# The Reality of Games

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#### Introduction

This article does not attempt to classify, define or demarcate play or games. Nor does it attempt to settle age-old philosophical discussions such as realism vs. anti-realism. This article rather proposes a model to engage with the philosophical conundrum of the ontological status of any human endeavour in general and of games and play in particular. It does so by drawing on an ecceclectic array of thinkers all dedicated to investigating difference as the basis of human perception and cognition, rather than the pervasive logocentric view of a Euclidian Universe. Besides the philosophical starting point of the difference as expounded by Deleuze and Derrida and applied by Luhmann, Maturana and Varela in the theory of Autopoietic systems, heavy influences are found from the seminal works of Gregory Bateson (Steps to an Ecology of Mind, Mind and Nature), the ecologoical psychology of J.J. Gibson and the dramaturgical perspective of Erving Goffman.

#### **Background**

So far the discussion of reality has taken the road of demarcational trenchwars over terms and definitions. Either games and play are consider quasi-real and playful behaviour irrational. Games are magical playgrounds (Huizinga, 1970) or 'make-believe'-worlds (Bateson, Steps to an ecology of Mind, 1972), that a player temporarily is transported into enchanted, in trance or by 'willing suspension of disbelief' (Murray, 1999).

"To play fully and imaginatively is to step sideways into another reality, between the cracks of ordinary life. Although that ordinary world, so full of cumbersome routines and responsibilities, is still visible to us, its images, strangely, are robbed of their powers. Selectively, players take the objects and ideas of routine life and hold them aloft. Like willful children, they unscrew reality or rub it on their bodies or toss it across the room." (Henricks, 2006, s. 1)

Alternatively play behaviour is considered actual communicative, interpretive or cognitive actions with non-real objects (symbols, fictions, etc.). This approach uses concepts such as simulation (Frasca, 2003) and representation (Crawford, 2003) (Juul, 2005).

"...video games are real in that they consist of real rules with which players actually interact, and in that winning or losing a game is a real event. However, when winning a game by slaying a dragon, the dragon is not a real dragon but a fictional one. To play a videogame is therefore to interact with real rules while imagining a fictional world, and a videogame is a set of rules as well as a fictional world." (Juul, 2005, s. 1)

This article proposes a different model with which to explain what games and reality have to do with each other.

"I never could accept the first step of the Genesis story: 'In the beginning the earth was without form and void.' That primary tabula rasa would have set a formidable problem in thermodynamics for the next billion years. Perhaps the earth never was any more a tabula rasa than is, a human zygote – a fertilized egg." ((Bateson, Mind and Nature, 1979, s. 13)

#### Where does the Universe end?

When I was a kid I used to gaze at the stars and wonder 'where does the universe end?' I, as any other daydreamer, soon realized that if we ever got to the end, the problem would morph into 'what is on the other side of the end?' As a professional daydreamer I've encountered the problem in a different guise: 'What can contain everything?' Imagine you draw a circle dividing an inside from an outside. Now stretch that circle for instance to match the equator. Which hemisphere is 'inside' now? As an answer we might shift our focus and imagine a sphere instead, the problem should be solved, right? Try thinking of a sphere; what would be the most inclusive sphere possible? You might imagine an enormous sphere containing everything. But this is of no use, because we always divide an inside from an outside. There will always be a remainder. At the very least the sphere itself remains 'outside'. There's a joke going around in mathematician circles.

\*An engineer, a physicist and a mathematician are challenged to calculate the shortest stretch of fence capable of containing a herd of sheep. The engineer jumps at the challenge and makes a square fence, which narrowly contain the sheep, since a square has a smaller circumference in relation to total area, than a rectangle.

The physicist scoffs and makes a circle shaped fence, which narrowly contains the sheep, since a circle has the smallest circumference in relation to total area.

