
Article:
Watkins, D. orcid.org/0000-0003-1273-1938 and Moseley, A. (2022) Envisioning research through a lens of play. The Journal of Play in Adulthood, 4 (1).

https://doi.org/10.5920/jpa.997

University of HUDDERSFIELD
University of Huddersfield Press

Journal of Play in Adulthood
Available open access at:
www.journalofplayinadulthood.org.uk

Journal of Play in Adulthood

Envisioning research through a lens of play

***Dawn Watkins*[a], *Alex Moseley*[b]**

[a]University of Sheffield, Western Bank, Sheffield, S10 2TN d.watkins@sheffield.ac.uk
[b]Anglia Ruskin University, East Road, Cambridge, CB1 1PT alex.moseley@aru.ac.uk

This work has been carried out at the foundational stages of a research project (FORTITUDE) which has received funding from the European Research Council under the European Union's Horizon 2020 research and innovation programme (Grant agreement No. 818457).

ARTICLE INFO

Keywords:
Research
Play
Theory
Practice

ABSTRACT

In this paper, two higher education researchers – one, an experienced play researcher and practitioner; the other, an experienced Law researcher who has more recently engaged with the play literature – present their ideas concerning what happens, or what could happen when research is envisioned through a lens of play. They describe how, drawing on the literature and theories surrounding play and games, they worked together to identify features that resonated with them as being relevant to research. Through their discussion of seven resonators (the significance of play, play is voluntary, play challenges, the uncertainty of play, accepting failure, community building and working within constraints) they suggest a playful look at research might encourage a number of positive changes to research practice and impact. They conclude by inviting readers to critically examine their claims, and to test them out in the contexts of their own research environments.

Introduction

In this paper we consider what happens, or what *could* happen, when we envision research through a lens of play. The paper is intentionally published in a play-focussed journal and we hope it prompts discussion and debate among the journal's play-minded readers. However, our intended audience extends beyond the journal's usual readership, as we seek to persuade those who are sceptical concerning the importance of play, or perhaps have given very little or no recent thought to it, that 'play matters' (Sicart, 2017) and it matters to research.

Taking play as our central theme, but extending this to explore related concepts, we have reviewed the

literature relating to theories of play, playfulness, games and fun. Following this literature search, which we conducted individually (one of us over many years, the other over a shorter timescale), we have determined together through discussion which aspects of this literature resonate with us as particularly relevant to the research process. Our original reason for doing this was to provide ourselves with a play theory-informed framework for our own research project, FORTITUDE, which aims to co-create game-based resources to measure and improve children's legal capabilities. You will not be surprised to see us talking about play in this context. But as we carried out this work, we became convinced that the aspects of the theories which have resonated with us in the context of this child-focussed research might well be relevant to others' work - whether or not it involves children, and whatever the discipline. We also formed the view that the so-called 'call to playful arms' as 'an invocation of play as a struggle against efficiency, seriousness and technical determinism' (Sicart, 2017, p.5) is both timely and significant when considered in the context of academic life and the university research environment more generally.

When writing this paper, we have imagined readers falling into one of three crude categories:

- **The Players:** you recognise aspects of play or playfulness in your own practice, although you may not have called it 'play'.
- **The Curious**: you will be interested in the ideas we present here and will think about how you might apply aspects of play to your research.
- **The Sceptics:** you cannot envisage play or playfulness being relevant to your research, and/or you could not see this working in your context.

Whichever category you fall into - we encourage you to read this paper and to think about how aspects of play, playfulness, games and fun might benefit your research, or help you understand it in a different way. But first - a warning. Given the paper is about play, you might find the tone a bit weighty in places. This is a deliberate tactic, designed to reassure the curious and the sceptics that our views are worth taking seriously. Players - we apologise and encourage you to skip over the parts you already know.

We begin the paper by defining what we mean by research but then mostly not defining what is meant by play, playfulness, games or fun, because our reviews of the literature lead us to conclude it is not possible to define all these terms objectively. Nevertheless, we are able to describe what we mean by these terms in the context of this paper, and we explain what we see as the relationship between them, based on these understandings. From here we set out in turn our seven resonators, explaining how and why each is significant. Within this section we provide examples of how play or playful approaches have produced some ground-breaking results in the research context. However, recognising the subjective and interpretive nature of our work, we acknowledge our ideas require further scrutiny. With this in mind, we conclude the paper by inviting readers to critically examine our claims, and to test them out in the contexts of their own academic lives, research projects and research environments.

Defining then mostly not defining our terms

When we refer to *research* in this paper, we refer to investigations being conducted by academics in University settings. Crucially, we refer to all kinds of research across all kinds of disciplines conducted in all kinds of places (desk-based, lab-based, online or out in the field) and with all kinds of people. So as we have already stated; not just, or necessarily even at all, research conducted with or about children. Indeed a key aim of the work underpinning this paper has been to explore how theories of play might inform the activities, attitudes, values and priorities of adult researchers who may or may not be conducting research with or about children.

