Reconciling Csikszentmihalyi's Broader Flow Theory

With Meaning and Value in Digital Games
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INTRODUCTION

The aim of this paper is to put forward an additional condition to the characteristics of 'Flow' (Csikszentmihalyi, 1975) that addresses the idea that the "meaningful experiences" Csikszentmihalyi is talking about rely on constructions of value drawn from our personal cultural context and not from some absolute set of invariant cultural values. Although this may be seen as broadly applicable to all discussions of 'Flow' type experiences the focus here is on Mihaly Csikszentmihalyi's discussion of his concept of optimal engagement known as 'Flow' (Csikszentmihalyi, 1975, 1979, 1990, 1996, and Kubey, R., & Csikszentmihalyi, M. 2002) as it relates to existing and future uses of 'Flow' in design and analysis of digital games.

Mihaly Csikszentmihalyi's concept of optimal engagement known as 'Flow' (Csikszentmihalyi, 1975; Csikszentmihalyi, 1990) is discussed in detail later in this paper, especially focusing on the key idea that there is a set of characteristics that are common to all 'Flow' experiences. The core concept is that 'Flow' describes a type of heightened engagement with an activity where the participant is so involved in the activity that there is no awareness spared for one's environment or even self-consciousness. Csikszentmihalyi describes the experience of Flow as:

"…a sense that one's skills are adequate to cope with the challenges

at hand, in a goal directed, rule-bound, action system that provides clear clues as to how well one is performing. Concentration is so intense that there is no attention left over to think about anything irrelevant, or to worry about problems. Self-consciousness disappears, and the sense of time becomes distorted. An activity that produces such experiences is so gratifying that people are willing to do it for its own sake, with little concern for what they will get out of it, even when it is difficult, or dangerous." (Csikszentmihalyi, 1975, p. 71)

There is a substantial amount of examination and discussion of what constitutes 'Flow' in the two key works on the subject by Csikszentmihalyi (the 1975 book is approximately 230 pages and the 1990 book is approximately 320 pages). In Mihaly Csikszentmihalyi's broader discussions of Flow across these works and his wider body of work he discusses instances of engagement and frequently characterises them as either passive and entropy inducing, and therefore not 'Flow', or meaningful growth promoting experiences -'Flow'.

Entropy inducing –

*"But this also depends on what activity provides Flow. Unfortunately, many people find the only challenges they can respond to are violence, gambling, random sex, or drugs. Some of these experiences can be enjoyable, but these episodes of Flow do not add up to a sense of satisfaction and happiness over time. Pleasure does not lead to creativity, but soon turns into addiction – the thrall of entropy." (*Csikszentmihalyi, 1996, pp. 123–124)

Growth promoting –

"In our studies, we found that every Flow activity, whether it involved competition, chance, or any other dimension of experience, had this in common: it provided a sense of discovery, a creative feeling of transporting the person into a new reality. It pushed the person to higher levels of performance, and led to previously undreamed of

states of consciousness. In short it transformed the self by making it more complex. In this growth of the self lies the key to flow activities." (Csikszentmihalyi, 1996, p. 74)

It is the contention of this paper that this separation, into 'good' and 'bad' engagement, especially when applied to digital games is based entirely on implied cultural values of the authors (for example Kubey & Csikszentmihalyi) and needs to be more thoroughly examined and accounted for. The second half of this paper will put forward a detailed argument for an individualised and contextual definition of Flow as it pertains to the individual's abstract cultural value. It is important to highlight that we are not referring to moral value or values specifically, rather we are referring to the construction of personalised perceived abstract value and the employment of that value in evaluating the worth of activities we could undertake. To help build this argument, the paper will address and attempt to integrate such concepts as Cultural Value (Bourdieu, 1986), and Habitus as well as a sense of culturally relative self-sense (Cooley, 1902) into a broader context definition of 'Flow' as individually meaningful positive engagement.

The authors feel this is important to address in digital games research because Flow is used in general videogame analysis and design discussions as an explanatory tool for player motivation in the face of challenges. This distinction between types of engagement is absent from the two types of discussion of 'Flow' in digital games. The first type of discussion of 'Flow' in digital games is to use 'Flow' as a model of how players might be motivated to find enjoyment with digital games (e.g. Baron 2012; Cowley et al. 2008; Sweetser and Wyeth 2005). The second type of discussion of 'Flow' in digital games is to use 'Flow' in examinations of designing appropriate challenges that avoid player boredom or frustration (Brathwaite & Schreiber, 2009; Fullerton, Swain, & Hoffman, 2008; Schell, 2008). In these cases, the discussion almost exclusively focuses on the description of 'Flow' presented as 'the 9 characteristics of Flow' and the diagram of the 'Flow Channel' between boredom and frustration. None of these works address the problem that Csikszentmihalyi has

consistently implied that digital games can only produce ‘bad’ engagement (entropy).