The mathematician smirks and makes a circle shaped fence, which narrowly contains himself and then he defines himself as being outside.\*

Well, after I heard this joke, I started imagining, in my very layman understanding of mathematics, the most inclusive 'sphere' wrapped inside out, becoming smaller and smaller rather than larger and larger until there was no 'outside' left, i.e. it became a point, remembering that a point has no extension, the 'side' facing the world would have to be all inclusive. The only problem left was 'what to do with the point itself?' Now at this point (literally) the thought experiment is at high risk of running sour. Either the point does not include itself and thus doesn't contain 'everything' or it does include itself, in which case you might ask 'but ought that which is included, not be included by *something*?'

Jorge Luis Borges oft-recounted story of the 1:1 map of the empire in 'On exactitude in science' elucidates the very same problem, although it initially seems to be about a very different subject.

"...In that Empire, the craft of Cartography attained such Perfection that the Map of a Single province covered the space of an entire City, and the Map of the Empire itself an entire Province. In the course of Time, these Extensive maps were found somehow wanting, and so the College of Cartographers evolved a Map of the Empire that was of the same Scale as the Empire and that coincided with it point for point. Less attentive to the Study of Cartography, succeeding Generations came to judge a map of such Magnitude cumbersome, and, not without Irreverence, they abandoned it to the Rigours of sun and Rain. In the western Deserts,

tattered Fragments of the Map are still to be found, Sheltering an occasional Beast or beggar; in the whole Nation, no other relic is left of the Discipline of Geography." (Borges, A Universal History of Infamy, 1975)

Ontological investigations commit to all of existence by default, but there doesn't seem to be a privileged spot from which we, the observers, can observe everything without having to answer the question whether or not we observe the spot we occupy, i.e. are we included in the observation; is the map included in the map?

Famously within science the interpretation of quantum mechanics has prompted the same question, as brilliantly explicated by Karen Barad in 'Meeting the Universe Halfway.'

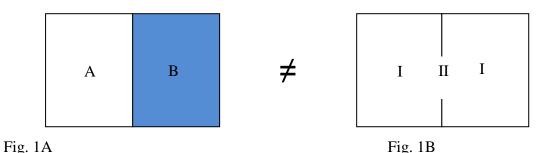
"That is, the apparatus that is to be characterized (i.e. measured) must be the 'object of observation' within some larger phenomenon involving its intra-action with an auxillary apparatus. This is necessary so that the 'object apparatus' within the larger phenomenon effects its marks on another part of the larger phenomenon (which includes the auxillary apparatus). In other words, to measure its characteristics (as part of a larger phenomenon), the original apparatus in question would have to become the 'object' of investigation in its intra-action with an auxillary apparatus, thereby involving it in some larger phenomenon. Since it is not possible to for the apparatus to simultaneously be both measured object and measuring instrument, the apparatus cannot be fully characterized and function according to its ('original') purpose simultaneously..." (Barad, 2007, s. 161)

In yet another disguise we may frame the problem as the cosmogonical problem of the beginning found in human mythologies everywhere. How did it all begin? Often the world starts as a cosmic egg, which then somehow cracks. Stories like these carry significance.

#### **First question**

"...a universe comes into being when a space is severed or taken apart." (Spencer-Brown, 1972, s. foreword)

Allow me to qualify the problem in terms of difference as illustrated by the following figures, before engaging with the problem as such:



If we allow fig. 1A to be a representation of a difference, the difference between A and B simply lies in the juxtaposition of the two sides A and B (fig. 1A). But if we ask the question 'what is a difference 'in-itself?'' (fig. 1B), the question translates to 'what is the line (II)?' or in my thought experiment: 'What is the all-encompassing point?' or in terms of relations 'what is a relation?' and what comes first the relation (II) or the entities related (I)? This could pose a nice little abstract paradox to meander in, however let us flesh out the problem instead.

If we take seriously the proposition that observation is distinction or difference, for instance as suggested by Niklas Luhmanns autopoiesis theory, the problem assumes an epistemological frame. Like the mathematician Luhmann needs to choose a side to stand on or in his words choose a side to mark. In other words Luhmann starts with the relation (II in fig. 1B) and needs a mark to find out which side he's observing, A or B (fig. 1A). The unmarked side, i.e. the other side which Luhmann occupies rather than observes, becomes a 'blind spot', unobservable unless he crosses the distinction and observes said side, i.e. shifts the mark (compare fig. 1A to fig. 1C).



