular values to include in the deck of values cards, and provide some brief notes on how participants engage with the values in the exercises.

### THE VALUES CARD DECK

One of the most important tasks a designer might undertake in learning about values in computer games is by analysing

the values embedded in already existing computer games. The Values Card exercise is a useful way to do this before a designer attempts to create a new game, wherein a value may be intrinsically tied to the mechanic or core of game interaction. At the outset of our project, the VAP team, including students and professionals in a wide variety of disciplines, prepared a deck of fourteen Values Cards, with each card representing a particular value such as equality, tolerance or diversity. The values included in this deck are represented in Table 1.<sup>2</sup> In deciding which values to select, we focused on those which emerged from the body of ethics and philosophy literature, as well as those which tend to be common among liberal, egalitarian democracies. As a result, many of the values represented in the cards are reflected in foundational documents such as the United States Constitution, and declarations of rights such as the Charter of the United Nations, or the Canadian Charter of Rights and Freedoms. In addition, other values, such as environmentalism, were included because we have encountered a great deal of interest in promoting those values through games. Further, the frequent appearance of these values in media and policy deliberation suggests that these values are tied to significant issues in the populations we hope to reach.

Diversity	Security/ Safety
Justice	Creativity
Inclusion	Cooperation
Equality	Sharing
Privacy	Trust
Gender Equity	Authorship
Environmentalism	Liberty

**Figure 1:** The first deck of value cards

### Using the Values Cards

In Values Card exercises, participants draw a card from the deck, and discuss the value it represents in the context of their prior play experiences. For example, if the *environmentalism* card is drawn, participants would think of examples they might recall involving the value. A participant could describe, as an example, the computer game *Command & Conquer*. In many real-time strategy games like *Command & Conquer*, players continually deplete the game world’s natural resources, but are provided no mechanisms through which to replenish those resources. As the Values Card exercise progresses, participants collectively explore how the value under discussion is expressed, promoted or violated in particular games and through particular game mechanics. Comparing interpretations of a particular value is especially useful in helping designers and students of design understand

differing points of view on how game interaction can be culturally or socially interpreted. Even for those skeptical of the relevance of values, the exercise can spark lively discourse.

When these exercises are run as part of a game design class, student participants are often asked to record game sequences in which their chosen value from the card selected is embodied. Their analyses, along with the accompanying game sequence, are uploaded to a collective wiki. The wiki then becomes a shared resource for students and designers who are interested in the fine points of how values are embodied through particular game mechanics.



**Figure 2:** The Values Cards

## EXAMPLES OF VALUES CARD EXERCISES

### Example 1: Using Values Cards

At an early workshop with our project advisory board, we used the concept of Values Cards to spark discussion on values in existing, mainstream games. There was great debate on several values, including fairness and tolerance, but perhaps the liveliest discussion was prompted by the *generosity* card. Dr. Celia Pearce, an interactive media designer and game design educator, used the value of generosity to describe an emergent behavior in the MMORPG *World of Warcraft (WoW)* and other MMORPGs called ‘twinking’<sup>3</sup>. As players in *WoW* increase in level, they are continually acquiring new, more powerful items, equipment and other resources in their inventories. With such a high rate of ‘upgrading,’ advanced players are typically left with an inventory full of obsolete resources. For example, a level 50 Hunter may still possess a bow that was useful at level 40, but has since been replaced by a more powerful bow. Instead of keeping obsolete items, she may gift, or twink, lower-level players for whom the items still have considerable value. In this case, the level 50 Hunter might freely give her level 40 bow to a level 30 character, who normally wouldn’t have access to such powerful equipment.

In most MMORPG’s, there is no explicit reward for twinkling a less experienced player, so it may be considered an act of pure generosity. However, as in the real world, there are social rewards for generosity, for example, by twinkling a ‘newbie,’ a more experienced player may earn the new player’s loyalty in the gameworld. As game researchers have noted, players highly value such social rewards for generosity, and thus twinkling becomes a common activity in nearly all MMORPG’s (the gift economy and the monetary economy of game worlds has been of special interest to scholars such as Castronova [7], Dibbell [9], Taylor [29], and others). But, interestingly, not all manifestations of generosity are rewarded. Dr. Pearce related a *Warcraft* experience in which she, playing as an Alliance priest, cast a protective spell on a member of the Alliance’s rival group, the Horde. Her fellow Alliance players reacted with consternation and displeasure. Generosity proffered to a member of the Horde was seen as a violation of her loyalty to her Alliance companions.

