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# **Bicycle Kicks and Camp Sites:**

## **Towards a Phenomenological Theory of Game Feel with Special Attention Towards ‘Rhythm’**

Bo Kampmann Walther, Lasse Juel Larsen

### **ABSTRACT**

The goal of the article is to present a theory of game feel inspired by phenomenology. Martin Heidegger’s tool-analysis and concept of time (*Sorge*), as well as Maurice Merleau-Ponty’s Body-Subject including the related phenomena intentional arc, maximal grip, and flow of coping are of special interest. The aim is to move beyond the descriptive game design take on game feel by inserting the body in a first-person perspective highlighting a sensuous approach with emphasis on rhythm and controller. We offer a methodological framework for analyzing game feel consisting on three levels: ‘Dance’, ‘Learn’, and ‘Inhabit’. Finally, we arrive at an understanding of game feel explaining reasons for player sensitivity toward game feel and clues to why players care so deeply about it.

### **Keywords**

Game feel, analysis, theory, game design, computer game, phenomenology.

## **1. Introduction**

This article sets out to explore and possibly explain the importance of ‘game feel’. Why do players care about game feel? We address this question from an analytical, play-centric perspective (Fullerton 2008, Schell 2008) that rests on the philosophy of phenomenology inspired by Martin Heidegger and Maurice Merleau-Ponty. We oppose the ‘traditional’ game-centric, ludological research tradition (Golding 2013) that focuses on game ontology understood through a distanced, totalizing, and controlling perspective outlining patterns, schematics, and configurations. Instead, theories of player-centrism insert the body in a close-up, first-person viewpoint addressing player experiences as malleable, situational, and navigational moment-to-moment perceptions and expressions.

Within this perspective rhythmical patterns and corporeal manoeuvrings with controllers take center stage.

Game feel is a complex concept tied to the responsiveness of the game system as well as to the bodily and sensuous cognitions and perceptions of the player (Keogh 2018b, Swink 2009). However, sorting out the categorical principles of subjective experience and knowledge is *not* the same as doing subjective philosophy. On the contrary, it is a cry out for scholarly objectivity. This was one of Edmund Husserl's (Husserl 1973) prime lessons later adopted by Martin Heidegger and Maurice Merleau-Ponty. In fact, while the influential hermeneutic existentialism of Heidegger consists of rather large chunks of descriptive first-person encounters with the world (a working model inherited from Husserl), the inclusion of time (in Heidegger's *Being and Time* 2010) precisely provided his thoughts and arguments with a rigorous, Kantian-like methodology.

The predominantly design-centric approaches to game feel seem to suggest that if the game is well crafted, it will produce just the right amount of invisibility, immediacy (Bolter and Grusin 2000) seamlessness, and flow (Csikszentmihalyi 1990). This in turn will result in elaborate, fun (Koster 2014), and engaging play (Sicart 2014, Sicart 2011, Huizinga 2014, Caillois 2001, Hopson 2001, Swift 2009), and immersion (Murray 1997, Calleja 2007). However, we argue in this article that game feel needs to be understood and read as a composite, player-centric phenomenon that is neither reducible to hardware, software, or the transmitter of player intensions while playing a game. Rather, game feel results from the emergence of a concentrated intersection of all these elements that together form the well-balanced and energetic involvement (Calleja 2011) with a game.

In investigating this we will arrive at what we consider a prolegomenon to a different and more philosophically reflective theory of the interconnected (though analytically distinguishable) layers of game feel.

The following is divided into five parts. First, we outline the main ideas of current research, from game centric 'fixing' slants to charming and esoteric player-centric accounts on trying to get the hang of buttons on a controller as a sensuous and rhythmic endeavour (Costello 2018). Second, we look into Heidegger's *Zeug* analysis, in *Being and Time*, in order to generate a phenomenological vocabulary of a common yet highly multifaceted relation in playing computer games. Usually game tools – basically the mechanics (Sicart 2008, Burgun 2015) and interfaces (Jørgensen 2013) of the game – work and thus become inseparable from

the task at hand. The player does not pay attention to these tools. And then there are opposite situations where, all of a sudden, the same tools become (all too) visible. We claim that the relation between tools-as-absent and tools-as-present is of critical importance to the understanding of game feel and its rhythmic undercurrents. Next, we turn our attention to the human body, Merleau-Ponty's 'Body-Subject', an interface of perception and pre-rational understanding as well as a very tangible vehicle for enacting the kind of competences dictated by video games. Merleau-Ponty provides a possible explanation to our sensitivity towards game feel and, most importantly, why we never seize to care about game feel. Fourth, we scrutinize three in-depth examples of how trains of 'rhythm' inform both play and game feel, ranging from geeky micro-tasks of soccer playing in *FIFA 19* (EA Sports), running through camp sites and choke points in *Counter-Strike: Global Offensive* (Valve Corp.), and, finally, to what we call the 'double inscription' of in-situ pre-conscious actions. Thus, game feel can be located in at least three levels when playing a game: a micro, a meso, and a macro level. The first we label 'Dance' since it is about the rhythmical sequencing of temporality. The second one is 'Learn' and relates to the gradual mastery of navigating in space producing a beat or a certain metrical tempo through sites full of conflicts and enemies. Finally, the third level, 'Inhabit', is really a meta-level evolving around how the rhythm of the game is inscribed in the player and how the player injects rhythm into the game. 'Inhabit' highlights how we 'live' or perhaps 'dwell' in computer game play. The case section is followed by a brief discussion of findings and thoughts for further research.

## **2. Research tradition**

What is 'game feel'? In recent years the term has been widely used although, we claim, it is still poorly understood. Yet there seems to be agreement on the underpinnings of the concept of game feel as referring to both player perception and experience of game response during gameplay (Author 2 and Author 1 2019). Positioning game feel in the interstices between player perception and experience of a game's (level and accuracy of) responsiveness emphasises interactivity as a possible point of entry. Undoubtedly, the coinage 'game feel' both springs from and is an attempt to describe, tackle and grasp the player's experience inherent in the dynamics of interacting with games during play. It should be noted that, in this context, interaction is understood as a responsive activity or dialogue between two or more agents (Latour 2005). Chris Crawford

(2003) has defined interactivity as “a cyclic process in which two active agents alternately (and metaphorically) listen, think, and speak” (p. 76).