Fig. 1C Fig. 1D

Students of classical philosophy will recognize the problem of form and matter. Can you separate the form or idea from the matter being formed? Aristotle deals with the problem by prohibition. The third man argument states that there's no third man in between two men being compared, to order the comparison, i.e. there's no relation 'in itself.' Luhmanns version states that you may differentiate between 1.order and 2.order observation. 2.order observation is observing observation. You may observe someone else observing or yourself observing, but not while you're observing. In other words you may occupy the position of observing or the position of being observed. However you may not occupy the (middle) position of both at the same time. This is another way of saying that every 2.order observation is simultaneously a 1.order observation (1C and 1D are equivalent). And by choosing one side to mark, you occupy the other side by default. Of course this leads to an infinite regress in which you may chase your tail forever. Whenever you turn to observe yourself, you will see that you've just left. The problem of the all-encompassing point is, in epistemological terms, the well-known problem of what to do with you, the observer? Luhmann (1999: 20) "the paradox of form only comes about because an observer attempts to observe at once both the unity and the distinguished sides of a distinction." (as quoted by Tække (Tække, 2006))

The third man prevents the inevitable 'meta- meta-'question which figure 1E poses – what's the difference (III) between II and I (Figure 1E)?



Fig. 1E Fig. 1F

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<sup>&</sup>lt;sup>1</sup> Law of the excluded middle.

The question is how on earth could we ever get confused as to which side we're looking at? When we observe a difference there's no confusion. Although figures 1D and 1C are equivalent, they cannot be observations in the same sense. Consider a simple difference such as: "Man walks into room." If we imagine this as a scene in a movie, we could 'shoot' it in at least two ways.

- 1. First a room, then a man enters
- 2. The camera follows a man, he walks into a room.<sup>2</sup>

Being situated we are in no doubt as to which 'scene' is relevant. Either we are in the room or we are following the man. However if you are at the other end of a walkie-talkie being told, that a man walks into a room, with no information of your informants perspective, the question of which scenario applies will be relevant. Similarly there's the same height difference between me and my brother regardless of who we start measuring from, but the difference is not the same for me or my brother.

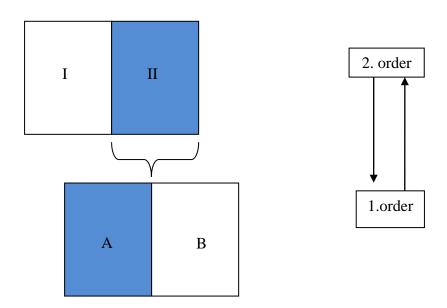


Fig.3

The problem is illustrated by comparing figure 1F and figure 3. If we take both figures to be illustrations of the difference 'man walks into room', there's no confusion in figure 1F. We simply perceive the situation as is, qua our situation, whatever our situation (in figure 3: Going from 1.order to 2.order II either signifies A or B whichever is marked). We have to start with a difference II to conjure the problem. Without further information as to which applies, II could mark either A or B (in figure 3: Going from 2.order to 1.order), i.e. the mark in 1F could stand for either.

There are several things to point out here:

1. The difference II is capable of referring more than one situation, i.e. at least A & B.

<sup>&</sup>lt;sup>2</sup> One may object that referring to the scenarios as A and B commits the error of confusing them with the difference between A and B as laid out in figure 1A. However this is quite deliberate as it is not clear at all what is meant by a marked side and an unmarked blind spot.

- 2. The difference II/I (fig. 1B) is itself presented as a difference, which must be subject to the same consideration as A/B (fig. 1A), unless it is stated how the two differs.
- 3. And an additional puzzle: If II is the difference, what is I?