As the discussion progressed, Dr. Pearce noted that some MMORPG’s do provide material rewards for acting as a mentor or benefactor towards less experienced players. In *Asheron’s Call*, for example, a mentor keeps a percentage of the experience points earned by his or her mentee. This raises an interesting question: By providing rewards for twinkling, does *Asheron’s Call* eliminate the possibility of pure generosity in the gameworld?

### Example 2: Using Values Cards in an Oppositional Fashion

Participants using the method are not limited to exploring how the deck’s values are positively expressed in the games under discussion. In many cases, participants find it easier to identify game segments in which those values are violated. For example, most people would find it difficult to discuss *Grand Theft Auto* in terms of the positive expression of justice, equality or security. However, participants can achieve a deep level of analysis by pinpointing how those values are violated through various narrative and gameplay elements.

In one Values Cards workshop, Jonathan Belman, a student affiliate of VAP, discussed various *Dungeons & Dragons* (D&D) games as examples of how the value of intolerance can be violated through gameplay mechanics. In these games, player characters interact with non-player characters (NPC’s) of various races, nationalities, and moral alignments. Unless there is a clear and unavoidable reason for immediate hostility, players are given the option to talk to NPC’s, persuade them of their views, sometimes barter with them, and also attack them. However, in the case of some NPC races, the game engine narrows the field of options. Move the cursor over a Dark Elf, for example, and the cursor turns into a sword, precluding negotiation, barter, or other non-violent interactions. From a values perspective, what is problematic here is not the representation of violence, but the fact that violence is the default interaction with an entire racial category. Building

tolerance into these games by allowing for a broader set of interactions with Dark Elves might make the play experience richer, more challenging and ultimately, more immersive.

Again, we want to stress that the purpose of these exercises is not to malign games like *Grand Theft Auto* or those based in the *D&D* world. Rather, we believe that designers who explore the mechanisms through which certain values are expressed (and violated) in such games will be better prepared to consciously control the expression of particular values in their own games.

### Example 3: Using Values Cards in the Classroom

One of the project's designers led a five-week unit in a class focusing on video games as an expressive medium at a large southern university. Five graduate students (3 female and 2 male, average age 26) with academic and professional backgrounds in digital media were introduced to the concept of embedding values in video games through the Values at Play methodology<sup>4</sup>. In order to begin to think about values in games, they began the course by using the Values Cards to choose self-esteem and sharing as values to be investigated in commercial, off-the-shelf video games. Each student was instructed to choose a game that he or she believed to possess features that demonstrated one of those values and to document them in a short film clip. Additionally, they were required to post their reflections on the experience to a class wiki so that they could review one another's writing.

In the following section we briefly analyze two students' experiences from the class.

#### Isaiah

Isaiah, a 25 year old Masters degree student specializing in human computer interaction, expressed mild trepidation about taking the class in his first wiki posting: "This is a very different class from any that I have ever taken. I guess that makes me a little nervous about figuring out how it works, but at the same time, I'm excited to have the chance." The instructor who led the class characterized him as "open minded" in his curiosity and eagerness to explore new areas. Isaiah summed up his feelings about the first day's activities, which included a game of hopscotch in order to explore how assumptions about gender roles influenced game rules, with one word in his posting: "Wow." But he indicated that he would remain "cautiously optimistic" and that "this may also be one of the most interesting and enjoyable classes I've had."

In the Discovery phase of the methodology that we are discussing in this paper, the objective is for the designer to identify a set of values (which may evolve through various production iterations) that are to be represented in the game. Designers might also choose to analyze an existing game (or game proposal) in order to define values already manifest through its features and content. Regardless of the tactic, the critical question to be addressed during the

exercise is, "What larger human themes emerge in the creation of this project?"