Swink (2009) echoes this take on interactivity as “the exchange of information and action between at least two participants” (p. 2). Still, it does not bring us closer to what game feel refers to beyond the vague notion pointing to players’ perception and practice in the trade of information between player and game during the activity of playing computer games. This aligns well with Swink’s stance that game designers do not have a well-established collective understanding of what game feel means or which dimensions of interactivity it refers to. Swink establishes this point when he claims that there are just as many takes on game feel as there are game designers, and each designer highlights different aspects of game feel. Some say games are “floaty” or “tight”; others highlight intuitive controls affecting players’ ability to interact with the game state (Juul 2005). We assume they refer to *game mechanics* which we understand as “methods invoked by agents for interacting with the game world” (Sicart 2008 para. 1) in relation to rules and challenges to reach a desired end state. Mechanics can also be understood as divided between action and purpose: Core actions specify what players can do within the game space, and core purposes serve as the reason for performing the core action (Burgun 2015). The core action in the successful game series *Super Mario Bros.* (Nintendo 1985-) is Mario’s jump acted out with the purpose of traversing the game’s obstacles.

A group of game designers see game feel as associated with naturalness or realistic presentation (Dahl and Kraus 2015, Normoyle and Jörg 2014); of what exactly is unclear, since most games are fictional representations (Juul 2005). Still, the argument circles around how to make the player feel as if (Author 2 2015) she is present in the game or transported to another reality. The notion of being ‘present’ or ‘transported’ to another reality is tightly connected with the creation of immersion (Murray 1997, Calleja 2007, 2011), here understood metaphorically as being surrounded by another reality through an involvement in six dimensions: kinesthetics, spatial, shared, narrative, affective and ludic dimensions read through two aspects: micro and macro involvement, i.e. in-game and out-of-game engagement (Calleja 2011, Author 2 2019). Yet other designers connote game feel to games being easy to learn but difficult to master (Fullerton 2008, Schell 2008), or finding the perfect balance between skill and difficulty, which is a perspective closely similar to Csikszentmihalyi’s (1990) flow theory in which the optimal state of happiness is achieved when skills are calibrated with the level of

difficulty of the presented challenges or to the wider ecology around games (Crawford, Muriel, and Conway 2018). The following two subsections address game feel respectively from a descriptive game-centric perspective and through a player-centric lens focusing on the in-situ experience of game feel.

### **2.1. Approaching a game feel description**

Swink (2009) is one of the only game designers that have presented a comprehensive definition of game feel. He defines game feel as “real-time control of virtual objects in a simulated space, with interactions emphasized by polish” (p. 6).

The first part concerns ‘real-time control of virtual objects’, which simultaneously focuses on a specific form of interaction as well as point to players’ degree of control of objects in the game space. These two can be scaled ranging from turn-based to fluent game scenarios with diverging dynamics between player input and machine output. The following three examples may clarify the point: The interaction is turn-based in Sid Meier’s acclaimed game series *Civilization* (1991-), i.e. the game pauses after player input and machine output. The player can make virtual objects move from point A to B, but there is no direct control of the virtual objects’ movement *between* point A and B. That is different in standard real-time strategy games, such as Blizzard’s *StarCraft*-series (1998-). In *StarCraft* players move objects from not only point A to B but between them as well. During the path of the virtual objects’ transition across the terrain players leave navigational manoeuvring to the game’s artificial intelligence (AI). Still, players have the possibility to interfere and correct the path if they find the AI have chosen poorly. In first-person 3D-shooters such as *Fortnite* (2017) or *Counter-Strike* (2000-) players have continuous and unswerving control of navigation, speed, aim, covering, and shooting of the main virtual object, the avatar. Player interaction is merged with full navigational command of the virtual objects. In a standard first-person 3D-shooter there is a fast recurrent and tight loop between player input and machine output. Here we find seamless expression of real-time control. It is, Swink writes, similar to “driving a car” (Swink, 2009 p. 3).

The second part of Swink’s definition addresses simulated space as the spatial frame of reference dealing with depth, height and width, i.e. how far away are the virtual objects in the game space, how low or tall are the objects, and how slim or wide are they. A simulated space provides proportional context to virtual objects. In first-person 3D-shooters

a simulated space needs not only establish its (proper) proportions; it must also facilitate the player's grasp of velocity, jump height, and which objects to crouch behind. In other words, simulated space is concerned with design of space (Aarseth 2000) and the architectural layout of levels (Totten 2014) as a reference of understanding virtual objects in relation to the entirety of a game's space and its environmental design.

Next, Swink focuses on how such interactions can be accentuated to ensure communication between player actions and game response, and this is the third part of his definition. The phrase 'interactions emphasized by polish' signals the effects that ensure such communication to facilitate seamless player understanding. If designers want to have a dusty world, they need to emulate particles as response to players' movement through the terrain. Particles around the players' feet when they jump down from a crate or a similar object communicate impact and gravity. Scaling collisions can be done with screen shake, i.e. it communicates greater impact thus threatening to break the game's boundary. Polish, though, does not affect the underlying simulation. Swink's conception of polish is equivalent to what other game designers call 'juice' (Jonasson and Purhu 2012, Niemann 2013): a composite of communicative effects that warrant maximum game output as response to minimum player input.

Swink pins out a range of polish metrics all manifesting the game's properties, or, as he writes, polish includes "animation, visual effects, sound effects, cinematic effects and tactile effects" (Swink 2009, p. 155). Animation can be character movements or the shifting shape of a bouncing ball; visual effects include particles or trails or similar effects to transfer interaction and collision between virtual objects; sound effects can be close to anything such as squash-like sounds, deep or high pitched sounds to communicate a water melon splatting, a distant engine or a leaky container close by; cinematic effects are mostly associated with screen shake, as mentioned above, that communicate high impact collisions since screen shake makes the entire screen shake similar to shaky-cam in action movies (Stork 2013); while, finally, tactile effects are reserved for haptic feedback in game controllers (Blomberg 2018).

## **2.2. Outlining game feel experiences**

Swink's formal definition of game feel is descriptively instructive, presenting designers as well as academics with a way to approach game feel from a game-centric perspective. What is left are players' experience, or to be more precise players' perception and response in relation to designers' design choices when designing game feel. According to Swink the

design of game feel must pay attention to five different player experiences.

The first of these centres on players' aesthetic sensation of control, which is an attempt to capture the proficiency of the dialogue between player input and machine output. Unfortunately, Swink does not dig deeper into the notion of control, which game designer Rob Pardo (2014) in a talk at MIT outlines as a key component in Blizzard's approach to game design. "Control is king", Pardo says followed by a story from the development of *Warcraft 3* (2002). In that game Pardo felt the mouse was "flooty" and "laggy". His software engineers insisted nothing was wrong. They discussed and investigated the issue and found that responsiveness was "off" by two frames. Sensitivity to two frames of mouse lag places control at the very core of the interactive experience in relation to game feel.