Ad. 1 'Which side to mark' is another way of saying 'how do we know what is inside a difference and what is outside a difference, if we start with difference?' It is not that the choice of side is arbitrary. It is that we have no way (none whatsoever) of deciding which is which. The knowledge of which side to mark has to come from somewhere else! This goes against our everyday intuition that 'naturally' things have an inside and an outside.

Ad. 2 A 'meta-' problem arises when we ask 'what difference is being observed and marked in figure 1B?' It would seem that figure 1D is logically equivalent to 1B. This constitutes the problem of beginning. If II is needed in order to produce a difference how was this difference (II) produced, would it not necessitate a third difference and so ad infinitum? Did it come preproduced (an idea) or was it 'in the world' only to be dis-covered? More importantly: Where is this difference?

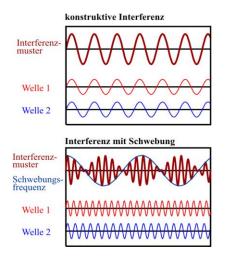
Ad. 3 Does it make sense to talk about I (A & B) separete from II? In medieval philosophy the question was: Can we talk about formless matter?

#### A differential model

Let us use change the tune on the epistemological frame. Let us propose that cognition is something you do and that it has a frequency. In this simple model we might call different thoughts different frequencies. If communication were to follow the transmission model, a thought with a certain frequency would have to be translated into a voice phenomenon carrying this exact frequency and translating it back into the same frequency in order for a communicative act to be complete. This of course brings along all known sources of error in relation to the transmission model. First of all how does one compare an 'inside' thought frequency with an 'outside' voice frequency? Second if the 'senders' choice of message frequency is arbitrary; the 'receivers' choice is equally arbitrary.

Now instead think of bat.

"Interesting phenomena occur when two or more rhythmic patterns are combined...In the case of rhythmic patterns, the combination of two such patterns will generate a third. Therefore, it becomes possible to investigate an unfamiliar pattern by combining it with a known second patterns and inspecting the third pattern which they together generate." (Bateson, Mind and Nature, 1979, s. 91)



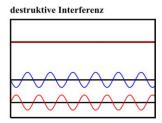
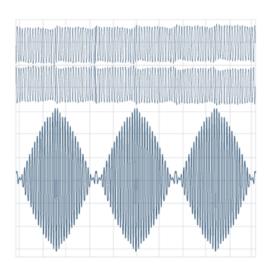


Figure 4

If you were a bat, you would 'see' by calling out and any object hit by your call would produce a return echo with a different frequency than the original. Combining this return frequency with the original would produce an effect called the moiré effect or a 'beat;' a frequency which to us would sound as if somebody turned the volume up and down rhythmically.



Sine waves combine to produce beats in this illustration based on oscilloscope traces. The two waves at the top are of slightly different frequency; when they are combined, the resulting wave at the bottom varies slowly in amplitude. The variations are beats and would be preceived acoustically as modulations in loudness. If the two signals were presented separately to each ear, binaural beats would be heard. These differ in characted from monaural, or ordinary, beats and are generated within the brain.

"Auditory Beats in the Brain" by Gerald Oster. Scientific American, Oct. 1973, (used with permission).

Figure 5

This can be illustrated something like this:

# Different Beats (patterns)

# Basic frequency 'Re-create' any frequency

Figure 6

If we stay with this bat-vision, different objects would produce different beats (or patterns). Instead of recognizing specific frequencies I would do myself a favor and recognize the beats. The interesting part is that, even if I change the basic frequency, I would still be able to recreate the frequencies of different objects, since my way of recognizing different objects is relative to the objects, i.e. we recognize the patterns not the specific frequency. Even more interesting; if I were to give this set of beats to my fellow-bat, he would produce the same relative frequencies (patterns) regardless of his basic frequency, but how would I transfer these beats?

As the above figures suggest, a beat is a frequency in its own right, although much lower than the frequencies producing it. But is not a sound wave in itself as such. Rather it is referred to as a 'beat envelope;' marked with the dotted lines below.