The idea that play is relevant and important to all humans, including adults and not just children, is a central premise underpinning the literature. Huizinga's *Homo Ludens* (translated from the Latin to mean *Man plays*) first published in Dutch in 1938, exemplifies this view, and this text is frequently cited as foundational in recognising the significance of play as a cultural phenomenon. Notably, Huizinga does not define, nor even attempt to define the term play. Instead Huizinga sets out six well-cited characteristics of play, which subsequent authors have variously adopted, refuted or further developed.[1] One of these authors, renowned play theorist Brian Sutton-Smith, notes:

> 'there are multiple kinds of play and multiple kinds of players… Different academic disciplines also have quite different play interests. Some study the body, some study behaviour, some study thinking, some study groups or individuals, some study experience, some study language - and they all use the word *play* for these quite different things. Furthermore, their play theories...come to reflect these various diversities and make them even more variable.' (1997, p. 6)

Drawing on these diverse theories in his seminal text *The Ambiguity of Play*, Sutton-Smith examines the rhetorical underpinnings of these apparently diverse approaches to formulate seven unifying 'rhetorics of play' (1997, p. 9). Aspects of Sutton-Smith's work feature further below, but we refer to it here simply to demonstrate that even for the experts 'play is a notoriously difficult concept to define' (Flanagan, p. 4).

[1] Taken from the 1945 edition, the six characteristics of play that Huizinga identifies in his seminal text *Homo Ludens* are:
1. 'First and foremost…all play is a voluntary activity' (p. 7).
2. It is fun (p. 3)
3. It stands outside of ordinary life and is 'intensely and utterly' absorbing (p. 13)
4. It is not connected to material interest or profit (p. 13)
5. It is orderly and creates order (p. 13)
6. It promotes the formation of social groupings (p. 13)

Play and Playfulness

So what do we mean by *play*? Put very simply, we describe play as an activity; as something distinctive that we do either individually or in groups. Although play is impossible to define, much has been written about its characteristics or 'properties' (Brown, 2010, p. 17) and we discuss many of these later in the paper. By contrast, *playfulness* is an approach or an attitude which projects characteristics of play into any activity, whether the activity is play or non-play (here we deviate from Sicart who equates playfulness with non-play) (2017, pp. 22 & 26). So for example, w mght dcde t wrt prt f ths ppr wtht sng vwls, t dd n lmnt f chllng r nvlty t th rdr. This approach to writing is playful but the writing itself and the wider activity of writing remains essentially non-play, and in accordance with established norms. We are not playing. We are writing with a playful attitude or, as we like to term it, larking about. In contrast, we might be invited to play a game that we don't like, or don't have time for, and therefore don't approach playfully; to the outside observer, we are playing, but we are not doing so playfully. In her study of *The Paradox of Playfulness*, Maaike de Jong supports the view that 'play and playfulness are intrinsically linked, yet distinguishable from one another' (2015, p. 97). She also acknowledges the distinction between a *playful* attitude and a so-called *lusory* attitude (p. 22). This further distinction is helpful in explaining the inter-relationship between playfulness, play and games.

Playing games

Readers who are unsettled by our ill-defined descriptions so far will be reassured to find we do rely on a definition for the term *game* in the context of this paper. In line with our emphasis on play (as opposed to, say, game-design) we rely on the definition provided by Bernard Suits in *The Grasshopper* (originally published 1978). As Salen and Zimmerman (2004, p. 77) note, this definition focuses on the activity of playing a game, rather than on the game itself. Suits states:

> '...to play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by the rules, where the rules prohibit more efficient in favour of less efficient means, and where the rules are accepted just because they make possible such activity' (p. 36).

Suits also provides a more succinct version of this definition that 'playing a game is the voluntary attempt to overcome unnecessary obstacles' (p. 43) and he illustrates this compellingly through reference to the game of golf. As Jane McGonigal observes, the aim of golf is 'to get a ball in a series of very small holes, with fewer tries than anyone else. If you weren't playing a game...you'd walk right up to each hole and drop the ball in with your hand.' (2012, p. 22).

McGonigal describes persuasively how Suits' definition applies equally in situations where the unnecessary obstacles are perhaps less obvious. For example, with regard to the game of Scrabble, she observes: '...your

goal is to spell out long and interesting words with lettered tiles. You have a lot of freedom: you can spell any word found in the dictionary. In normal life, we have a name for this kind of activity; it's called typing' (McGonigal, 2012, p. 23). It is the added restrictions imposed by the rules of Scrabble (e.g. using seven letters at a time; adding only to words already created; avoiding giving your opponent access to a high score) that make it a game.

Returning now to de Jong's reference to lusory attitude. This is a willingness to accept the rules of the game; so making it possible to join in. Indeed, Suits describes this lusory attitude as essential to game-playing, as it is the only means by which the player can justify their acceptance of abandoning the most efficient means of achieving the goal of the game (pp. 40-41). Indicated by our use of the term 'game-playing' here, the concepts of play and games are closely related; and it is broadly agreed 'games are experiences we encounter through play' (Bogost, 2016, p. 92). However, our understanding is that the two concepts of play and games remain distinct. Games, as Sicart states '...are a manifestation, a form of and for play, just not the only one' (p. 4). We play a game. But we can engage in play without playing a game. And finally, we can adopt a playful approach to playing a game but we do not have to do so. For example, when playing a game of Scrabble we might decide to only allow nonsense words. But if we choose *not* to do this, we will still be playing.

Of course, there will always be times when we might not want to play at all - maybe we don't like the type of game, or the odds seem unfair, or there are people we dislike, or we simply don't have the time or interest. James Carse added a further definition for play: "whoever must play, cannot play" (1987, p3). In other words, if play is ever forced on someone, it is no longer play.

Our understanding of fun

Ian Bogost notes that although he includes it as one of his six characteristics of play, Huizinga considers the term *fun* to resist all analysis (2016, p.76). Undaunted by Huizinga's conclusion, Bogost engages in an extensive examination of fun in his *Play Anything* and our own understanding of *fun* is heavily influenced by the arguments he puts forward in this text. Bogost argues our use of the word fun in conversation tends to be 'more perfunctory than we realise' (2016. p. 62). Just as 'how are you?' and 'I'm fine' are often customary greetings, rather than parts of a meaningful conversation, phrases such as 'that was fun' or 'have fun!' tend to signal that things have gone well and in accordance with our expectations, or that we hope they do (pp. 62-63). He also acknowledges that in contemporary culture, the concept of fun, or having fun, tends to be associated with experiencing a feeling of pleasure or enjoyment (p. 76). Bogost argues persuasively that fun is neither of these things.