The second mode of experience, *pace* Swink, has to do with learning and mastering games. Players enjoy progression, accomplishments, and reward. But what is progression? Is it as a structural dynamic of learning through scaffolded challenges (author 2 2019) with rising complexity? Or is it a wavering back and forth between players' trial and error, fail and success in the game space? It is also unclear whether accomplishments should be taken as embedded game goals (Burgun 2013, Crawford 1982) or player generated aspirations (Sicart 2008). The same goes for rewards. Should they be conceptualized as the outcome of player actions through intricate and chained relationships between fixed and variable ratios and intervals as outlined by Hopson (2001)? Or are they associated with the main goal of the game (Author 2 2012)?

Thirdly, Swink ties game feel to extensions of our senses as in getting a feel of the size of virtual objects, or hitboxes. It is a matter of how close to or far away from danger the player can steer the virtual object without being hit or 'fall off' the virtual world. Swink sees similarities with the tacit body knowledge one develops when driving one's car. How far away am I from the pedestrians crossing, other cars, or the rear back of the garage? Taken together these modes of perceptions work as "an extension of our senses" (Swink 2009, p. 11).

The fourth experience is a 'proxy', a mix-up of agency, so that when players engage in games they do not say 'my avatar died', 'my spaceship exploded', or 'my car drove off the cliff'. Instead they say, 'I died', 'I exploded', and 'I fell off the road'. Extension of identity includes the exchange of virtual objects with the players' experience of playing (Isbister 2017).



Finally, Swink associates game feel with the experience of interacting with a unique physical reality. It is vital that players *feel* the physics of the game. Consider the player's sensation when witnessing Mario slide when he is turned, in *Super Mario Bros.* (1985-); or the avatar's forceful jump in *Fortnite* (2017). This attest to the coolness of adding balloons to jump higher and longer and possibly even fly in *Fortnite*; or to fire the BFG (Big Fucking Gun) in the original *Doom* (1993). Interaction with the game's physical reality through game mechanics is all about the interplay between player and objects (and among objects themselves) within the game space. The unique interactivity in the classic arcade game *Asteroids* (1979) rests on a slowed elastic and 'skating' feel as opposed to *Clash Royale* (2016) where interactions are predominantly rendered by the AI.

It is worth noting that Swink's approach implicitly frames itself along a subject-object axis echoing a Cartesian philosophy of knowledge-perception versus thing-essence. The player and the game are securely placed on each side of the fence; one perceiving and interacting, the other controlling and responding. The following sections see it otherwise. Here game feel is rather the – at times chaotic – conglomerate of control, response, controller, rhythm and movement including hands, body and perception.

### **2.3 Rhythm and dance – toward the game as an instrument**

Embedded between the aesthetics of content displayed on the screen and player perception is the often-overlooked controller and player's body. The membrane between the aesthetics and complexity of the computer game system passes recursively through a body and a physical controller. Surely, different games are interfaced through different controllers ranging from embodied touch abilities found on mobile phones (Dourish 2004, Bayliss 2007, Jørgensen 2013) to interactions with the body inclusive Wii remote. Not to mention PS4 and Xbox controllers, the WASD keyboard and mouse configuration, as well as the far more complex and exotic racing simulator setups combining chair, wheel, gears, accelerators, brakes, all in adjustable metal frames to ensure pressures and counter pressures correctly suspend the body in the right position during play. The task of the controller is to sharpen the sensation of control inserting hand and body tensions and relaxations at the heart of the game content practise (Kirkpatrick 2011). The often-silenced controllers point to a dissolved and overlooked research area. The controller is simply the hidden object in the intersection between body and game.

Looking closer at the controller we see that it constitutes a folded coherency between player input converted into actions in and outside of the game world, as described in Sudnow's (1983) autoethnographic (Keogh 2018a) journey learning to play *Breakout* (1976) on the Atari 2600 home console. His report places hand, body, sight, controller, sense of control and rhythm at centre stage. The controller may call for attention, only to fall into the background replaced by a sensation of control; that close and faultless relationship with the game via hand, controller and the activities of game objects. But then that too 'disappears' only to be substituted by an even greater revelation – finding a *rhythm of play* while engaging with the game.

Sudnow's account offer expanding cycles of more and more refined and elevated proficiency composed by greater sense of detail, precision of placement, increased knowledge of the game system and correlating game aesthetics, together with the amplified capacity to read and predict game responses in order to master the game. In Sudnow the practice of playing computer games is much closer to playing instruments, and certainly completely different than the rational, configurational, and distanced gameplay typically found in ludology. This is a perspective which Hamilton (2011) expands upon when he insists that interfacing with a game is a "kinaesthetic dance of feedback and response that can easily be thought of as a kind of music" (para. 1). So, players play music playing games. Hamilton calls it "rhythm of play". And rhythm is, as Hamilton explains, essentially division of time segmented into notes and "a whole note contains four quarter notes, each of which contains two eighth notes" (para. 11) that can be divided further, and so on. The point is that games establish and create different patterns of rhythm. Some are fast, others dense, others still are slow, and some mix and remix rhythmical patterns creating shifts between hectic or soothing tempos.

Hamilton sees the *The Konami Code* (a sequence embedded in many Konami games to unlock cheats): Up, Up, Down, Down, Left, Right, Left, Right, B, A, B, A, Start, as a "rhythmic chant, almost a mantra. It's the video-game equivalent of the introduction to "'Hooked on a Feeling'" – Up, Up, Down! Down! Ooga-Chaka, Hooga, Hooga, Ooka-Chaka!" (para. 22). Not only are cadenced patterns of play rhythm enticing; combinations of play moves can also be gracious. In *Fortnite* players train, learn and execute predefined sequences of movement (Author 2 2019) until they are carved into their bodies (Ihde 2010). In that way players exhibit what Seamon (1980) in his phenomenological investigation of the human experience of space and place coins "place-ballet".

Place-ballet stems from space-time routines as a set of bodily behaviours that organise space and time into meaningful routines, like getting up at a specific time, get dressed, perform morning toilet, leave house etc. The behavioural sequences even include smaller sets of routines that Seamon calls body-ballets, which together with space-time routines weave into the wider pattern of place-ballet.