Isaiah chose *The Legend of Zelda: Ocarina of Time (OOT)* as an example of an existing game with which he would investigate the value of sharing for the class Values Card exercise. In a post to the wiki, he suggested that his experiences with single-player games did not always include examples of sharing:

*"...[S]ince I'm not much of a fan of multiplayer games, I did have a hard time figuring out exactly what sharing in a game might look like. There are many instances of 'giving' when a player is given a new tool or must give something to another in-game character. Sharing, though, is somewhat more difficult. I finally chose my favorite game, Zelda: Ocarina of Time...*

*...When he is given the ocarina, Link is able to play it, but he does not initially 'know' any of the songs for it. Simply playing the correct notes is not sufficient; instead, he must journey through the world and learn songs as other characters are willing to teach him. This was what I chose to represent sharing within OOT. In the simplest sense, these points are instances of sharing, as the correct sequence of notes is taught without the teacher losing the ability to play them. I considered this to be a technically sufficient representation of sharing. However, I wanted to address another concern as well: I wanted the sharing to be of something valuable to all parties.*

*Link learns songs that enable him to gain various powers and abilities within the game; clearly, these songs are important to him within the game world. However, most are not idle tunes taught by casual observers; instead, they are important treasures and memories to those who offer their notes. I chose the teaching of these songs as a representation of sharing because of the importance to both parties willing to share in the knowledge of them. I believe that this bears strong resemblance to the sort of sharing that we consider virtuous within the real world. Sharing that which is dear to oneself is considered to be a good act, while sharing that which is unimportant or trivial is rarely noted."*

In his reflections on the features of *Ocarina of Time* that represent sharing, Isaiah drew a distinction between *giving* and *sharing*. He characterized giving as commonplace ("There are many instances of 'giving'"), while sharing was "somewhat more difficult," in part "because of the importance to both parties willing to share in the knowledge of [the songs]. I believe that this bears strong resemblance to the sort of sharing that we consider virtuous within the real world." The contrast that Isaiah drew between the two is characteristic of the kind of deep analysis on values for which we are advocating in the Discovery exercise initiated with the Values Cards. We are not suggesting that one definition is 'better' or more significant than the other. Rather, we are encouraging game designers to contemplate representation thoughtfully and systematically by regularly

considering how a game's constraints and affordances reflect values.

#### Karen

Karen was a 28-year-old advanced Masters degree student in digital media who had worked in the game design industry for several years. In response to our pre-class survey question asking whether games reflect values, she wrote, "Of course. They are human artifacts, and encapsulate and express much of the assumptions and beliefs of their creators. Technologies are developed by humans in specific cultural, social, and material contexts." In her second wiki posting, in which she began to address the challenges that arose from designing a game based on a specific value, she noted the difficulty of mapping game mechanics to values:

*"I think the most interesting type of values game has those values manifested through the basic mechanics of interaction. Not the story, not the goal, but the activity the player performs. Problem is, devising atomic game mechanics is not my strongest suit. World building, characterization, storytelling—these are the ways I usually approach building a game. So this challenge may derive in part from my not using a particular mental muscle as much as the others."*

Karen chose *Dance Dance Revolution* (DDR) as the game with which she would illustrate an example of the value of self-esteem for the Discovery exercise. In her wiki posting, she wrote:

*"I picked DDR as my example after thinking about what 'self-esteem' means in a video game context. Playing games generally involves skills challenges and learning curves, which in turn affect one's self-esteem for better or worse. DDR stands out in this context because so much of the game experience springs from not just these skill challenges, but also the judgment made by the game of that performance. The emcee's goofy exclamations ("I can't stop crying...buckets of tears!" "You're no ordinary fella!" "There's always...a tomorrow!" etc.) are an integral part of the game experience. Evaluation of player performance occurs at multiple sensory layers and levels of granularity. The breadth AND depth of the feedback are significant because the evaluation lies at the core of the game mechanic. They work at a personal and minimally mediated level to place locus of the game's impact on the player's self-esteem.*