According to Bogost, the paradox of fun is that we tend to think of it as enjoyment, but in practice it actually often feels like the opposite. Many experiences we later come to describe as fun have involved a measure of

discomfort or distress - yet not to the extent that it feels like suffering 'otherwise we'd not call it fun but hardship' (pp. 66-67). He acknowledges that those recognising this paradox have often relied on Csikszentmihalyi's flow theory to explain it. However, for Bogost, this theory is insufficient to explain the paradox of fun in the context of everyday experiences. In much greater detail than we can give credit to here, Bogost determines that 'fun is not a feeling, as it turns out' (p. 79) and in simple terms he states: 'We think fun means enjoyment, and that we want enjoyment above all else. But we're wrong. Fun is the aftermath of deliberately manipulating a familiar situation in a new way' (p. 57). And it is through the exercise of play in these familiar situations that we can discover something new (p. 198).

A number of other game-designers-turned-thinkers (like Bogost) have tried to define fun. Raph Koster notes in his playful book *A Theory of Fun for Game Design* (2004, p.97) that based on his study of players of commercial video games "real fun comes from challenges that are always at the margin of our ability": a notion that fits within Bogost's definition, as it suggests that difficult challenge is one way to have fun. Others like Nicole Lazarro[2] and Marc LeBlanc[3] have created typologies of fun, that break it down into activity types (such as people/fellowship fun - being with friends in a bar, or on a trip; and easy fun - exploration, hobbies, role play etc.). As with our definitions of play and playfulness, there is no one easy definition - but there is a sense that it's probably not just general enjoyment.

Resonating

We conclude this section of the paper by explaining what we mean by the term *resonate*. One definition given by the Oxford English Dictionary is: 'To produce a corresponding or sympathetic response; to evoke some emotion or reaction; to strike a chord' and this aptly describes our meaning. As we have explained in our introduction, we both arrived at this paper from different directions: one of us from many years of studying and practicing play; the other arriving from a different discipline (law) and reading the literature afresh; both of us experienced in research. We set out individually to find the aspects of the theories of play, playfulness, games and fun that struck us as particularly relevant to the research process, based on our experiences of working and researching across disciplines in a university setting. We then compared our notes to see what *resonated* for both of us – surprisingly, finding several areas of common thought. These seven *resonators* are discussed in the following section.

[2] The Four Kinds of Fun: http://www.xeodesign.com/research/
[3] http://algorithmancy.8kindsoffun.com

Seven Resonators

Our first resonator 'the significance of play' is the longest of the seven, and broadest in scope. It is here where we make some observations concerning academic life and the university research environment in general. We include in this discussion views concerning the intrinsic and instrumental values of play. The remaining six resonators are then considered more briefly in turn. These are: play is voluntary, play challenges, the uncertainty of play, accepting failure, community building and working within constraints.

The Significance of Play

One of our stated aims in publishing this paper is to persuade those who are sceptical concerning the importance of play, or perhaps have given very little or no recent thought to it, that 'play matters' (Sicart, 2017) and it matters to research. The phrase 'play matters' is the title of Sicart's text, and his theories of play rest on his assertion that 'play is a mode of being human' (p. 1) and '…a manifestation of humanity; used for expressing and being in the world' (p. 2). This, he writes, is contrary to saying that play matters because of its association with games and gaming, and is an extension of the work of earlier theorists[4] - in part because he does not assume play as a positive activity; 'play can be dangerous' (p. 2). Implicitly Sicart also refutes here the commonplace assumption that play is unimportant or frivolous (or that play does not matter).

Sutton-Smith acknowledges play can be thought of as 'a waste of time, as idleness, as triviality, and as frivolity' and considers these 'rhetorics of frivolity' as the most powerful and long-lasting of all (1997, p. 201). He points to industrialisation and Protestantism as influential in creating the binary distinction between work and play, which when described in opposition to 'serious' work 'is said to be optional, fun, nonserious, and nonproductive' (p. 202). Sutton-Smith credits Huizinga with being the first to counter this view in *Homo Ludens*. Nevertheless, he critiques Huizinga's description of play as being outside of ordinary life; arguing this idealises play and effectively trivialises the broad significance of play in human life (pp. 202-3). By contrast, Roger Caillois appears to align with this aspect of Huizinga's work as he asserts that play is 'essentially a separate occupation, carefully isolated from the rest of life' (1961, p. 6). However, Caillois states this in the context of arguing that 'there is a place for play' (p. 6) not only in terms of physical space, but also as a period in time where the 'confused and intricate laws of ordinary life' are displaced by the rules of the game (p. 7).

If we accept play matters, and that as humans 'we are built to play and built through play' (Brown, 2010, p. 5) then arguably the significance of play in human life obliges us to create places for us to play, both in terms of time and space. This applies even if we have a view of play as non-productive and apparently purposeless.

[4] In terms of his predecessors, Sicart refers to a canon of literature in the Huizingan tradition, consisting of Huizinga, Sutton-Smith, DeKoven, Caillois and Suits (p. 103).