*Fortnite*'s combat episodes can be interpreted as rhythmic dances composed of runs of moves: build wall, build steps, build plateau, jump, shoot, reload, change weapon, and so on. Such elegant sequences can be detailed out beforehand, rehearsed again and again until the rhythm and whereabouts synchronize with the player's body to elevate sensible responses. Players may then be compared to classical musicians preparing for concerts, or improvising jazz musicians experimenting on site recombining and resequencing patterns of tonality and paces. The player-as-musician resides somewhere in-between doing what she is told (by the game system) and constantly innovating.

A broad, schematic summary of the research traditions of game feel can be illustrated as in figure 1 below. It is a bifurcated diagram with 'traditional' ludology on one side and phenomenology on the other. Whereas ludology focuses on describing game structures and dynamics as well as play formations (Salen and Zimmerman 2004), phenomenology addresses game feel from the sensuous bodily experiences of rhythm and principles of subjectivity under the labels 'Learn', 'Dance' and 'Inhabit', which will be outlined in the following sections.

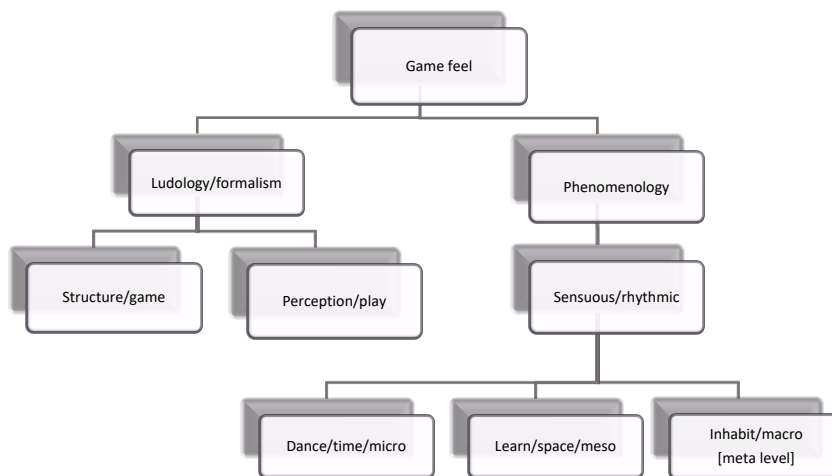


Fig. 1: A summation of the research tradition of game feel including hints to the following sections in this article.

### 3. Tooling (Heidegger)

In his *Aesthetic Theory and the Video Game*, Graeme Kirkpatrick (2011) discusses an integral aspect of computer game experience, namely the fact that “we do not rationalize our actions with direct reference to controllers” (p. 97). When we are immersed in playing, we do not talk about – and perhaps not think about – that we are pressing ‘X’, then ‘circle’, and then ‘triangle’ on the PlayStation controller.

This practical philosophy of functional absence resonates with Martin Heidegger (2010). When we experience game feel interruptions, we are thrown out of play. Heidegger would say that in doing so we lose our existential grip of the world because we lose sense of the tool (controller) that used to be a natural extension of our intentional projects. As a result, tools transform into *Dinge* – things, rather than tools, *Zeug*.<sup>1</sup> What is at

<sup>1</sup> It could be argued that a controller, or any other interfacing or tooling device, is not a thing (*Ding*), but rather a *Bestand*, Heidegger’s term for technology’s standing-reserve, which he developed as part of his epistemology of objects, ‘the fourfold’ (*das Geviert*). A thing ‘things’, Heidegger writes in *Poetry, Language, Thought* (Heidegger 2013), meaning that it reveals its manifestation as thing by appropriating the dynamics of sensuous and real object qualities. A standing-reserve (*Bestand*), on the other hand, is an entity brought to light only by the practices of technology, implying that it is an object construed from the practical usage of the technology rather than being a technological object in itself. There is a certain ‘waiting’-aspect of, say, a PlayStation controller in that it unveils itself to us as waiting to be turned on so that we can use it to play games. The primary features of the *Bestand*, the controller, is its interchangeability

stake here, according to Heidegger in his famous tool analysis in *Sein and Zeit* (Being and Time 2010), is a disruption of the *Zuhandensein* (ready-to-hand) of using tools precisely without paying attention to them in favour of an alienating observation of *Vorhandensein* (present-at-hand) (Kaptelinin and Nardi 2009). The corruption of game feel is the decline of perceiving the game almost as an extension of the player to the detached reflection of props, objects, pixels, and the like, within the game as mere objects. The result of this presence that was supposed to be absent is that play is dispelled. The rhythm through which we feel the game – with our hands, body, and our unspoken pre-rationality – becomes disrupted. In Heidegger’s tool analysis *Zeug* is precisely absent because we become one with it. The tools we utilise to interface the game while playing it, our ‘tooling’, are absent products that engulf our being, intentions, and creative endeavour; they are silent witnesses of the stuff we are doing (Sommerseth 2007). For Heidegger, *Zeug*, tool, product, is a witness of our beingness (Frede 1996). In the German language, *Zeug* carries the philological connotation of ‘*Zeuge*’ (witness) and of ‘*erzeugen*’ (to create) (Heidegger 2010). Thus, *Zeug* also works as a creative enterprise that serves the intentions and existence of the person. As such playing a game could be equated with a craft (Brock and Fraser 2018). Heidegger would say that the tool possesses our Being, also because deploying a tool corresponds to man’s (*Dasein*’s) both projective and situated nature: We do something with our tool. We are always-already in a specific context while doing what we do whether feverishly pressing buttons on the controller trying to produce a bicycle kick in *FIFA 19*, or running towards a bombsite and passing enemies on the Banana in *Counter-Strike: Global Offensive*.

No matter what we do or what tool we use, our actions point inevitably towards the future. This is what Heidegger later on calls *Sorge*, i.e. the implied temporal structure of *Dasein*, which projects a future related to a past that finally lands in present time (*Gegenwart*), thus creating an ever-evolving, spirally formed pattern of being-in-time (Dreyfus 1999, Heidegger 2010). Essentially, ‘thingy’ game feel distorts this delicate spiral of time; it becomes a rift in the projected future of our creative tooling.

Kirkpatrick provides an exact, though implicit, Heideggerian take on the nature of man and his tools. Fluctuations in game feel may lead to an uneasy alteration from tools that are ready-to-hand and joyfully absent to

and lack of distinctiveness. Thus, it is a kind of ‘proxy’ instrument; it is nothing without our practical use of it (see also Heidegger 1977).

tools that are present-at-hand. Then, the latter tools turn into present tools, *Dinge*.