It seems wise at this point to raise Csikszentmihalyi’s exploration of play in contrast to Flow. In his essay ‘Some Paradoxes in the Definition of Play’ (1979) Csikszentmihalyi defines play as a subjective state where an individual has freely chosen to engage in an activity irrespective of or counter to the normative rules or conditions which might be in place to frame that activity in that individual’s reality. Thus, for Csikszentmihalyi, play and games are distinct. Play is the approach to an activity in which an individual intends to act in a way which is not wholly in compliance with the norms or rules of the context. Games however, are fixed sets or rules and agreed actions which may be approached playfully, but not necessarily. That said, games according to Csikszentmihalyi are codified realities which may allow for the safe (or in Csikszentmihalyi’s terms ‘emasculated’) bending of the rules outside of the ‘serious’ reality of daily life. So one may ‘play’ a game, conforming to all the rules, and thus would not have engaged in that reality ‘playfully’. A playful exploration of a reality and the earnest engagement in a game can both be potential sources of Flow, as could a routine activity in full conformance with one’s normative reality (such as work). Flow being a ‘process of involvement’ with any activity, given the presence of appropriate conditions.

This separation of playfulness from the act of participation in a game may point to the importance Csikszentmihalyi places on the individual’s expression of self-generated value (the autotelic component of ‘Flow’) and argues for a wider discussion of the idea of knowing subversion of cultural and personal values and the creation of personal realities, which is beyond the scope of this paper.

FLOW IN GAMES

Csikszentmihalyi describes the experience of Flow as:

“*…a sense that one’s skills are adequate to cope with the challenges*

at hand, in a goal directed, rule-bound, action system that provides clear clues as to how well one is performing. Concentration is so intense that there is no attention left over to think about anything irrelevant, or to worry about problems. Self-consciousness disappears, and the sense of time becomes distorted. An activity that produces such experiences is so gratifying that people are willing to do it for its own sake, with little concern for what they will get out of it, even when it is difficult, or dangerous." (*Beyond Boredom and Anxiety*, 1975, p. 71)

This quote is a general statement of the position upon which Csikszentmihalyi builds the concept of Flow; a deep engagement with an activity in which the participant finds a profound sense of gratification and ultimately constructive personal meaning and enjoyment.

Breaking the concept down further in his subsequent work to *Beyond Boredom and Anxiety* Csikszentmihalyi provides sets of 'conditions' or features of Flow. One such breakdown is the following set of nine conditions found in *Creativity: flow and the psychology of discovery and invention* (Csikszentmihalyi, 1996):

1. There are clear goals every step of the way
2. There is immediate feedback to one's actions
3. There is a balance between challenges and skills
4. Action and awareness are merged
5. Distractions are excluded from consciousness
6. There is no worry of failure
7. Self-consciousness disappears
8. The sense of time becomes distorted
9. The activity becomes autotelic

These conditions and quotes seem to sum up certain types of engagement with video games quite well. As such, and as noted in

preceding sections, the above conditions of Flow are often quoted by researchers and designers who are using the concept of Flow as a model of engagement and even enjoyment or pleasure found in playing video games. Point 3 is often a focus of attention, and variants of a diagram regularly employed by Csikszentmihalyi throughout his work, which shows that a challenge must not be too great (or else frustration would result) or too slight (yielding boredom), are regularly found in the literature. For example, Chen (2007) employs a modified sense of optimal challenge based on Flow, which calls for an approach to the design of any single-player game which will allow the player to dynamically select the difficulty of the challenge through their actions. Expert players performing identifiably expert actions make the game more difficult, while novice players who act in identifiably novice ways make the game easier.

Flow while playing video games

If we map these conditions onto an imagined experience of playing a game, we can see that there is indeed a very good apparent fit between Flow and video game engagement.

We might have been deep into a middle level of a favourite scrolling shoot-em-up where:

1. We knew that what we had to do was avoid or shoot an onslaught of enemies
2. We knew what weapons we had to use and how close the enemies were getting to destroying our ship
3. We were at the point where we could just think fast enough and respond fast enough to avoid the stream of bullets and enemies
4. We'd stopped thinking about what the controls were, and were just thinking in terms of move and shoot
5. Nothing outside the game mattered for a few minutes, the

birds singing outside, or that we might be a tad hungry or in need of the toilet.