Indeed, we argue this applies because play *is* apparently counter-productive and purposeless. As already discussed, Suits' definition of game-playing positively requires us to abandon the most efficient means of attaining our goal (2014, p. 57) and Brown identifies the apparent purposelessness of play (done for its own sake) as one of its essential properties (2010, p. 17). Similarly De Koven celebrates the purposelessness of play in contrast to the 'display of purposefulness' we otherwise maintain during adulthood (2013, p. 139).

This, we suggest, has application to academic life and to the university research environment, where our 'outputs' are assessed and measured in terms of their quality or impact for REF (Research Excellence Framework) purposes, and our activities regularly monitored and reported to the Office for Students as TRAC (Transparent Approach to Costing) data in order to 'help higher education providers understand the costs of their activities' (Office for Students, 2021). For the purposes of TRAC, academic staff are allocated specific weeks in the year where they are required to record time spent on pre-defined core activities. Concerning the core activity of research, the guidance explains this can be 'blue skies / speculative in nature, but for TRAC, research has an external sponsor or is expected to lead to some research output…' (Office for Students, 2021, at 1.3.2.1). Specifically concerning 'Institution own-funded' research (so research carried out in our normal course of employment), again this can expressly include speculative 'blue skies' research, but only so long as it relates to the preparation of a grant or contract bid, or is expected to lead to a 'research output' such as a conference paper, or publication (Office for Students, 2021, at 1.3.2.3). Research not falling within this definition are necessarily categorised as 'other' research and scholarly activities - which are neither linked to external funding, nor linked to our own institutional funding. Evidently, we are not paid to engage in non-productive activities.

Our contention is that research conducted for its own sake, just because we're interested, or just to see what might happen, is an essential part of academic life. And if this apparently non-productive activity must be categorised as 'other' then 'significant other' is a more fitting description, as the reminiscences of Nobel Prize-winner Richard Feynman (1918-88) attest. Referring to a time when he was feeling burned out and even 'slightly disgusted' with the idea of Physics, Feynman describes how he deliberately adopted a new attitude: 'I'm going to *play* with physics, whenever I want to, without worrying about any importance whatsoever' (p.157). The end result: 'It was effortless. It was easy to play with these things. It was like uncorking a bottle: Everything flowed out effortlessly. I almost tried to resist it! There was no importance to what I was doing, but ultimately there was. The diagrams and the whole business that I got the Nobel Prize for came from that piddling around with the wobbling plate' (p.158).

How might this resonator play out in practice?

Play theorists provide numerous examples of scientific researchers who have deliberately engaged in play, or taken a playful approach to their work, as a precursor to making ground-breaking discoveries. Within his 'rhetoric of fate' Sutton-Smith refers to extensive work published by Mihai Spariosu in 1989, exploring the play theories of 'play-oriented Nobel-prize winning physical sciences' (1997, p. 59). Brown, after meeting and taking 'play-histories' from Nobel-prize winning neuroscientist Roger Guillemin and eminent medical researcher Jonas Salk, concludes '...what they were doing every day in the laboratory was playing' (Brown, 2010, p. 63). Bateson describes Jim Watson and Francis Crick engaging in play with 'a set of coloured balls superficially resembling the toys of pre-school children' as leading to their discovery of the double-helix structure of DNA (Bateson 2014, R12). Bateson also highlights the playful approach of Andre Geim and Konstantin Novoselov, awarded a Nobel prize in 2010 for the discovery of graphene (Bateson, 2014, R13). This is affirmed by public information accompanying their prize: 'Playfulness is one of their hallmarks. With the building blocks they have at their disposal they attempt to create something new, sometimes even by just allowing their brains to meander aimlessly' (The Royal Swedish Academy of Sciences, 2010).

So are we now saying that play is significant because it leads to ground-breaking discoveries? And if so, how does this sit with our earlier claim that research conducted for its own sake, just because we're interested, or just to see what might happen, is an essential part of academic life? Or - to put it another way - are we arguing play is significant because of its *instrumental* value (it helps us to achieve great things we would not otherwise achieve) or because of its *intrinsic* value (it matters because it just matters)?

To answer our own rhetorical question, we refer back to our earlier discussion of play as non-productive and apparently purposeless. The view is supported in the literature, and provides the basis from which we seek to critique the current purpose-driven, productivity-focussed academic life. As we go on to discuss in further detail below, it is also broadly agreed in the literature that 'play is voluntary' (Huizinga, 1955, p. 7), and although he offers his own critique in this respect, Sutton-Smith recognises 'a feature that is almost universally acknowledged to be *the hallmark of play is that it is intrinsically motivated'* (1997, p. 188). We play, or engage in playful activities because we want to, and not because we feel forced or required to do so (De Koven, 2013, p. 27). However, as we have sought to evidence through our Nobel prize-winning examples, play *can also be* instrumental. The significance of play in human life obliges us to create places for us to engage in play or in playful activities in the context of academic research. Such activities - to even count as play or playfulness - need to be intrinsically motivated and apparently non-productive; not linked to any specific production / research output. They *can* also lead to ground-breaking discoveries. But they do not need to do so.

The final thoughts in this section are dedicated to Suits' Grasshopper, who considers this distinction between

intrinsically motivated and instrumental activities in the context of determining which would be included in a Utopian game-playing existence, 'where people are engaged only in those activities which they value intrinsically' (2014, p.182). Having initially concluded that all instrumental activities could have no place in this ideal world, the Grasshopper listens to the views of his disciple Skepticus who states:

'You know, Grasshopper, as well as I do, that people who are seriously engaged in the pursuit of knowledge value that pursuit at least as much as they do the knowledge which is the goal. Indeed, it is commonplace that once a scientist or philosopher after great effort solves a major problem he [or she] is very let down, and far from rejoicing in the possession of his [or her] solution or discovery, he [or she] cannot wait to be engaged once more in the quest' (p. 189).