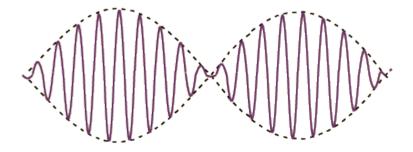


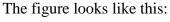
Figure 7

I am told that people who play with oscillators can use a so-called 'envelope detector circuit' to produce a sine wave at the beat frequency. You might think of it as an ear and mouth that picks up the beat and spits out sound instead. One is easily mislead to think that communication from this point simply consists in my screaming the beat frequency at my fellow-bat. But notice that my fellow bat does not know that this sound is to be treated different from any other sounds (ruling out the infamous and very problematic argument that we somehow connect with each other through analogy). We can also infer that it is not the object, sign, sound, or 'thing itself' which, somehow magically provokes an interpretation. If others could simply 'adopt' my screams, we would have much more success with a simple transmission model; a scream for each object. What we need is a reverse 'envelope detector circuit;' one that is capable of taking a frequency, reverting it to its enveloped state (beats) and 'apply' it to a basic frequency in order to re-create the relevant frequency. It is extremely important that we do not identify 'relevant frequency' with a specific frequency (Hz). The relevant frequency is one that relates the same way to whatever basic frequency 'sender' and 'receiver' respectively may choose, i.e. materializes the same difference and thus always will reproduce the same beat; in short it is the pattern.

At this point we have to address an inherent problem with this picture. If we are to believe that the different beat frequencies, in a sense, 'are' different objects and objects we 'see' are

the result of solving beats, it seems peculiar that we need an object (beat frequency) which itself would seem to need to be reversed before we can get at its beat. Wouldn't that necessitate another beat of the beat having been negotiated (which we haven't received yet) and so on and so forth?

But this caveat brings us to the crux of the matter. If an object (a beat frequency solved) is the result of a beat negotiated (post factum), and a beat thus may be considered an 'inverse' frequency (pre factum), then a beat has its own beat only in order to be 'seen' *as* an object (beat frequency itself). By extension a frequency solved is not treated as frequency in itself. So the answer to the above puzzle is a conceptual one. We do not take a beat frequency and revert it; we just never resolve it as frequency in its own right (III in figure 8), but treat it only as a beat in order to negotiate it in relation to our own basic frequency (i.e. solve it – I in figure 8). In more prosaic (and slightly inaccurate) terms we might say that rather than listening for sounds, we listen for pauses (articulations) with which to puncture our perception or stream of consciousness.<sup>3</sup>



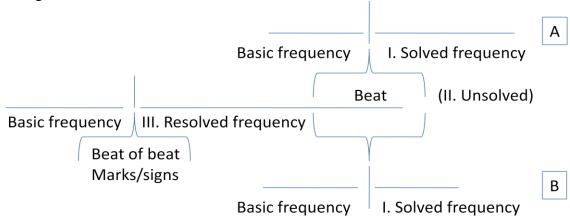


Figure 8

Let us call a difference negotiated 'solved' (I). Let us call a differences not negotiated 'unsolved' (II). And let us call a difference *negotiated as an un-negotiated difference* 'resolved'(III). This is another way of saying that there are three states to a beat. A longhand version (solved - I) and a shorthand version (resolved - III) of beat, but neither of these are the unsolved beat (II) – although they are 'identical' with it.<sup>4</sup> A sender (A) would call out to produce a beat which was picked up and solved by a receiver (B). If the receiver is not familiar with the system he would never pick up the beat. His only choice would be to solve it as simply sound (III) (if he picks up on it at all).

<sup>&</sup>lt;sup>3</sup> This is inaccurate in that the differences involved are not only the pauses. There are differences in sound, pitch, volume, etc. The image however lends itself to the description because of the complementarity of positive sounds and negative pauses.

<sup>&</sup>lt;sup>4</sup> They are both the same unsolved beat, but only respectively solved and re-solved. Each solution is identical to itself only in relation to 'itself', i.e. the unsolved beat.