6. This is the furthest we'd ever come through this bullet hell, we just need to stay focused to see the level boss who must be only a little bit further along the path set out by the game.

7. That we were an adult sat cross legged on the floor, holding a strange plastic device covered in buttons, gurning and grimacing in comedic ways at the television didn't enter our conscious mind even for an instant; we were our ship and the ship was us.

8. The dozen or so attempts to get past this one section seemed to have taken 5 minutes or so, but when we looked at the clock it took more like half an hour.

9. Why we were flying through space shooting baddies from another galaxy was because… well for the period when we were… because it was fun. There was no expectation of economic or social reward, it was pleasurable in its own right. It was pleasing because of, rather than in spite of, the time and energy we had invested in it.

It is this apparent match between the published conditions of Flow, and the subjective experience occasionally felt in playing which has apparently resulted in the use of Flow as a way of understanding engagement with games.

Flow as a design concept

Flow is one model of engagement with the challenge of a game proposed within design focussed literature (Brathwaite & Schreiber,

2009; Fullerton, Swain, & Hoffman, 2008; Schell, 2008), The first three conditions of Flow are more or less heuristics for the kind of experience which might then lead to the remaining six: There are clear goals every step of the way; there is immediate feedback to one's actions; and there is a balance between challenges and skills. These rules of thumb are regularly reproduced alongside Csikszentmihalyi's diagram showing how Flow requires the right level of challenge relative to a person's skill in an activity. As such the way Flow is often framed by the design literature is almost another way to consider a games 'balance' or 'difficulty level'. While these heuristics might be of some use to a designer seeking to tune how difficult their target audience is likely to feel their game is, it is our contention that such an understanding of Flow is incomplete. Indeed, Chen (2007) does not include the condition of autotelism in his reproduction of the conditions of Flow. A well-tuned challenge does not necessarily yield 'enjoyment' in the sense Csikszentmihalyi employs the term. A player might find a game to be meaningful and satisfying, and thus feel enjoyable Flow, but they might equally find a game lacks value, is unsatisfying, and thus will not experience enjoyable Flow. Rather, they could conclude that they are wasting their time in an insidious, trivial, addictive pursuit. It is this issue of relating value to the apparent engagement with a game that this paper seeks to address.

Flow as an analytic tool

As the design literature attempts to employ Flow to aid the design process, others have taken Flow and attempted to employ it as a mode of analysing the quality of a game or the degree to which a player might find enjoyment with a game (e.g. Sweetser and Wyeth 2005). While these somewhat more academic approaches are more detailed, not merely assuming that Flow can simply be mapped onto videogames without further decomposition, as to what the conditions of Flow mean in the context of analysis and design of a specific game, we have found none which take Csikszentmihalyi's broader thesis into account. While Csikszentmihalyi has written extensively about the ability (or even need) for Flow to provide meaning to the lives

of those who experience it, it is a little surprising that the meanings or values of videogame play experiences are seldom explored in the context of Flow with respect to engagement with videogames. A little surprising, but not entirely so, as on the one hand Csikszentmihalyi claims that Flow can provide meaning, and gives examples of socially relative positive meaning encountered in Flow, but on the other insists that Flow must be free of external motivating influence if it is to provide enjoyment. However, a broad reading of Csikszentmihalyi's writing suggests that we cannot assume that instances of challenging play, which hold our attention for a time, should automatically be deemed 'enjoyable'.

Games may set up structures which may promote Flow, whether engaged in playfully or not. Flow and playfulness being independent phenomenological concepts expressing attitudes an individual has toward a reality (Kubey and Csikszentmihalyi). The issue raised by this current paper relates to an apparent confusion in the relationships between Flow, enjoyment, and pleasure. In that it seems that Csikszentmihalyi argues that Flow experiences will necessarily yield a satisfyingly meaningful outcome for individuals, and ultimately 'enjoyment' on the one hand, while admitting that some experiences, while fulfilling the stated conditions of Flow, do not yield satisfaction and enjoyment, but rather mere pleasure without meaning and potentially entropy or addiction.