From here, the Grasshopper concedes that indeed 'any objectively instrumental activity whatever' will be intrinsically valuable if it is considered to be so by those undertaking it. Crucially, however, 'it would have to be the case that such activity *could* be undertaken, but it would also have to be the case that no such activity *need* be undertaken (p. 191). At first sight, this overturns our earlier assertion that to even count as play or playfulness, activities need to be intrinsically motivated and apparently non-productive. However, we suggest the Grasshopper's conclusions confirm the primacy of intrinsic motivation in determining how any particular activity is categorised. Applying this in the context of academic life and the university research environment, a period of study leave granted to an academic to pursue an area of interest they are passionate about is intrinsically valuable. A period of study leave granted on condition the academic produces pre-identified outputs and submits a specific grant application within a specified time period is not.

Play is voluntary

In the last section we considered the voluntary aspect of play from the point of view of the researcher. In this section we apply this aspect of play to those being researched. This struck us as one of the most obvious areas of relevance. Of course, whenever research involves human participants, University ethics committees will need to provide authorisation before the research takes place, and research funding bodies will also require evidence that the planned research is to be conducted in line with its ethical standards. Commonly this requires researchers to provide full information to participants concerning the nature of the research, and to obtain their informed, written consent to taking part. This includes an understanding that the participant can withdraw their consent to taking part at any time, for any and for no reason.

When we envision this aspect of research through a lens of play in the context of our own research, there are two outcomes: (1) a focus on ongoing assent (in addition to consent) to participate in the research, and (2) frustration with the power of gatekeepers. As McGonigal emphasises, voluntary participation or 'the freedom to enter or leave a game at will' ensures that players experience even potentially stressful or challenging work

as 'safe and pleasurable activity' (2012, p. 21). Each of our research activities commences with a reminder that people are invited to participate only if they want to do so today, and that they can leave at any time. This has worked well insofar as it has led to one participant leaving a session because they wanted to finish writing a letter to a French penpal, one turning up only to the last of three sessions because she knew it would be fine to do so, and one leaving early just because they wanted to. While this is disruptive to our data-gathering activities, this freedom for our participants to come and go as they please must take priority; 'one plays only if and when one wishes to' (Caillois, 1961, p. 7).

Because our research participants are children, we are required to obtain informed written consent from their parent or carer in order for them to take part. Whereas we accept just the parent or carer's consent for children aged under 5 years, we ask both parents and children aged 5 years and over to provide their informed written consent. Then, in light of our concern for voluntary participation, we establish every child's ongoing assent at the commencement of each research activity. As described above, this has worked well. The much more difficult situation occurs when we have children who want to take part in our activities, but are prohibited from doing so due to lack of parental consent. Ethical guidelines lack specific guidance on this issue and, if anything, lean towards requiring parent or carer consent.[5] Viewed through the lens of play (and perhaps especially where research activities involve elements of play) we suggest there are circumstances where the child's wish to participate should take priority.

How might this resonator play out in practice?

> **In the AHRC-funded project Transforming Thresholds, researchers and practitioners were brought together in creative 'charettes', given random partners, random scenarios, random (real) locations, and a set of playful tools. One team - comprising an academic, a museum representative and a holographer - developed new signage for Chatsworth House in Derbyshire. The signs were playful in different ways (some revealed holographic images when walking past them, others traced rooflines on the buildings beyond if one was to stoop down a little), inviting visitors to engage with them but not forcing them (Kristiansen & Moseley, 2020, pp. 183-185).**

Play challenges

We use the term 'play challenges' to describe two aspects of play which resonate with us in a research context. Firstly, play often deliberately involves elements of challenge; especially in the context of games. Suits' definition of playing a game as 'the voluntary attempt to overcome unnecessary obstacles' (2014, p. 43) summarises this very well. Noting the millions of people globally who regularly spend hours playing

[5] See for example the British Educational Research Association, *Ethical Guidelines for Educational Research*, fourth edition (2018), paras 23-25.

computer or video games, McGonigal suggests this is not because they are rejecting reality. Rather, she suggests, it is because 'computer and video games are fulfilling *genuine human needs* that the real world is currently unable to satisfy' (p. 4). So among these gamers, she suggests, 'are the nine-to-fivers who come home and apply all of the smarts and talents that are underutilized at work to plan and coordinate complex raids and quests in massively multiplayer online games' (2012, p. 2). McGonigal's response to this phenomenon is to utilise such games as platforms for social change. For our purposes, we suggest the deliberate addition of unnecessary obstacles into mundane activities, or an agreement to abandon the most efficient means of achieving a goal in favour of less efficient means, could add an element of challenge that is currently lacking.

At this point, academics reading this section of the paper might remonstrate that actually many of their frustrations stem from having to negotiate apparently unnecessary obstacles and least efficient processes which are inherent to institutional cultures. We consider this further in our final section **'**Working within constraints' where we consider in particular the work of Ian Bogost. For present purposes, we remind readers that the obstacles we refer to here are those deliberately placed to enhance the feeling of challenge, to be negotiated only where the player voluntarily opts to do so. Some people find Francesco Cirillo's 'Pomodoro' technique (Cirillo, 2018) useful for completing 'normal' work: where short, enforced time constraints are applied regardless of how the work is flowing.

How might this resonator play out in practice?