*To swing back to the personal reflection, I can say that playing DDR affects my self-esteem. Sure, good performances make me feel good about myself and my capabilities. I should note that poor performances don't make me feel bad about myself (mostly I just get cross or bored).*

*The exception to this is playing in public places. There is no way, for example, that I will play DDR at Disneyworld. It's one thing to do badly in a context limited to my own*

*performance. But it would be a crushing blow to my self-esteem to have my ass handed to me by a 12-year-old in a public place. And that's something we should think about and try to use strategically when designing ubiquitous games".*

In her reflections, Karen connected a game mechanic, the emcee's observations, to the value of self-esteem (or, more specifically, to the value associated with building self-esteem rather than bringing it down) and noted that this "integral part of the game experience...place[s] [the] locus of the game's impact on the player's self-esteem." She also suggested that the fact that a game can affect self-esteem should be considered when designing ubiquitous games, or games that can sometimes occur in a public space, as she noted.

## DISCUSSION

### Problematizing Video Game Design

We have adopted the term 'problematize' from Freire [17] in order to describe a method by which designers consider the content and features of a video game critically, with an eye toward their impact on and their perception by a broader population. In his model of 'liberatory education,' Paulo Freire proposed the task of problematization as a method for generating critical consciousness, or the level of consciousness at which an individual is able to perceive the social, political, and economic forces that influence human lives, especially those that are oppressed. Problematization includes questioning assumptions about commonplace explanations and 'given' solutions and exploring the motives of those who author them; it is fundamentally an interpretive act, as it entails exploring issues from multiple perspectives and suggesting meanings based on an awareness that positionality influences understanding. Kincheloe and McLaren [20] wrote,

*Such work involves the unraveling of the ideological codings embedded in these cultural representations. This unraveling is complicated by the taken-for-grantedness of the meanings promoted in these representations and the typically undetected ways these meanings are circulated into everyday life...The better the analyst, the better he or she can expose these meanings in the domain of the "what-goes-without-saying," the activity previously deemed noise unworthy of comment. (italics added; p. 448).*

The Values Card activity is intended to surface the 'taken-for-granted' and "what-goes-without-saying" by encouraging designers to plumb video games for representations of particular values and to transform them into challenges to be evaluated during the design cycle. To the extent that it is practical and feasible (given competing demands for time and resources) we are arguing that game developers should examine their assumptions about functionality from such a reflective perspective, considering how content might be interpreted by a game's audience and

how a game's features embody values as products of implicit and explicit decisions made during the design process. Using the Cards to analyze games is an exercise in consciousness-raising, as they can be used to instigate reflective practice and initiate the scrutinization of features in order to interpret how they reflect social values.

In the wiki reflections discussed above, Isaiah suggested that sharing is a weightier act than giving, in that it includes the fair distribution of a commodity that has value to both parties, whereas giving seems to imply a unidirectional flow of value. He also analyzed the elements of the narrative and game features of *Ocarina of Time* that portrayed this value. In her consideration of self-esteem through *Dance Dance Revolution*, Karen wrote that the emcee's comments were "significant because the evaluation lies at the core of the game mechanic. They work at a personal and minimally mediated level to place locus of the game's impact on the player's self-esteem." She also noted that "it would be a crushing blow to my self-esteem to have my ass handed to me by a 12-year-old in a public place. And that's something we should think about and try to use strategically when designing ubiquitous games." In their writing, Karen and Isaiah both demonstrated a level of reflection about values that begins to exhibit critical qualities that will influence the overall design process.

### Games as Designed Experiences

Flanagan, Howe, and Nissenbaum [12, 13] and Squire [28] have suggested that games should be studied as *designed experiences*, that is, as technical artifacts constructed by individuals whose decisions and skills as developers are informed by their own ideological dispositions and by their own experiences in the world. In her work on activist games, Flanagan [14, 15, 16] has noted that games involve participation in ideological systems. Squire wrote that "a game's context of production may also be important for understanding the layers of meaning in a text" (p. 21) when studying how players play and interpret the symbol systems within video games. Using *Civilization III* as an example, he noted that it "is based on a geographical-materialist game system...the central features...present an argument for the fates of civilizations as largely governed by geographical and materialist processes" (p. 21). Discussing *Deus Ex*, he added, "the player must continuously decide whether to ally with multiple competing organizations (governments, corporations, family loyalties) in a world where every choice involves moral ambiguity and no decision is ethically 'right'" (p. 21). Decisions about game mechanics, which dictate how players may and may not function in a game world, and narrative content, which sets the rule system within a coherent framework, may reflect designers' conscious and unconscious considerations of values and their beliefs about "how the world works," even when that world is fictional. We are arguing that these issues should be surfaced regularly as developers—particularly those who are engaged in the design of activist games and "games for change"—create games in order to