If we distinguish between successful and unsuccessful game feel – cartoonishly illustrated in figure 2 below – we see that the first one is connected to absence, *Zuhandensein*, while the other is tied to presence and *Vorhandensein*. The latter sensation is where game feel marks a negative intrusion rather than a positive impactedness and, perhaps, becomes a destroyer of fun.

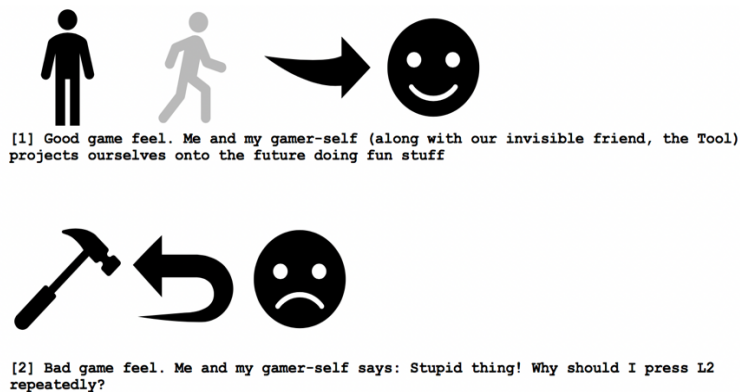


Fig. 2: Heidegger, successive and disruptive game feel. Happy or frustrated?

We are always-already ‘out there’ (Heidegger: *in-der-Welt-seiendes*), on our way to the future (*Zukunft*), and this expresses the true existence (*Existenzialität*) of our tool-being, says Heidegger.<sup>2</sup> Thus [1], in the figure above, is preferable. The reason why [2] is to be avoided is because *Dinge*, things, point to a withdrawal. The sudden appearance of things withdraws our intentions and attentions from the future and makes us ‘fall back’ (*Verfallen*) into the past thus facing a dull comfort in repetition (boredom) or a sense of alienation within our own framework of being (anxiety). Effectively, had Heidegger been writing specifically about game feel, he would have stressed the importance of using tools and the fact that playing a game is to be interactively involved in a temporal loop.

#### 4. The Body-Subject (Merleau-Ponty)

In Merleau-Ponty’s phenomenology the body is not conceived as separate from the mind as in the Cartesian thinking. Merleau-Ponty insists instead that the body is the prime condition for our being-in-the-world,

<sup>2</sup> This intimate connection between *Dasein*’s world-orientedness and *Dasein* as a tool-being is radicalised in Harman (2002).

for subjectivity and intentionality. One of the trademarks of the Body-Subject is that it operates beyond our control always-already intentionally directed toward and responding to the world. Two aspects of the Body-Subject are of particular interest in the context of perceiving and affecting games: the intentional arc and the maximal grip.

Merleau-Ponty's intentional arc is the expression of the relationship between body and world in the shape of a constant and ongoing recursive feed-back loop. Replacing world with 'game' implies that the player as Body-Subject is intentionally directed towards the game (or, rather, the tools with which to interact with the game) striving for a tight relation between body and game. The intentional arc thus becomes an extension of Heidegger's *Zeug* since it details the dynamics integral to the close-fitting bond between body and world (game).

The correlation between body and *Zeug* (tool), says Merleau-Ponty, is not just a matter of perceiving or not perceiving the tool. Say, a hammer. Or an Xbox controller. In fact, Merleau-Ponty radicalizes the Heideggerian notion of being (*Dasein*) and *Zeug* so that using a tool simply *is* being, Tool-Being. The Body-Subject doing tool-business means to always-already interact with the world, and the Body-Subject cannot escape that condition.

The conditional disposition in Merleau-Ponty's intentional arc is geared to respond to "the solicitations of situations in the world" (Dreyfus 2002a, p. 367). Solicitations are world presentations of possible actions to which the Body-Subject is called upon to respond. When playing games, the Body-Subject reacts to solicitations of the game.

The intentional arc means that we approach and grab the tool from a specific position in relation to our body. Clutching a hammer with our hands and fingers provides an instant, sensory information about the size, shape and weight of the hammer, all kinds of data that relate to the rich solicitations implanted in the task at hand. From then on, the Body-Subject executes series of movements that *feel* appropriate vis-à-vis the situational solicitations.

What does this mean in relation to the issue of game feel? First, bodily adjustments are a fundamental condition so that the player is almost obliged to adjust to the game's solicitations. Second, these adjustments happen before and beyond our conscious choices in the exact moment when the solicitations call upon the player to respond. And third, all of this occur in an instant of time, the same way the Body-Subject automatically directs itself and responds to solicitations in the world.

However, the intentional arc should not be perceived as static. Rather, it is dynamic and persistently moving forward toward enhancing and expounding details in the continuous finetuning of the connection with the world. The same goes for games. The player constantly inflates and adapts to the game's feel. This is done to achieve what Merleau-Ponty calls *maximal grip*. The maximal grip functions as a conditional directness, or as Dreyfus (2002a) describes it, "the body's tendency to respond to [...] solicitations in such a way as to bring the current situation closer to the agent's sense of an optimal gestalt" (p. 367-368). The optimal gestalt can be regarded as absolute connectedness. The Body-Subject (player) positions and 'angles' itself through called upon solicitations of the game (world).

Merleau-Ponty's conception of the intentional arc and the maximal grip is intimately tied to what Dreyfus calls '*flow of coping*' or elsewhere 'skilful coping' (Dreyfus 2016). The flow of coping consists of two distinctly different forms of intentionality (Dreyfus 2002b), one in which actions are deliberate and planned and another containing spontaneous and transparent actions. A player can intentionally plan specific actions or react situationally to game solicitations. When playing a game, the player finds herself in a flow of coping as a mixture of actions already called upon and performed spontaneously, transparently and appropriately toward a maximal grip of the game's gestalt. One could speculate that there is a rhythmic component in Merleau-Ponty's concept of flow; rhythm builds from the interplay between the game's solicitations and the player's flow of coping.

Why, then, does game feel matter so much to the Body-Subject, in a phenomenological context? Because when there is any interruption in play, the Body-Subject's existential connectedness with the game is similarly disrupted. The flow of coping when responding to the game's solicitations becomes asynchronous.