#### **Production not transport**

There is no transport, no transmission, no channel, no tube and no package passed between A and B in this model of communication. Both A and B solve their respective frequencies separately and autonomously (autopoietic)<sup>5</sup> and are free to choose whatever basic frequency they prefer. What matters are the relative differences (beats) negotiated and the respective negotiation skills of A and B.

It is important to stress that a differentiating system (A or B) at this point will not 'see' both sides, it will differentiate one or the other. Nor is it possible for a differentiating system at this point to recognize the resolved beat with us (the observers of this system). The reason is that changing state does not require observing a difference, but it does require crossing a difference. Consider a turtle which travels on a plane with marks on it. The turtle scans the color of the plane underneath it. Once it detects a change, it changes state, travelling from an unmarked state to a marked state or vice versa, i.e. by crossing a line, it changes state. This illustrates what Bateson calls 'news of a difference' (Bateson, Steps to an ecology of Mind, 1972, s. 458). Such a turtle would have no idea of whether or not being in a marked or unmarked state (or rather wouldn't have an idea which state was the marked one), it is simply interested in the news that there is a difference, which we can equate with a change of state. In other words as actors we are simply biased when acting, i.e. we are in one state or another. A given state has no borders or horizon. It is simply the world as it is. When we observe we differentiate, we do not 'see' 'the other side of the difference' – there is no figure, because there is no ground (fig. 1F). Nor do we see the difference (the line of distinction). An actor in this model is not (yet) capable of juxtaposing a marked state to an unmarked. One way of putting it is that we're capable of differentiation, but not yet of observation. The turtle changes state, but does not observe the current state in relation to other states. Gibson's argument against the hoomoculus theory touches upon the same issue.

"Just as the stimulation of the receptors in the retina cannot be seen, so the mechanical stimulation of the receptors in the skin cannot be felt, and the stimulation of the hair cells in the inner ear cannot be heard. So also the chemical stimulation of the receptors in the tongue cannot be tasted, and the stimulation of the receptors in the nasal membrane cannot be smelled. We do not perceive stimuli." (Gibson, 1986, s. 55)

The argument prevents us, as observers, from accounting for differences of state by referring our observation of these.<sup>8</sup>

Studies have shown that Capuchin monkeys have different alarm calls in response to aerial, arboreal and terrestrial threats: "Whenever they encounter one of these threats, capuchin

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<sup>&</sup>lt;sup>5</sup> This is a radical departure from Luhmann, who never would permit individual communicators. He might have a point in a macro perspective. In the micro perspective I would however contend that he himself operates with terms which can be interpreted as sender' and 'receiver.

<sup>&</sup>lt;sup>6</sup> I owe this turtle scenario entirely to Hanno Kaiser (Kaiser, 2007)

<sup>&</sup>lt;sup>7</sup> This conception differs radically from the operationally closed autopoietic system of Luhmann or Maturana and Varela.

<sup>&</sup>lt;sup>8</sup> The model allows for a correction of a common misusage of the word 'refer.' A word does not refer *to* anything. A word simply *refers* something; acknowledging that 'to refer' comes from latin referro 'to carry or bring back.' This still allows a word to stand proxy for an object or state of affairs, until such time where it can be solved. But with the mindfulness of the word and the object not being correspondents.

monkeys show different escape strategies and utter one of several types of alarm calls." (Fichtel, Perry, & Gros-Louis, 2005)

In the case of these monkeys, either you scream or you stop screaming. There is no scream for not-screaming. One might object that the scream is a medium and that it is only required that the monkey hears the scream and then interprets it, but this does not solve the problem. From the point of view of the monkey not hearing a scream or hearing 'just' a scream (just sound) would have nothing to do with any scream solved. Additionally, in order to hear 'just' scream, a monkey would have to re-solve a scream as just a scream (just sound), rather than solve the scream as a state-changing difference (a beat). Which brings up the question, why (and indeed how) would the monkey choose to hear the scream as anything but a scream (just sound) in the first place, if this was the case?