> **An example we can provide here is our own creation of a digital game as a research tool in an earlier research project, Law in Children's Lives, funded by the ESRC from 2014-2016. Here, game mechanics (e.g. randomising the order of play, unlocking aspects of the game at each level) were used as successful means of encouraging participants to complete a vignette-based survey gathering quantitative and qualitative data. The activity of filling out a survey can be transformed when repurposed in this way.**

The second aspect of the term 'play challenges' relates to the positively disruptive potential of play. Shira Chess maintains that 'play is powerful in both protests and scholarly activities because it helps to reform the world around us as well as rethink activities we have previously ascribed to mundanity' (2020, p. 69). Aspects of the work of Sutton-Smith and Sicart provide support for this view. Drawing on his and others' research in the field of children's folklore (Sutton-Smith et al., 1995), Sutton-Smith describes how children have been observed to engage in play as a form of covert protest against constraints imposed by adult custodians (Sutton-Smith, 1997, p. 114-125). As Sicart explains, play is appropriative, (2017, p. 3); it takes over the context in which it takes place and 'disrupts the normal state of affairs' (p. 15). Thus through play children can appropriate a space of their own, within a wider context otherwise governed by adults. Adults, too, can adopt this approach when faced with imposition from above: Woodcock and Johnson (2017, p. 9) note how call centre agents –

when faced with targets and quotas – play at introducing spurious words into their calls. Mary Flanagan (2009) sees this playfully subversive behaviour – particularly amongst artists - as 'critical play'. Applying this to research, we suggest the Nobel-prize winners cited earlier provide examples of this. By engaging in play in a context not traditionally considered appropriate for play, researchers have effectively disrupted their environments and challenged their previously unchallenged assumptions, allowing them to see something new.

The Uncertainty of Play

Related to the previous section but worthy of its own 'resonator' status is the uncertainty of play. As Brown explains, 'another hallmark of play is its improvisation potential' (2010, p. 18). Approaching research through the lens of play requires from us a willingness to include 'seemingly irrelevant elements' into our work, and to respond both positively and creatively to what emerges (p. 18). Necessarily such an approach requires us to deliberately avoid following any pre-set patterns of thinking and practice. However, it does not require us to entirely abandon the rules or norms of our disciplines. As Huizinga famously stated 'All play has its rules' (1955, p. 11) and to engage meaningfully in play we must agree to abide by them or change them by agreement (De Koven, 2013, p. 45).[6]

The uncertainty of play we refer to here relates to the *outcome* of a research activity. De Koven maintains uncertainty as to outcome is a key component of playing with purpose (2013, p. 138) and, drawing on this, game designers Salen and Zimmerman identify uncertainty as a central feature in every game. As they explain, this does not necessarily require the inclusion of elements of chance or randomness, as the word may suggest. Rather; 'it is crucial that game players don't know exactly how it will play out. Think about it: if you knew who was going to win a game before it started, would you even bother to play?' (Salen & Zimmerman, 2004, p. 174). Greg Cosikyan suggests that "games require uncertainty to hold our interest" (2004, p. 2) and identifies different sources of uncertainty that occur when playing a game – including *performative uncertainty* (p. 71) and *narrative anticipation* (p. 94). It's easy to see these two sources of uncertainty occurring naturally in research activity, but we also suggest that embracing uncertainty in a research context requires us to deliberately frame our activities in such a way as to make the outcomes unpredictable, and to be open to working iteratively and creatively in pursuit of our findings.

[6] Caillois maintains this applies even to role play, where 'the sentiment of *as if* performs the same as do rules.' (p. 8)

How might this resonator play out in practice?

Rapid Brainstorming is a technique we use regularly when working in interdisciplinary research, where researchers from different disciplines come together for the first time, or want to respond to a particular call. The idea is to open up space for random/creative thoughts, in order to look for connections between the researchers. Small mixed groups are given three minutes in which they rapidly shout out project ideas. If two other members of the group identify with the project, it's written down quickly, then the next project idea is shouted out. In this way, no-one can predict what emerges from the groups in advance, and often surprising and unexpected outcomes occur.

Accepting failure

A notable theme in the literature is the need to accept loss or failure. As De Koven states: 'What we call the 'will to win' functions best only when there is a complimentary willingness to accept loss. From that position…we can focus on winning, we can call forth new strengths - not because we are driven to win but because we know we don't have to' (2013, p. 134). Taking this approach can equip us with courage to design those 'high-risk, high-reward' research projects which research funders often esteem. And when we undertake these research projects, acceptance of failure requires us to commit to actively reflecting and learning throughout the project, to dedicate ourselves to iterative improvement and a willingness to report even unwelcome outcomes fully.

Drawing on McGonigal's work in the field of digital games, we suggest acceptance of failure can also be a key to maintaining our motivation as researchers. Noting that nobody likes to fail, McGonigal asks 'So how is it that gamers can spend 80 percent of the time failing, and still love what they're doing?' (2012, p. 64). In answer to this question, McGonigal reports the findings of a research study carried out on a group of participants playing video game *Super Monkey Ball 2*. The game is based on bowling; where success is a 'strike' and failure is a ball that rolls into the gutter. Researchers were unsurprised to record positive emotional responses from players who had gained high scores or attained new personal levels. However, they were surprised to find players exhibiting positive emotional responses when they made a mistake and landed their ball in the gutter. McGonigal observes: 'When we fail in real life, we are typically disappointed, not energized. We experience diminished interest and motivation. And if we fail again and again, we get more stressed, not less. But in Super Monkey Ball 2, failure seemed to be more emotionally rewarding than success' (p. 66).