reflect on the values that have been embodied in the game and the features that enable players to experience and understand them.

## ISSUES

### Whose Values?

The list of values that we have chosen is not exhaustive and may be problematic. In their first iteration, we have chosen to include those values that we considered to be central to the principles of a liberal democracy (in this case, many are found in the U.S. Constitution, including a respect for human rights, the rule of law, individual freedom, justice, and the basic equality of all human beings). But a researcher in Sweden might add, alter, or remove one value for another given her social and cultural background. Take for example 'autonomy,' a value that may be vital for someone in the U.S. but one that might endanger a greater value, community, and therefore might be far more controversial in one locale over another.

### Designers' Experiences with the Methodology

Most of the design students enrolled in the class had never spent any significant amount of time considering how a game, in terms of mechanics or narrative, could be designed to embody specific values. The class instructor found that, as might be expected, some students were more amenable to the new methodology than were others. As they considered how values are represented in games, several of the students realized the challenge of representing values without becoming too didactic and removing the qualities that make a game fun. Alex, another design student, wrote, "I'm learning that it's difficult to design a game that contains exactly the kinds of messages (and values) that you want it to contain, but doesn't beat the player over the head with them." Karen had a similar realization when she commented on her game prototype for the class:

*"Most games that try to communicate constructive values tend to make them the most prominent feature (the semiotician's surface structures), but these games rarely succeed in being "fun" (oooooh, contentious term!) or, perhaps more significantly, in propagating the values they set to communicate.*

*Besides, there is more to a game than just what it's "about." (And yes, I realize the immense irony of my making this statement, me, with all my antiquated obsessions with aesthetic value, narrative, emotion, and all that other content-focuses nonsense.) So I tried to imbed the values as far into the game's DNA as I could, to distill the values into action and result. The surface structure would then point to these deeper structures without explicitly articulating them. In [her game prototype], this manifests in the somewhat abstract game world and its aesthetics, as well as the procedural narrative of access and evolution."*

In discussing his coding of the mechanics for his own prototype, Isaiah wrote:

*“As I wrote the code, I found myself thinking of problems that I do not normally consider. Whether or not the algorithms selected truly encouraged diversity and tolerance was a primary concern, and not the sort of thing that I usually worry about. I think that the version of the game as it is presently constructed does encourage diversity, and though there are ways to circumvent combining different types of [game element], they will not ultimately lead to a successful conclusion of the game.”*

In the survey that we administered after the class Karen and Isaiah both suggested that the methodology had influenced their thinking about values in game design and that they might try to use the methodology in future work. Karen said, “Yes, I’ll try. One thing that may make it difficult is justifying values studies and prioritization as part of the project requirements.” Isaiah remarked that the exercises

*“... influenced my thinking about values in games in that I now think about them. Whereas I had never really even considered them before, I now notice values and try to determine whether they were consciously included or not. (This makes games slightly less enjoyable, but far more interesting!)”*

#### **GOALS AND FUTURE PLANS: EXPANDING AND REFINING THE EXERCISE**

As we’ve run additional exercises, participants have often suggested the inclusion of a new value into the deck, or a reanalysis of our initial choices. Many of these suggestions have been used to add to and refine the deck, with the result that the exercises are continually evolving to better suit (and challenge) the perspectives of those who would use the cards in their thinking on design.