Flow and cultural values

In Creativity (1996) where Csikszentmihalyi discusses how society has a role in teaching young people what activities they should be enjoying in order to grow personally and culturally:

"We are much too sophisticated in this day and age to have strong feelings in the matter. Yet we probably agree that we would feel better if our children learned to enjoy cooperation rather than violence; reading rather than stealing; chess rather than dice; hiking rather than watching television. In other words, no matter how relativistic

and tolerant we have become, we still have priorities." (Csikszentmihalyi, 1996, pp. 124–125)

This quote suggests that we cannot escape employing priority or value. Indeed, throughout his work Csikszentmihalyi seems to be arguing that while the principal experience of Flow is apparent in all societies, the activities through which one might achieve enjoyment or 'good Flow', rather than mere pleasure, or 'bad Flow', are personally realised and have a relationship with culture, if not society. That once a person is experiencing Flow, they will not question the experience, and will continue to engage as long as the appropriate conditions are in place, is not the subject of this discussion. Rather, it seems that Csikszentmihalyi is consistently arguing for an extra-Flow clause or a super condition of Flow which gives the individual a means of evaluating the meaning (and value) of a given Flow inducing activity.

To recap, it seems that for Csikszentmihalyi the difference between Flow as a positive, meaning producing, satisfyingly enjoyable experience and Flow as a negative, addictive, entropy inducing, merely pleasurable experience, is the individual's sense of growth in normatively agreeable directions.

Flow and video games

Let us then consider a passage from a paper Csikszentmihalyi co-authored with Robert Kubey in 2002, about television:

"Although much less research has been done on video games and computer use, the same principles often apply [as they might to television]. The games offer escape and distraction; players quickly learn that they feel better when playing; and so a kind of reinforcement loop develops. The obvious difference from television, however, is the interactivity. Many video and computer games minutely increase in difficulty along with the increasing ability of the player. One can search for months to find another tennis or chess player of comparable ability, but programmed games can

immediately provide a near-perfect match of challenge to skill. They offer the psychic pleasure–what one of us (Csikszentmihalyi) has called "flow"–that accompanies increased mastery of most any human endeavour. On the other hand, prolonged activation of the orienting response can wear players out. Kids report feeling tired, dizzy and nauseated after long sessions." (Kubey and Csikszentmihalyi, 2002)

The above quote, especially the value laden words used, such as 'escape' and 'distraction', suggest that despite the admission that games may offer 'Flow', in the case of 'video games' Kubey and Csikszentmihalyi feel that the Flow found in that specific context is undesirable.

Kubey and Csikszentmihalyi's position on videogames seems to work counter to the principle of autotelism, explored in depth later in this paper, but that they pre-judge videogame play as potentially corrupting, devoid of meaning, or valueless, despite showing all the conditions of Flow presented above, raises the possibility that there are in fact at least two kinds of Flow. Good, meaningful, worthwhile, personal growth promoting Flow, and the bad, addictive, meaningless, waste of time kind. This is not an unusual observation. In data collected in interviews as part of a broad ranging study of players' relationships with games (Salisbury 2013), a significant subset of players lamented the time they had spent playing games despite (in fact in a couple of cases reinforced by) having experienced apparently Flow like engagements when they did. Just as Kubey and Csikszentmihalyi ascribe their own values upon the children whom they have observed playing games, some players self-analyse the experience of deep engagement in games negatively. Reflecting on the loss of self and sense of time passing; reflecting on what they feel they have achieved; some players decide that playing games work against their efforts to achieve their own life goals. While they might find playing games to be 'pleasurable' on occasion, the deep engagement that they experienced was not ultimately enjoyable. It is this failure to find value in an otherwise absorbing and deeply

engaging activity which ultimately fails to yield a personal sense of greater value. We propose to call this kind of experience ‘bad Flow’.

A bad Flow activity provides clear localized goals; it provides feedback to the participant; the participant finds it suitably challenging; the participant doesn’t think about their actions as they perform them; the participant blanks out the distractions; they stop worrying about failure; they don’t think about who they are outside of the context of the activity; and time seems to pass more quickly. Ultimately, however the experience is judged by the individual to lack enjoyment or value, and does not generate a sense of long term, personal meaning.

Differentiating between good and bad Flow

In order to effectively differentiate between good Flow and bad Flow we need a means which any solution would avoid falling into the authoritarian trap of decreeing appropriate and inappropriate values and meaning. A trap which Csikszentmihalyi argues against but seems to fall into by suggesting that videogames are only able to deliver short-term pleasure and ultimately entropy.

The simplest way to differentiate between the two interpretations of a Flow experience would be to modify the stated conditions of Flow. A tenth condition of Flow might indicate that the individual must value the experience in some way. Employing a broad, axiological sense of ‘value’ which accounts for aesthetics, morals and ethics, and valences where the worth of a thing can be felt by an individual explicitly or implicitly.