After investigating this phenomenon further, researchers concluded that within the context of the game, failure was experienced by the players as something to be proud of for a combination of reasons. Firstly, failure was made immediately enjoyable by the animation sequence in the game. When the player made a mistake, 'the monkey went whirling and wailing over the edge and off into space...it made players laugh' (p. 66). Second, players experienced the mode of failure as a demonstration of their agency in the game. McGonigal reports 'the

combination of positive feeling and a stronger sense of agency made the players eager to try again' (p. 66) and she suggests if we – like gamers – can fail 'in the right way' then we can be motivated to be optimistic and start over again. Indeed, the gaming world has a word for moving through periods of repeated, extreme failure, and then finally succeeding: a 'feiro' moment.

How might this resonator play out in practice?

We suggest the area of academic life where this aspect of play has the most obvious and immediate application is to the process of peer review. Whereas it may not (yet) be possible to communicate our views on each other's work in the form of a whirling animation, it is surely possible to create an environment where an author's failure to have a paper accepted for publication is communicated to them yet as something to be proud of; and, going further, by recognising and publishing the (iterative) failure involved in getting a paper to publication eventually: celebrating the journey that leads to the 'feiro' moment of acceptance.

Community building

The potential for play to build community or to promote 'the formation of social groupings' was recognised by Huizinga (1955, p. 13). This aspect of play links to the appropriative nature of play, discussed earlier above under 'play challenges'. There we presented the potentially disruptive role of play as a means of taking possession of a space and repurposing it - either openly or covertly - for our own ends. In an analogous way, Huizinga maintains the social groupings formed through play 'tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means' (p. 13). Huizinga's description here is neutral in tone; he neither celebrates nor criticises this aspect of play - he merely observes it exists. Sicart challenges Huizinga's neutrality, both in general and relative to this point. He warns 'collective play is a balancing act of egos and interests, of purposes and intentions. Play is always on the verge of destruction, of itself and its players' (2017, p. 3). He notes too that through play we can appropriate 'events, structures and institutions to mock them and trivialize them' (p. 3). Likewise, Sutton-Smith acknowledges that as well as being appropriative, children's play can be cruel (1997, p. 112).

Clearly then this community building aspect of play has potentially both positive and negative effects. For De Koven, a commitment to search for and engage in 'the well-played game' is key (2013, p. 9). As discussed earlier, De Koven argues the willingness to accept failure or losing is an essential aspect of play. Certainly there is no problem in *wanting* to win; 'you're supposed to want to win' (p. 77). Problems in maintaining community arise, however, when the pursuit of the well-played game is replaced by the sole desire to win. The game is no longer considered a shared experience, and our evaluation of a game depends only whether we won; 'If you won, it was a good game' (p. 78). Interestingly, De Koven also suggests that community can be lost

when we delegate the application of the rules of the game to a 'fair witness' - so an umpire or referee (p. 31). This first allows but then perpetuates to an unhealthy degree a focus on the game, rather than on the community. De Koven maintains that in order to maintain the play community as well as the game, 'we have to give up a little of our commitment to the game. We have to restore our commitment to the community as well' (p. 33). In de Koven's play sessions – one of which the authors attended - he proposes games for the group to play, but then asks if everyone is willing to play, and if the rules work for everyone. In running the games, he often asks "do we want to continue?" or "do we want to change something". Participants quickly move from individual players to a play community that has the power to play in a way that it wants to.

How might this resonator play out in practice?

LEGO Serious Play ® (LSP) may look from the outside like an individual building activity, but its ethos is based on communities that play together. One of its strengths is to flatten the room - so that everyone is equal, everyone speaks and listens to each other, and when individual models come together into shared models or landscapes, respectful communities negotiate and form around the models. We've used LSP to: discover shared research strengths in a team; to build data models; and to play out different research strategies to see if they are more likely to fail or succeed.

Working within constraints

The last of our seven resonators will perhaps be the most surprising for those unfamiliar with the literature. When we think of play or playfulness, we tend to think of freedom from regulation, and escape from the mundanity of everyday life. Indeed in *Homo Ludens*, Huizinga does describe one of the characteristics of play as standing 'outside of ordinary life' (1955, p. 13). However, as we have already discussed, Sutton-Smith critiques this view; attributing it to the influences of industrialisation and Protestantism. Sicart too rejects this aspect of Huizinga's work; 'I am not going to oppose play to reality, to work, to ritual, to sports because it exists in all of them. It is a way of being in the world' (2017, p. 3). In accordance with this view, the focus of this paper has been on the ordinary practice and process of research, and we propose no escape from this through play. So we don't change or play apart from these constrains, we play within them.

Indeed, some *constraints* are already common in all research activity: word lengths, budget categories and limits, presentation time limits at conferences, and so on. We suggest that as we are already used to working within these existing limits, it is a natural step to impose other, self-imposed, constraints as a way to introduce play and open up new thinking. Techniques such as rapid brainstorming (writing down or shouting out as many new ideas as you can in three minutes) or deliberately looking at problems or data from an opposite angle are some simple suggestions.

As Bogost notes (2016, p. 99), despite his description of play as being separate and free from ordinary life, even Huizinga maintains that play 'is orderly and creates order' (1955, p. 13). And again citing Huizinga, we have already emphasised the view supported in the literature that 'all play has its rules' (p. 11). In our introduction to this paper we adopt Suits' definition of a game as (stated briefly) a 'voluntary attempt to overcome unnecessary obstacles (2014, p. 43). And as we have already discussed, much of the challenge of play derives from our willingness to overcome these obstacles through the inefficient means imposed by the rules. Working within constraints is then an inherent aspect of play.