For example, when we began, we emphasized cooperation as a positive social value that is expressed in some games. However, in some of our exercises, designers told us that the contrasting value of competition is important to them and can also have positive social applications. Their insights on how competition is embedded in some games as a positive social value have prompted us to expand our initial position on what values are appropriate for inclusion in the deck. Values like competition, and also individualism and hierarchy, can, depending on their application, have positive or negative effects on society. Interpreting their expression in games, therefore, requires that we pay close attention to the social and cultural context in which they are situated.

Likewise, some student affiliates felt it was important to integrate free thinking and humor into the Values Cards and exercises, and they suggested the inclusion of values such as style, loyalty, and funkiness. In our experience, extending the discussion to whimsical or idiosyncratic, personal values can give designers a good entry point from

which to begin thinking more broadly about values in design.

We believe there might be further categories to group the values in as the list expands and as many participants engage with the Values Cards. Some new values suggested by participants include nurturing, guardianship, health, solidarity, and ‘superhero-ness.’ One category which may emerge are interpretive values, that is, those wider human values that could be interpreted either positively or negatively, such as hierarchy, growth, individualism, and loyalty. There are also consistent values conflicts in the exercises. In fact, this double edge may be a good thing; it might be easier for novices in the field to make a game that promotes a value by portraying its violation, i.e., a designer may design an *intolerant* game, design an *untrustworthy* game, design an *unjust* or “un-community”-building game. This task may prove to be easier than it is to make a game in which the mechanics constitute the positive expression of a particular value. Negative values identified might be those such as pride, lust, sloth, envy, wrath, avarice, gluttony, or assimilation.

Other values conflicts provide insightful opportunity for discussion. For example, early on in the project, we emphasized cooperation as a positive social value that is expressed in some games. However, in some of our exercises, designers told us that the contrasting value of competition is important to them and can also have positive social applications. Their insights on how competition is embedded in some games as a positive social value have prompted us to rethink our initial position on what values are appropriate for inclusion in the deck.

#### **CONCLUSION & FUTURE DIRECTIONS**

The Values Cards exercise has been useful to those engaged in the VAP project, and has sparked many lively discussions. The Cards have prompted further group exercises, such as the development of full-blown games themselves as part of the discovery process. This work will be described in forthcoming papers.

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#### **REFERENCES**

1. Agre, P. (1997). Toward a Critical Technical Practice: Lessons Learned in Trying to Reform AI. Bowker, G.C., Star, S.L., Turner, W., and Gasser, L. (Eds.). *Social Science, Technical Systems and Cooperative Work: Beyond the Great Divide*. Hillsdale, NJ: Erlbaum.