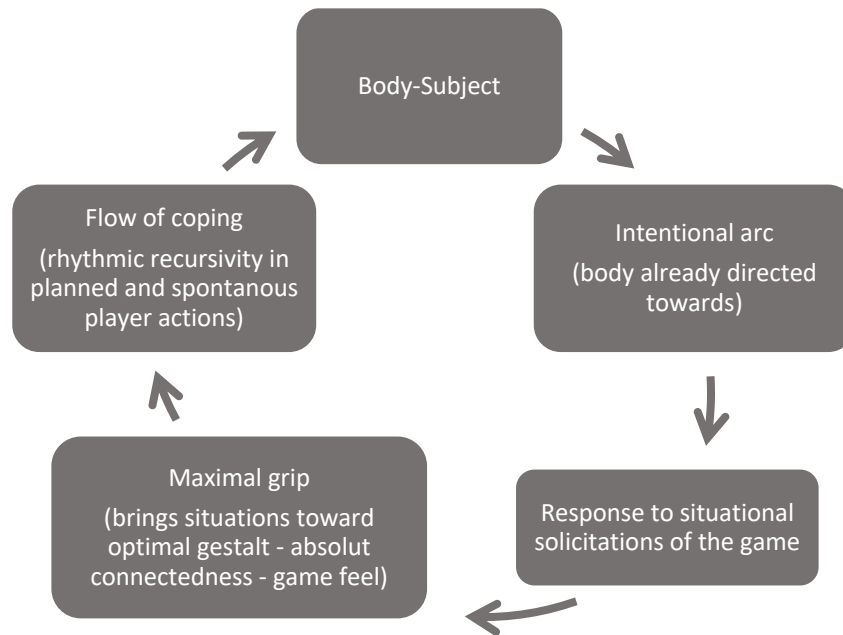


Fig. 3: Game feel perceived by the Body-Subject, as condition, response, explanation, and as always-already threatened.

## 5. Three levels of game feel: Dance, Learn, Inhabit

### 5.1 Dance: Bicycle kicks and micro-rhythms in FIFA 19

Let us look closely at the rhythmical patterns in attempting to score a spectacular bicycle kick goal in *FIFA 19*, similar to Gareth Bale's goal against Liverpool in the Champions League final May 2018. These rhythmical displays occur all the time in playing a computer game since they are the repetitious 'riffs' that the player performs.<sup>3</sup> They become like a subconscious 'dance' with game tools and solicitations. The riffs also tie in to a larger and more 'stretched' knowledge and mastery of the typical temporal modes in a game.

<sup>3</sup> Rhythm derives from Greek *rhythmos* and can most generally be defined as "any regular recurring motion" or symmetry (Liddell et al. 1996). This general meaning of regular recurrence or pattern in time can apply to a wide variety of cyclical natural phenomena having a periodicity or frequency. The abstraction of rhythmic measure in the musical *metre* regulates a series of beats unfolding in time (London 2004). It is important to note that rhythm is an underlying framework for *tempo*: Speed (tempo) cannot be a specification for a certain rhythm, as the same rhythm can occur at any tempo. A certain tempo compares mathematically to other tempi by the difference in speed, whereas a certain rhythm compares to other rhythms by the difference in structure.

We use FIFA 19 on a PlayStation for our purposes. And remember the following is not exact science but a qualified approximation.

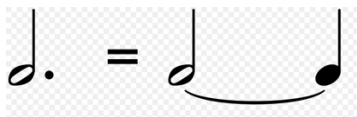
[1] First, we deploy a steady beat, *eight notes*, by repeatedly pressing L2 and R1 on the controller. Perhaps the feeling is a bit ‘shuffled’, rather than a steadfast march when juggling the ball directly on the spot – ground-air, ground-air, and so on.

[di-da-di-da-di-da ...]



[2] Following our regular beat is a *sliding, punctuated half note* that briefly changes the level throb of the juggle we did before. By flicking the left analogue stick in the direction of the player, while simultaneously turning around our own axis, the ball will kick above the head with the player’s back to the goal.

[di-da-aaaaaaaa ...]



[3] Next up is a *pause*. However, it is *rubato* one. It may be lifted above the regular time in one bar, so that the ball can reach a couple of feet above the player’s head before the final kick.

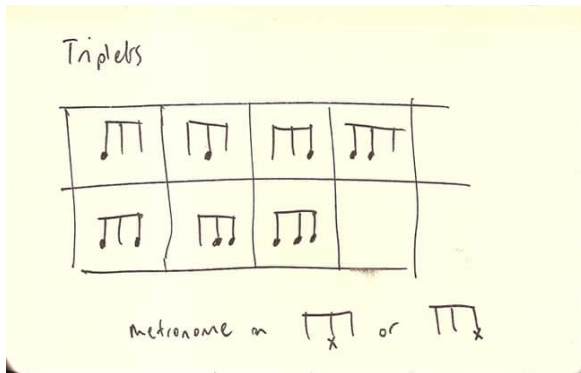
[da-aaaaaa [.....] ...]



[4] And finally, here comes the sweet (and difficult) part: Using *triplets* (3 over 2) to simultaneously (or almost, since it’s never done completely at the same time) press L2 + Circle, which produces a more abrupt, tensed sensation:

[da x da x da = di-da ...].

In the drawing below we see that the triplet *accentuations* vary quite a lot; from applying pressure on every note in the triplet to combinations of either one or two 'down' and 'up' beats.



To further add to the complexity, the above four steps, the eights, the sliding half note, the rubato pause, and the triplet pressing, must – if you are a seasoned player – be accompanied by the player's attention to Flair Shooting and Timed Shooting, a new mechanic in FIFA allowing for more accurate, well-timed shots.



Fig 4.: Will the ball go in? A bicycle kick situation retro-style in FIFA 99.

The FIFA franchise has had many adjustments and facelifts in its long history of iterations. In FIFA 99 the bicycle kick was executed on PC's by pressing multiple keys on the keyboard at once, following, for instance, a corner. Compare this procedure with the more 'footballing' accurate and multipart steps of the *FIFA 19* instalment. Of course, both games aim at emitting a smooth and ultimately transparent player

experience, thus inscribing the bodily moves and player inputs as merely zeroes and ones in the machine's cybernetic feedback loop. Nevertheless, while the learning curve of *FIFA 99* tends to be all about being good at stroking keys, the combination of the analogue stick and button pressing on the PlayStation controller in *FIFA 19* along with the ability of Timed Shooting make the game harder to master yet creates an overall much more natural sensation of the 'player-as-a-footballer'.