In determining how this aspect of play might resonate in a research context, we draw heavily on Bogost's *Play Anything* (2016). As explained in the introduction to this paper, Bogost argues persuasively that fun is not what we think it is. It is not a feeling. It is not enjoyment. Rather, it is 'the aftermath of deliberately manipulating a familiar situation in a new way' (p. 57). Just as play does not take place outside of ordinary life, Bogost argues 'fun isn't a distraction or an escape from the world, but an ever deeper and more committed engagement with it' (p. 81). Drawing on the work of Marshall McLuhan and Martin Heidigger, he challenges us to focus intently on the scenes of our everyday lives and 'flip' our attention between figure (that which most obviously attracts our attention) and ground (that which does not normally do so) (pp. 72-74, 79-81). He suggests this deliberate act makes it possible for us 'to see the hidden potential in ordinary things so that we can put them to new uses.' (p. 72). Whilst this all sounds quite philosophical, Bogost provides some simple, practical ideas for transforming these ordinary things. We credit the idea t wrt prt f ths ppr wtht sng vwls to his discussion of lipograms (p. 187).

How might this resonator play out in practice?

You might already have used this resonator in your own work: PechaKucha (twenty slides each displayed for twenty seconds on auto-advance)[7] represents a playful, alternative approach to research dissemination that uses tight constraints to encourage greater creativity, visuality and energy in the presentation.

[7] See further https://www.pechakucha.com/ (accessed 3 June 2021)

Conclusion

We are two researchers who have approached the play literature from different directions and points of expertise. We found aspects and concepts of play that resonated with aspects of research: in fact we saw them as resonators both between ourselves, and for opening up approaches to research. We found that play could:

- Open up new ways of thinking or avenues of research
- Contribute to supportive research communities
- Teach us to value failure and see it as a learning process
- Encourage us to embrace uncertainty
- Help us to disrupt bureaucratic or limiting systems and processes
- Value time spent on 'non-productive' research

Recognising the subjective and interpretive nature of our work, we acknowledge that our ideas require further scrutiny, both conceptually and in application. With this in mind, we conclude our paper by inviting readers of this paper to critically examine our claims, to test them out in the contexts of their own academic lives, research projects and research environments, and to formulate your own responses.

Whether you are among the players, the curious or the sceptics, your views and perspectives are valuable to us. So please do contact us if you are interested in discussing these ideas further. Instinctively, our 'output-focused' minds envisage opportunities for a multi-authored follow-up paper, providing case study examples of play in research; or perhaps a special issue focused on play in research. But much more importantly, we wonder if it might be possible to begin to build a community of players in research… a research-play community? … a community of resplaychers? And for those of us interested in 'deliberately manipulating a familiar situation in a new way' (Bogost, p. 57), who knows? It might be fun.

References

Bateson, G. (1955). A theory of play and fantasy. *Psychiatric Research Reports*, 2, 39-51.

Bateson, P. (2014). Playfulness and creativity. *Current Biology, 25* (1). R12-16. https://doi.org/10.1016/j.cub.2014.09.009

Bogost, I. (2016). *Play anything*. Basic Books.

Brown, S. (2010). *Play: How it shapes the brain, opens the imagination, and invigorates the soul* (Illustrated ed.) Penguin Putnam.

Caillois, R. (1961). *Man, play and games*. University of Illinois Press.

Carse, J. (1987). *Finite and infinite games*. New York.

Chess, S. (2020). *Play like a feminist*. MIT Press.

Cirillo, F. (2018). *The pomodoro technique*. Virgin Books.

De Koven, B. (2013). *The well-played game: A player's philosophy* (Revised ed.) The MIT Press.

De Jong, M. (2015). *The paradox of playfulness redefining its ambiguity*. http://www.denkontwerp.nl/wp-content/uploads/2017/05/ParadoxOfPlayfulness_MMdeJong_BookVersion.pdf

Feynman, R. P., Hutchings, E. & Leighton, R. (1985). *'Surely you're joking, Mr. Feynman!': Adventures of a curious character.* W. W. Norton.

Flanagan, M. (2009). *Critical play: Radical game design*. MIT Press.

Huizinga, J. (1955). *Homo ludens. A study of the play element in culture.* The Beacon Press.

Koster, R. (2004). *A theory of fun for game design*. O'Reilly.

Kristiansen, E., & Moseley, A. (2020). "Games in the lobby: A playful approach. In R. Parry, R. Page & A. Moseley (Eds.) *Museum thresholds: The design and media of arrival (pp. 175-188)*. New York.

McGonigal, J. (2012). *Reality is broken. Why games make us better and how they can change the world.* Vintage Books.

Office for Students TRAC Data. Retrieved November 3, 2021 from https://www.officeforstudents.org.uk/data-and-analysis/trac-data/

The Royal Swedish Academy of Sciences. (2010). *Graphene – the perfect atomic lattice.* The Nobel Prize. https://www.nobelprize.org/prizes/physics/2010/illustrated-information/

Salen, K. & Zimmerman, E. (2004). *Rules of play: Game design fundamentals*. MIT Press.

Sicart, M. (2017). *Play matters*. MIT Press.

Spariosu, M. (1989). *Dionysus reborn: Play and the aesthetic dimension in modern philosophical and scientific.* Cornell University Press.

Suits, B. (2014). *The grasshopper: Games, life and utopia* (3rd ed.). Roadview Press.

Sutton-Smith, B. (1997). *The ambiguity of play*. Harvard University Press.

Sutton-Smith, B., Mechling, J., Johnson, T., & McMahon, F. (Eds). (1995). *Children's folklore: A sourcebook*. Routledge.

Woodcock, J., & Johnson, M.R. (2017) Gamification: What it is, and how to fight it". *The Sociological Review*, *66*(3), 542-558. https://doi.org/10.1177/0038026117728620