2. Akrich, M. (1992). *The De-Description of Technical Objects. Shaping Technology/Building Society*. Ed. W. Bijker & J. Law. Cambridge, MA: MIT Press, 205-224.
3. Anderson, C. A. (2004). An Update on the effects of playing violent video games. *Journal of Adolescence*, 27, 113-122.
4. Barr, P., Noble, J., Biddle, R., Khaled, R. (2006). From Pushing Buttons to Play and Progress: Value and Interaction in *Fable*. *Proceedings of the Seventh Australasian User Interface Conference*. 16-19 January 2006, Hobart, Australia. Darlinghurst, Australia: Australian Computer Society.
5. Borning, A., Friedman, B. & Kahn, P. (2004). Designing for Human Values in an Urban Simulation System: Value Sensitive Design and Participatory Design. *Proceedings From the Eighth Biennial Participatory Design Conference*, Toronto, Canada, July.
6. Brey, P. (1997). Philosophy of Technology Meets Social Constructivism. *Techné: Journal for the Society for Philosophy and Technology*, 2(3-4), Spring-Summer.
7. Castronova, E. (2005). *Synthetic Worlds: The Business and Culture of Online Games*. Chicago: University of Chicago Press.
8. Cross, N. (September 1971). Design Participation: *Proceedings of the Design Research Society's Conference*. Manchester UK.
9. Dibbell, J. (2006). *Play Money: or, How I Quit My Day Job and Made Millions Trading Virtual Loot*. New York: Basic Books.
10. Dourish, P., Finlay, J., Sengers, P. & Wright, P. (April 2004). Reflective HCI: Towards a Critical Technical Practice. Extended Abstract. *Proceedings of CHI 2004*.
11. Druin, A. (1999). Cooperative inquiry: Developing new technologies for children with children. *Proceedings of CHI 1999*. ACM Press, 592-599.
12. Flanagan, M., Howe, D., & Nissenbaum, H. (2005a). New design methods for activist gaming. *Proceedings of the Digital Games Research Association (DIGRA)*, June 16-20 Vancouver CA.
13. Flanagan, M, Howe, D. C., & Nissenbaum, H. (2005b). Values at Play: Design Tradeoffs in Socially-Oriented Game Design. *Proceedings of CHI 2005*. New York: ACM Press, 751-760.
14. Flanagan, M. (2003). Next Level: Women's Digital Activism through Gaming. In A. Morrison, G. Liestøl & T. Rasmussen (Eds.). *Digital Media Revisited*. Cambridge: MIT Press, 359-388
15. Flanagan, M. (2006a). Making Games for Social Change. *AI & Society: The Journal of Human-Centered Systems*, 20(4), 493-505.
16. Flanagan, M. (2006b). "Politicising Playculture." *GAME/PLAY Exhibition Catalog*. HTTP Gallery, London.
17. Freire, P. (2005). *Education for Critical Consciousness*. New York: Continuum.
18. Friedman, B., Kahn, P. & Borning, A. (2002). Value Sensitive Design: Theory and methods. *Technical Report 02-12-01*, Comp. Sci. & E., UW Seattle, WA.
19. Grudin, J., Ehn, P., & Schmidt, K. (1988). Computer Supported Cooperative Work. *Proceedings of the 1988 ACM Conference on Computer-supported cooperative work*. Portland, Oregon, United States, 377 - 394.
20. Kincheloe, J.L., & McLaren, P. (2003). Rethinking critical inquiry and qualitative research. In Denzin, N.K. and Y.S. (Eds.), *The Landscape of Qualitative Research: Theories and Issues*. Thousand Oaks, CA: Sage Publications.
21. Latour, B. (1992). Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts. In *Shaping Technology/Building Society*. W. Bijker & J. Law (Eds.). Cambridge, MA: MIT Press, 225-258.
22. Laurel, B. (2001). *The Utopian Entrepreneur*. Cambridge: MIT Press.
23. MacKenzie, D. & J. Wajcman (Eds.). (1985). *The Social Shaping of Technology*. Milton Keynes: Open University Press.
24. Mateas, M. (2000). Expressive AI. *Proceedings of SIGGRAPH 2000: SIGGRAPH art and culture papers*. (CD-ROM), 23-28 July 2000, New Orleans, LA. New York: ACM Press.
25. Media Education Foundation. (2001). *Game Over: Gender, Race & Violence in Video Games*. DVD.
26. Melillo, W. (15 November 1999). Video-Game Group creates ads to deflect criticism. *Adweek*, Eastern Ed., 5
27. Schön, D. (1983). *The Reflective Practitioner*. New York: Basic Books.
28. Squire, K. (2006). From content to context: Videogames as designed experiences. *Educational Researcher*, 35(8), 19-29.
29. Taylor, T.L. (2006). *Play Between Worlds: Exploring Online Game Culture*. Cambridge: MIT Press
30. Winner, L. (1980). Do artifacts have politics? *Daedalus* 109(1), 121-36.

## NOTES

1. Many scholars, designers, and consumers note that some games embody antagonistic and antisocial themes – violence and gore, genocide, crime, cruelty, problematic representations of bodies in terms of gender and race, and viciously competitive game interactions and goals [3, 4, 25,



26]. While, of course, this is not the case for all games, these themes arise in a notable proportion of popular games.

2. The initial deck was produced by Tiltfactor Fellowship recipient Jay Bachhuber, Hunter College.

3. We are aware that the term “twinking” is used to describe a variety of behaviors in MMORPG’s, some of which are widely regarded as “unfair” or deleterious to the

experience of other players. However, in this paper, we restrict our discussion to a sub-category of twinkling behavior that is generally considered to be benign.

4. As a final project, the students were required to submit a prototype of a game that embodied a value chosen from the deck—all students designed for one value.