When it comes to game feel and the case of FIFA, it is really a question of which controller serves game feel best (or worse). Is it the isolated pressing consistency, found in *FIFA 99* and the following years, or is it the combination of prerendered parametrisation and analogue movements (as in *FIFA 19*)? Both games, the old and the new one, share the characteristic of framing skill requirements on a micro-task level asking the player – from novice to master – to perform outbursts of energy assembled in rhythmical patterns and corporeal choreographies. The point where they differ is in their dependency on consistency and realism, the latter obviously also achieved by means of technological development. Thus, a negative game feel, the kind where the Heideggerian tool becomes a thing, present-at-hand, may arise out of two distinctly different controllers: One can get bored in *FIFA 99* because of the almost predetermined outcome of pressing keys the right way. Give me a corner, and I'll score with a bicycle kick! And one can get just as easily bored (or anxious about one's capabilities thus threatening to quit the game) in *FIFA 19* due to the overwhelming density of producing a 'natural' kick, with all the flicking, kicking and rotating this requires.

## **5.2. Learn: Camp sites and meso-rhythm in Counter-Strike: Global Offensive**

According to Henri Lefebvre (2004) rhythm is at once a repetition and a renewal (Ringgaard 2010). Abstractly speaking, rhythm is the corresponding energy of Heidegger's *Sorge*, that is, the spiral of future-past-present. Rhythm, felt through our heartbeat, sounding in our womb, and exited through the speed of our emotional affect, is an exalted measure simultaneously consuming past movement and creating expectations for the next (Schulze 2012).

As such, rhythm is a pivotal vehicle in man's play (McDonald 2014). What is important is that rhythm functions not only as a bundled flow of experiences with the world – and the tools to operate the world – but also as a means to bind memory and sharpen focus. It is exactly this binding mechanism which is accomplished by the musical *metre*; a way of

fastening the endless flux to a steady materialisation and allowing the tempo to increase or decrease.

Now, let us expand, 'stretch', this (approximated) periodicity of rhythm to a larger confine, namely *navigation in space* in *Counter-Strike: Global Offensive* where the to-and-fro movements of formalised play not only expand but also become a sensory clockwork monitoring one's gradual climb up the competence ladder (Dreyfus and Dreyfus 1988).

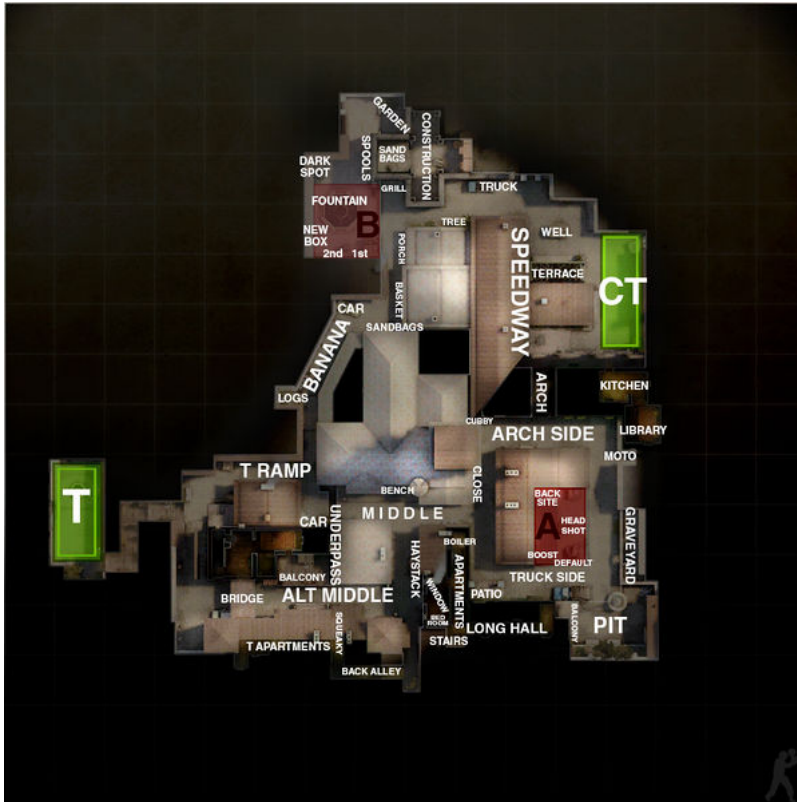


Fig. 5: The *CS: Global Offensive* Inferno map. It is a bomb defusal map.  
*T* = Terrorist Spawn area  
*CT* = Counter-Terrorist Spawn area  
*A* and *B* = Bomb sites

Above is a plan drawing of *Counter-Strike: Global Offensive*. The map is loosely rectangular, with the Counter-Terrorists spawning on one corner of the map and the Terrorists on the diagonally opposite corner, and the two bombsites sitting at the other two corners. A meagre backstory reports that while terrorists (*T*) are attempting to blow up two critical gas pipelines through part of a small village (assumedly somewhere in Italy or perhaps the Basque Country) the counter-terrorists (*CT*) will try to prevent the terrorists from destroying the pipelines.

*Inferno* has been revamped several times due to the controversial and much-hated tactic, *camping*, where a player obtains a static strategic position of advantage, often by repeatedly waiting in one specific location. The facelifts of *Inferno* had ramifications for the level design – or, rather, how the level was felt and *enacted* especially in relation to camping.

Camping leads to distortions of rhythm, often voiced as an interruption of flow. Not only does the camping/no camping facility affect the competitive balance of the game; it also dictates the experience of periodic eruptions of energy amassed in the playing ‘metre’ that scans the terrain and choke points. Read as a *configurational* space (Golding 2013), a space in which locations and orientations are neatly arranged and overlooked, the now sparse location tucked in between the Arch Side and the Pit in the far-right corner of the map softens out the advantage of especially the CT team if they were to opt for the camping strategy (see Fig. 5.). For a *navigational player*, however, one who operates the game while simultaneously trying to traverse the frightening spots of the game, all the running, pausing, and uneasy musicality of adjusting to the demands of the game turn into a *tic-TAC-tic-TAC* blow: heightened pulse, punk-like rhythm. It could also mimic a battle trance formed as a rhythmic war cry uniting players into a shared collective identity placing the team interests above their individual interests and safety (cf. Pieslak 2009). In Counter-Strike, then, ‘rhythm’ is not only the periodicity of traversing space but also the collectively unified beat of combat.