For a monkey eliciting a scream whilst entering a state of alarm (from seeing a threat) is no different from entering a state of alarm from hearing (solving) a fellow monkey's scream (beat) (elicited by an unseen threat). The two are symmetric in this sense. We as observers, on the other hand, can differentiate between mark (scream) and marked (threat) and establish a correspondence between the two, since both trigger the same state.

"If we speculate about the evolution of communication, it is evident that a very important stage in this evolution occurs when the organism gradually ceases to respond quite 'automatically' to the mood signs of another and becomes able to recognize that the other individual's and its own signals are only signals, which can be trusted, distrusted, falsified, denied, amplified, corrected, and so forth." (Bateson, Steps to an ecology of Mind, 1972, s. 178)

In order to see the 'other' side we have to mark the mark. Why? Consider figure 8. Imagine the unlikely scenario of a monkey unable to solve the beat but capable of solving the beat of beat, for instance by reconstructing a scream heard, but not 'understanding' it. His screaming will prompt escape strategies by his fellow monkeys, but the screamer himself won't be alarmed. Now if he were to make sense of the other monkeys' behavior, he would have to realize that not all screams cause this behavior. Only one scream out of the screams he's capable of, has this effect. From his perspective he's not differentiating a beat of beat (2.order if you like, beat<sup>2</sup>) in order to simply scream. Screaming simply produces a beat in its own right (1.order, beat). Distinguishing one scream from another would, for the other monkeys however, be marking the mark, i.e. producing a beat of beat or if you like differentiating the beat. The only way to do this, for these monkeys would be to make the marks different from each other. Each time a new scream was to be marked it would have to be different from all existing markings. All the marks developed in this fashion will simultaneously share 'being' the initial mark (1.order) which would simply mark screaming as such and would also be a uniquely differentiating mark (2.order).

The big question is in this system is: What possible mark is capable of marking the initial mark, which in a sense 'is' all marks? The answer will of course be a mark for marking. Illustrated this looks like this: Imagine you have a blue pen and paper. You make the first mark:



Fig. 9

Now try to make a different mark?



Fig. 10

Now try to mark the mark? Remember you only have a blue pen. Regardless of which mark you make within any mark, it will not be discernable. So what do you do in order to mark the mark?



Fig. 11

Solution: You un-mark the mark. This is an inversion of the differentiation. The mark that marks all marks (marking as such) of course has the same reflexive problems as the first mark. Does it mark itself? Does the Barber in Seville cut his own hair? This second mark is equivalent to the beat of the beat (beat<sup>2</sup>).

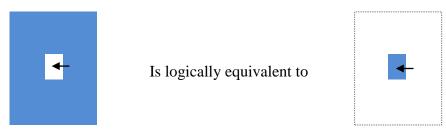


Fig. 12

What we 'see' in figure 12 on the left side is the unmarking of the original mark. This unmarking is logically equivalent to marking an object represented on the right side. The right hand side represents an object as we normally think of objects: A difference (blue square) which differentiates itself from all other differences (white background). It is the gestalt (figure-ground). The border around the white area is necessary for us to differentiate (remember) the original mark (difference), but ought not to be referred. The left hand side illustrates a non-positive term in a system of differences. Making the explanation outlined so far equivalent to Saussure's 'system of differences with no positive terms,<sup>9</sup>' but the rather clumsy signifier/signified distinction is replaced by (perhaps an equally clumsy) Beat resolved/Beat solved, but unlike the signifier/signified this explanation allows for further explanation. In order to see these non-positive terms we have to simply solve the beat<sup>2</sup> as a regular beat instead of resolving it:

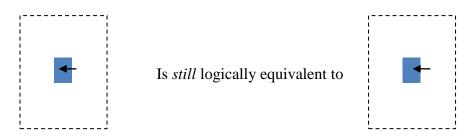


Fig. 13

Solving the beat<sup>2</sup> gives us the equivalent of a white piece of paper with letters on it; a white canvas with paintstrokes; or a white sheet of music with black lines and nodes.