That individuals make choices based on socio-culturally informed relative values can be illustrated by a simple example:

A young man who feels himself to be fit and has learned to value physical prowess; raised in the United States of America, he might easily be deeply engaged in playing and following American Football. He might even find Flow in running plays for his team or even following the tense parts of a game as a spectator. The sport adds

meaning and purpose to his life. He is aware of other sports, but they are not for him.

If we transpose our young man to having lived his life not too far away in Mexico he would not have grown up in a society where American Football is such a cultural force. Instead, his sporting passion is much more likely to be Association Football, which is much more popular in Mexico than gridiron.

In either case we can ask if the young man made a rational, deliberate choice to prefer one code of football over the other? He might be able to rationalize his choice once made, but we would contend that he would be enacting the culture of the society in which he was raised in order to come to these meanings. Why our young man would be fully committed to one particular sport over another is not well handled by the 'conditions of Flow' or the idea that either sport provides an optimal challenge for our young man when compared to the other. To reinforce the point (given that many choices might be made, but stereotypically are not) why didn't our fictional young man chose to become skilled at Australian Rules Football or even Kabaddi? These sports are not meaningful to him; he does not value them.

We need to free Csikszentmihalyi from his contradiction where he proposes Flow as a means of achieving meaning and enjoyment, while also admitting that Flow can be found in pursuits observers and individuals might find meaningless and discombobulating. However, we must be careful that whatever we propose still maintains much of the sense of Csikszentmihalyi's employment of 'autotelism'.

Autotelism and flow in games

One of the critical conditions of Flow presented by Csikszentmihalyi throughout his work is that the experience or activity should be 'autotelic'. A complete critique of the possibility or nature of autotelism is beyond the scope of this paper. It is important however to explore how Csikszentmihalyi has employed the concept, and what effect this employment has in the context of analysing engagement

with digital games. It is also critical to the argument put forward in this paper that we carefully account for Csikszentmihalyi's autotelism while discussing the value or worth of a play experience. That is, we do not want to destroy one of the pillars of Flow theory, while trying to account for a differential between experiences which should qualify as Flow. Essentially, we are trying to interpret and augment the description of Flow rather than deconstruct and weaken it.

Csikszentmihalyi defines 'autotelic' in this way:

"The term "autotelic" derives from two Greek words auto meaning self, and telos meaning goal. It refers to a self-contained activity, one that is done not with the expectation of some future benefit, but simply because the doing itself is the reward. Playing the stock market in order to make money is not an autotelic experience; but playing it in order to prove one's skill at foretelling future trends is – even though the outcome in terms of dollars and cents is exactly the same." (Csikszentmihalyi 2008, pp 67)

This description is similar to Apter's (1991) phenomenological state of 'paratelism', one of two opposing mental states an individual can assume toward an activity. In Apter's model an individual can assume a stance toward an activity in which action is taken in virtue of the ostensible purpose or goal; the 'telic', purposeful state, but in situations of relative safety the individual might take up a stance which ignores the normative goals. So the stock trader can flip back and forth between trying to maximise returns and, during periods of financial stability, trying different forecasting strategies. Csikszentmihalyi's version of autotelism and Apter's paratelism differ in a couple of different ways. Apter's paratelic state of mind requires a protective frame. Engaging in the activity must feel relatively safe to the participant. Csikszentmihalyi's autotelic activity has no such 'magic circle' requirement (following the way Huizinga's (1938) term has been employed by Salen and Zimmerman (2004) to denote a reserved space for play), instead the disregard for extrinsic motivators is what characterizes autotelism in Flow. Whether it is dangerous, risky, or entirely safe and mundane is irrelevant as

whether an activity is autotelic is independent of the degree of danger or risk involved. Another difference is that Paratelic attitudes toward an activity may flip back and forth between telic and paratelic states of mind. Csikszentmihalyi makes no such condition of autotelism in Flow. The participant can approach an activity completely autotelically, the extrinsic motivations, if they ever existed, being irrelevant.

Essentially, autotelism is a phenomenological stance toward an activity where an individual intrinsically values the activity. The activity has value in and of itself, irrespective of any external value supposed of it, or that the products of the activity have imputed value.

Csikszentmihalyi also suggests that some individuals are more predisposed to find activities intrinsically motivating especially, and critically to the argument of this paper, if the activities are part of a structured life's purpose. That is, individuals who can structure their lives such that each activity they will find Flow in is also contributing to some greater meaning will find happiness and enjoyment in life.