Oscillating between configurable and navigational play means zigzagging between diverging rhythmic patterns; from the silence of the professionals’ needlestick operation to the clumsy, confrontational shouts by the novices.

### **5.3. Inhabit: The double inscription of playing games and making rhythms**

We have seen so far that the player’s ‘micro-dance’ of performing repetitive tasks in a game is of utmost importance as to how a game is sensed, mastered, and enjoyed, especially when viewed from a player-centric perspective. The same applies for the next level we encountered, the spatial bodily-sensory acceptance of a game’s meso-rhythmical structure. Now we will move on to the third and final level, which is a ‘macro-level’ synthesising the temporality of ‘Dance’ and the spatiality of ‘Learn’. Looking at the ‘Inhabit’ level reveals (ideally) the flexible ease with which players switch from pre-consciously enacted, sequenced

‘riffs’ or patterns of button pushing to the art of moving gracefully along both short and long stretches of space.

To ‘inhabit’ a game is really a masterful ‘flow of coping’, as we believe Merleau-Ponty would attest, and it happens as a result of a *two-folded inscription*. Inscription should be understood as the formative power always-already inserted between the Body-Subject’s conditional directedness and the demanding call to respond to the game’s solicitations. Such responses happen, as we saw earlier, within the confines of Heidegger’s spirally wrought temporality (*Sorge*) as a projection of past experiences onto the game’s future. Thus, the responses manifest themselves in the present as motivations carried out through planned – but also unconscious – actions toward a desired goal. (Although that goal may not always be clear-cut).

The *first* fold of inscription happens when the game’s *Zeug* (tool) are carved into the Body-Subject; much like the ancient cuneiform that wrote itself into the body through physical effort (Ihde 2010). In computer games such carving is often a result of repeating actions of temporal sequencing or performing specific ‘riffs’ over and over again. This is somewhat similar to what Koster (2014) have coined “grokking”: doing something again and again to the point where game solicitation responses ensue beyond any conscious thought or bodily control. We may perform the ‘dance’ of bicycle kicks in *FIFA19* blindfolded – the dance becomes a trance – right when it is carved into our pre-rational cognition. And we may just as effortlessly seek out camp sites and choke points as mere reflections of body responses to game solicitations.

The *second* fold of inscription is the player’s creative and unconscious usage and enactment of tooling. It can be thought of as a kind of ‘writing’ (or engraving) the temporal actions and spatial patterns into the game’s architecture and systemic relations. The outcome of this tooling practice is ideally a perfect synthesis of game and player. It is that exact moment when the hitherto unnoticed, flickering solicitations of the game suddenly reveal themselves and call upon us to act in a creative fashion; to engage in a bicycle kick in *FIFA19* or take on a choke point in *Counter-Strike: Global Offensive*. In other words, to push a situation in the game and its sensuous ‘solution’ as close as possible to the optimal gestalt (Merleau-Ponty).

The two-folded inscription explicates how actions are carved into the players flesh, so to speak; but is also signals how players’ actions ‘crave’

themselves – or force their way – into the game’s multifaceted fabric.<sup>4</sup> As such the two-folded shape of inscription can easily be compared to Seamon’s (1980) ‘place-ballet’. The existential integration of temporal routines in the spatial construct of our surroundings forms a seamless and recursively adjustable flow of coping. The ‘ballet’ is simultaneously danced (performed by us) and executed (called upon by the game) because we pre-consciously perceive our existence within the game as something (somewhere) to inhabit. As Merleau-Ponty (1967) writes: “[...] at this moment consciousness is nothing other than the dialectic of milieu and action” (p. 169).

## 6. Final thoughts on game feel

We sat out to examine game feel. It brought us on a journey from Swink’s descriptions of how everyday interactions with the world translate into polish metrics, animations, visuals, sounds, tactility, cinematics, and onwards to a more sensible appreciation of games played as instruments. Viewed phenomenologically rhythmic patterns on both sides of the screen occur, in the player and in the game, and in the area between them. The periodic riffs of controller handling, the rhythmic acting of tools, engagements and strategies all merge into a punctuated half note when the ball is bounced up in the air seconds before the bicycle kick is executed in *FIFA19*. We argued that the rhythm of play is both a reflection of strategies and (a kind of) music made from moment to moment responses to game situations, i.e. the dance of the bicycle kick in *FIFA19* and the ‘Learn’ mode in *Counter-Strike: Global Offensive*. Finally, ‘Inhabit’ offered a synthesis of the former two levels holding a two-folded inscription where tools, actions, and strategies carve into the player’s Body-Subject the same way the player’s actions and strategies carve into the game and its ecology.

The tricky and overlooked dimension of game feel regards how we understand the reason behind players’ sensitivity toward fluctuations in game feel; figuring out why we care about them. Possible answers to these questions can be found in the first-person philosophy of Heidegger and Merleau-Ponty; notably how the Body-Subject amidst the spiral of time (*Sorge*) uses *Zeug* with its maximal grip to ultimately and intentionally reach a flow of coping.

<sup>4</sup> Thus, it makes sense to compare the elements of the two-folded inscription with Heidegger’s *Geviert*, the ‘fourfold’: [1] Game -> tools (mechanics) => [2] Body-Subject => [3] player -> tooling <=> [4] game -> solicitations.



By applying Heidegger's tool analysis to controllers and game mechanics, i.e. the methods for interacting with the game's states, we also arrive at a deeper understanding of the subtle and fragile 'breaking point' between transparent play and fluctuations in the stream of play when something doesn't feel right. There seems to be an axis of tooling that cuts the notion (and sensation) of game feel wide open: either absent *Zeug* (fun) or present *Dinge* (rupture). Furthermore, one might speculate that it is time itself (*Sorge*) as an existential condition that gets disturbed, and that *Dasein*, the player, instantly perceives this when displacements in game feel transpire. We react to even the slightest temporal disarticulation in the rhythm and language of games due to our fundamental being-in-the-world and because of our tool-oriented, temporal intentionality.

Merleau-Ponty's Body-Subject offers a somewhat different insight into our existential conditions when it comes to the body's connectedness with the game. Players are always-already directed toward a dialectic response call. This directedness is pre-rational and strives continuously toward establishing seamless connections and integrations with the game (world). Thus, playing games means to be existentially guided toward game responses because we react to minuscule disturbances. Most of the times, these disturbances are simply part of our ongoing rhythm; the di-da-di-da of repetitious clicking and the di-*daaaaaaa* of using the controller. It is the music we make while playing games.

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