Autotelism and value

When considering this issue of meaning; a meaning in one's life, a meaningful activity and so on we are obviously concerned with more than mere semantic or semiotic meaning. Csikszentmihalyi uses the term 'meaning' as if he is imploring individuals to find purpose in their activities and a purpose is surely some kind of telos. So in essence Csikszentmihalyi is arguing that for an activity to be autotelic, and for autotelic to hold true he does not intend that individuals engage in activities which are pointless, but that individuals personally find the purpose in and thus value an activity.

So the value is not intrinsically found in the occasion of the activity, but is found in an individual's personal sense of purpose; in their phenomenological stance toward an activity. In this sense an activity can be both autotelic and valued as it is the individual self (auto) determining the purpose (telos) of activities, rather than those

activities holding value intrinsically or due to some societal norm. The difference then between Flow activities which promote growth and enjoyment and those which promote pleasure devoid of meaning is the difference between the individual experiencer's sense of value relative to a broad self-actualising life goal (consider say Maslow's hierarchy of needs 1943 and 1954 for a famous example of a model exploring value and personal purpose).

The question remains then why Kubey and Csikszentmihalyi see no value in playing 'video games'. The answer seems to be that in general Csikszentmihalyi criticises passive consumption of experiences, such as watching television or reading pulp novels, as lacking in value. For Csikszentmihalyi most things of value lead toward personal improvement. It must be said though that such an extrinsic judgement of the meaning of an activity seems to work against his greater thesis of Flow, whereby the individual experiencer is tasked with finding the meaning and thus value of an activity, irrespective of external rewards and societal pressure. That is, surely an individual is free to find the meaning in playing videogames, just as some people find meaning in playing chess irrespective of the club scene or competition rewards.

It seems probable that Csikszentmihalyi has simply fallen foul of a trap he warns against. That of applying normative value judgements upon the activities of others. He seems in this instance to deny that videogames have the capacity to provide meaning for an individual. This apparent error is interesting however; it shows the power of cultural value systems and how they direct individuals' judgements of worth. The socio-cultural nature of value is an extensively studied area. For example Bourdieu extensively published on the different types of value or capital; breaking value down into three broad areas of human experience, the economic, the social, and the cultural (Bourdieu 1986), and how these values are held and negotiated by different kinds of people. It seems that if we look at the value types developed by Bourdieu Csikszentmihalyi clearly critiques the need for economic (wealth of money, property, and possessions) and social (friends, contacts, fame, influence) value in Flow, but deals poorly

with cultural capital (knowledge, skill, taste). That is, he seems happy to claim that meaning must be personally found, but allows culture to drive what is personally acceptable:

"Cultures are defensive constructions against chaos, designed to reduce the impact of randomness on experience. They are adaptive responses, just as feathers are for birds and fur is for mammals. Cultures prescribe norms, evolve goals, build beliefs that help us tackle the challenges of existence. In doing so they must rule out many alternative goals and beliefs, and thereby limit possibilities; but this channeling of attention to a limited set of goals and means is what allows effortless action within self-created boundaries."

In this sense 'value', in a broad axiological sense which accounts for how ethics and aesthetics produce worth, can be said to be normative, driven by culture. Cultures form *habitus* (after Aristotle) in individuals, where each individual is enculturated into the value systems and norms of behaviour of the society which they in turn embody and enact unconsciously. So to say that people seek value in things is not to say that they necessarily seek financial reward or the adulation of peers and superiors (though these might be present), but rather that they seek to enact their cultural selves. One way of conceiving of this embodiment is Cooley's looking-glass self (1902) where individuals evaluate themselves as if they were being evaluated by an observer. Using their own cultural value judgements, which they would naturally employ to evaluate other's roles and statuses in society, back upon themselves. Cooley argues that through this process, we come to understand ourselves and our own place in society.

In this sense it seems that Csikszentmihalyi is suggesting that in order for Flow to lead to positive experiences, the Flow must yield personal but culturally relative worth. The error he might be making in his evaluation if videogames is assuming that his cultural habitus and current nexus of personal cultural value objects is the same as that of the young people he sees playing such games. His self-sense as an aging Croatian emigre to the United States of America,

who played Chess with a degree of skill in his youth allows him to see Chess as meaningful and life enriching, but not the videogames enjoyed by those he has observed, in spite of the potential similarities between the two activities. That is not to say that his evaluation is unique to his specific personal history and culture, as interviewing people of various backgrounds and ages who reject videogames or play few videogames yield similar evaluations of videogames as a 'waste of time' (Salisbury 2013). We might employ another concept from Bourdieu here. 'Legitimacy', where every sphere of human experience is evaluated by members of society according to the degree to which it is valued by the power structures within that society. That is if we were trying to understand why some people might see videogames as a waste of time over say listening to music or going to the theatre by way of a Sociological concept. However, we feel that at this point it is sufficient to say that some people, embodying their culture born of the nexus of values they have acquired, value some activities more than others. Exactly how the worth of a thing is measured is not entirely relevant to the purpose of this paper.

A Tenth Condition of Flow

In order to differentiate between those experiences of Flow which are meaningful and pursued, and those that are entropy inducing and eventually abandoned or rejected before participation through concern for the amount of time and effort they might 'waste', the resolution of this paper is to present a further clause into the nine conditions of Flow:

10: The activity must present an opportunity for meaningful growth of the self which is valued by the individual participant.

In this way we believe that it is possible to account for the differences between 'good' Flow and 'bad'. In employing this condition, we can now account for self-ascribed 'gamers' finding enjoyment in defeating a particularly tough game, as well as players who might

have spent some time absorbed in a game, but ultimately feel that the time would have been better spent in some other pursuit.

Conclusions and taking Value Based 'Flow' Forward

In terms of pure 'good Flow' it is difficult to see where design interventions might encourage it in a game or other activity. That is, in Csikszentmihalyi's conception of Flow, it seems that one of the greatest conditions is an individual's receptiveness to eschew social controls and approach activities from an autotelic position. That is, it is the individual who is autotelic (capable of acting without external drivers), rather than the activity. Csikszentmihalyi presents examples of individuals who approach every day activities with autotelic intent (Csikszentmihalyi, 1990); essentially gamifying their everyday experiences. However, he also presents the nine conditions of Flow listed above, so there is at least some sense that an individual needs to find themselves in an activity with the appropriate features or conditions, even if some of those conditions are self-imposed. Perhaps the closest game design interaction with this side of 'Flow' is in the idea of self-selected difficulty put forward by Chen (2007).

We argue that, in including the sense of cultural significance, which accounts for both social and individual values, it is reasonable to suggest that any activity which is valued by the participating individual has more chance of providing a Flow experience than one which is not individually culturally valued. The question becomes how one designs for the proposed tenth condition of Flow is one of designing for personalised cultural or axiological value. Outside of digital games design, there are some who argue that designing for value (after considering systems design, ergonomic design, and experience design) is the next phase in software design (e.g. Cockton, 2004). It is conceivable that much of the industry of games design, and thus games design practice will continue to take a fairly mechanistic approach to the design of games for short-term monetary returns. However, we could suggest that if games designers are striving for greater recognition of their products as culturally significant objects, and there is a will for games to avoid being seen

as a destructive, time wasting pastime, then the values embodied in games needs to be addressed as part of the design practice. More than the sense that games designers are striving for a recognition of legitimacy for their products though, it seems obvious that games which address the cultural values of enough players are more likely to be successful (by being valuable to those players) than those which only address the values of a niche.

If we add personal value to this discussions of designing game experiences, we see a subtle change come over the discussion. It becomes a question of what the player values about the gameplay experiences they participate in. These experiences include the feeling of acquisition or improvement of a particular skill (clearly 'Flow'-like), the feeling of progress on to the next challenge (somewhat 'Flow'-like), the feeling of being rewarded with loot, story or resources (explicit reward is counter to 'Flow'), the feeling of making choices about things in the game you value (character appearance, moral character, friends), and other game experiences; this cannot be an exhaustive list.

It is clear that 'Flow' only accounts for a small number of these value based drivers. This points to an approach to game design that keeps 'Flow' as a way of thinking about certain design tasks, but moves it out of the centre of the design process. What becomes central is a core set of values that the game and gameplay encompasses and highlights. One of the ways this might be approached is to use Alan Cooper's (1999) conception of the idealised user (or persona) as a central design process for capturing and embodying the designed values anticipated in the games audience. This could then allow for designing a game for a core persona audience that seek to improve a set of skills through increasing challenges using 'Flow' but equally designing a game with a persona with a different set of values and therefore a different approach to challenge; such as having an unvarying level of challenge.

Taking *Grand Theft Auto 4* as an example, this game has several structures that guide the player's activity. The primary structure is

based on missions that have a mixture of gameplay activities and provide the player with a feeling of progress toward a goal and rewards the player with story cinematics. The secondary structure is player selected, usually location or vehicle based, gameplay activities that always require using the same set of skills, but with increasing difficulty (increasing skill based challenge). The first structure makes the player engage at least once in all the skill based activities involved in the games but usually only the lowest difficulty version of the activity. The values expressed in this structure (story, progress, sampling, life simulation) are not engaged with 'Flow'-like activities, however the second structure is entirely player selection driven and allows them to pursue a series of increasingly challenging skill activities that have been given value by the primary structure of the game.

Conceivably, this approach answers both of the questions, providing a core experience which engages an idealised player's values, and then offering opportunities to pursue increasing skill based challenges as a choice.

BIBLIOGRAPHY

Apter, M. 'A Structural Phenomenology of Play', in M. J. Apter and John Kerr (eds). *Adult Play*. Swets and Zeitlinger, Amsterdam, 1991.

Baron, S. 'Cognitive Flow: The Psychology of Great Game Design'. *Gamasutra*, http://www.gamasutra.com/view/feature/166972/cognitive_flow_the_psychology_of_.php, 2012.

Bourdieu, P. *Distinction: a social critique of the judgement of taste*. Cambridge, Mass.: Harvard University Press, 1984

Bourdieu, P. 'The Forms of Capital'. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241–258). New York, NY: Greenwood Press, 1986.

Bourdieu, P. *The logic of practice. Stanford*, Calif.: Stanford University Press, 1990.

Brathwaite, B., & Schreiber, I. *Challenges for game designers*. Boston, MA: Course Technology/Cengage Learning, 2009.

Chen J. 'Flow in games (and everything else)'. *Commun. ACM 50*, 4 (April 2007), 31-34.

Cockton, G. 'Value-centred HCI'. *In Proceedings of the third Nordic conference on human-computer interaction* (pp. 149–160), 2004. ACM Press. doi:10.1145/1028014.1028038

Cockton, G. 'Making Designing Worth Worth Designing'. *Presented at the CHI'12 (2012)*, ACM.

Cooley, C. *Human nature and the social order*. New Brunswick (U.S.A.): Transaction Books, 1902.

Cooper, A. *The Inmates are running the asylum*, SAMS, 1999.

Cowley B., Charles D., Black M., and Hickey R. 'Toward an understanding of flow in video games'. *Comput. Entertain. 6*, 2, Article 20, 2008.

Csikszentmihalyi, M. *Beyond boredom and anxiety (1st ed.)*. San Francisco: Jossey-Bass Publishers, 1975.

Csikszentmihalyi, M. 'Some Paradoxes in the Definition of Play' in *Play as Context: 1979 Proceedings of The Association for the Anthropological study of Play* ed. Cheska, A. T. West Point, NY: Leisure Press.

Csikszentmihalyi, M. *Flow: the psychology of optimal experience (1st ed.)*. New York: Harper & Row, 1990.

Csikszentmihalyi, M. *Flow: the psychology of optimal experience (Perennial Classics ed.)*. New York: Harper & Row, 2008.

Csikszentmihalyi, M. *Creativity: flow and the psychology of*

discovery and invention (1st ed.). New York: Harper Collins Publishers, 1996.

Fullerton, T., Swain, C., & Hoffman, S. *Game design workshop: a playcentric approach to creating innovative games (2nd ed.)*. Amsterdam ; Boston: Elsevier Morgan Kaufmann, 2008.

Huizinga, J. *Homo Ludens: A Study of the Play Element in Culture*. Beacon Press, Boston, 1955, originally published 1938.

Kubey, R., & Csikszentmihalyi, M. 'Television Addiction'. *Scientific American*, (February), 2002.

Maslow, A.H. 'A Theory of Human Motivation.' *Psychological Review, 50 (1943)*, 370-396

Maslow, A. H. *Motivation and personality*. New York: Harper and Row, 1954.

Rockstar Games. *Grand Theft Auto IV*. Take-Two Interactive, 2008.

Salen, K. and Zimmerman, E. *Rules of Play: Game Design Fundamentals*. The MIT Press, Cambridge and London, 2004.

Salisbury, J.H. (2013). *Playing with Value: Player Engagements with Videogames as a Negotiation of Net Cultural Worth*. PhD Thesis. Middlesex University, London.

Schell, J. (2008). *The art of game design: a book of lenses*. Amsterdam ; Boston: Elsevier/Morgan Kaufmann.

Sweetser P., and Wyeth P. 'GameFlow: a model for evaluating player enjoyment in games'. *Comput. Entertain. 3(2005)*, 3