One way of framing this situation is to regard the solved frequency as a territory and the resolved frequency as a mapping of it. The territory would be differences solved, the map would be the same differences re-solved. The beat 'itself' is never 'perceived' since 'seeing' the difference means either solving or resolving it (i.e. there is no difference in beat between the map and the territory).

Solving the map instead of resolving it brings us directly into the heart of the correspondence debate. As Bateson rightly notes by quoting Alfred Korzybski:

"The map is not the territory, and the name is not the thing named." (Bateson, Mind and Nature, 1979, s. 37)

Although this is correct, the statement misdirects our attention. Nobody (but a philosopher) really questions whether or not the map *is* the territory. We treat the map as the territory, but not because we think that the map is the territory. Like St. Augustine we know the difference, but are at a loss, if asked to explain how the two are related. Asking for the correspondence between object and representation is like comparing a photographic negative with a developed picture, we see two 'positives.' We are deceived (by ourselves) into explicating a positive relation between the two, since both are positives. The negative does not stand for the picture —it is the beat of beat solved *and* the beat *resolved*. It is a key, if you like, to produce the beat, which in turn only 'works,' if you have the code to solve the beat. You're comparing a solved version of a difference with a (solved) resolved version of the same difference.

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<sup>&</sup>lt;sup>9</sup> (Saussure, 1986, s. 118)

<sup>&</sup>lt;sup>10</sup>Compare with Wittgensteins argument on comparing newspapers in Philosophical Investigations.

If the difference solved is a cast, then the difference resolved is a mould. Mould and cast are then complementary or inverse solutions of the beat. It is important to note that the mould is a cast in itself. The beat required to solve the mould is equal to the beat (beat<sup>1</sup>) only insofar as the beat resolved (beat<sup>1</sup>) by the mould is subsequently solved to produce the cast. In other words if you came upon a mould without realizing it was a mould, you would simply treat it as an odd object. Confusion arises since the mould in one sense has to be treated a par with the cast. The mould is only a mould insofar we realize that we have to treat it inversely from a normal object in order to get at the differences needed to cast the cast.

In monkey terms we would say that a normal monkey's scream resolves a threat. Our odd monkey's scream solves a scream. He's simply quoting or mimicking the other monkeys screams.

This presents the gist of the model. The entire model is rather more complex, but for the present purpose this will do.

The model has several interesting consequences. We may say that the relation between map and territory is one of inversion. Observation, i.e. making a mark is the inverse (but logically identical) differentiation of changing state. Map and territory are complementary, i.e. inverse, but logically identical, material negotiations of difference. We should not look for correspondence in terms of similarity, but rather look for 'correspondence' in difference.

The model allows us to answer the questions we posed earlier.

Ad. 1 'How do we know what is inside a difference and what is outside a difference, if we start with difference?'

The short answer is that we don't. We simply have to guess. The problem is illustrated by the act of deciphering. If we are only given the

Ad. 2 The problem of beginning. If II is needed in order to produce a difference how was this difference (II) produced, would it not necessitate a third difference and so ad infinitum? Did it come pre-produced (an idea) or was it 'in the world' only to be dis-covered? And where is this difference?

The short answer is that any difference will do as a starting point of a world. It is 'in' the world, because it cannot be anywhere else. The hard part is not to come up with differences. The world is teeming with them. The hard part is to account for how some differences become more important than others, i.e. they become differences that make a difference.

Ad. 3 Does it make sense to talk about I (A & B) separete from II? In medieval philosophy the question was: Can we talk about formless matter?

Yes we can. We can imagine matter bereft of a form (not any form). What we cannot do is imagine the form without matter.

However, we can easily be swamped in philosophical implications here. The point was not to answer these questions. Rather it was to develop the model to see what the answers did to our take on games and reality.

## How to use this in relation to philosophy of games?

What we have uncovered is something hidden in plain sight. There *is* something in between A and B. Namely their communal attempt to communciate which are recognized by us as resolved beats, i.e. screams, signs, gestures, symbols, in short whatever means we may consider. We do find words materialized as objects alongside 'real' things in the world. Text is found as paper and ink; speech as physical sounds, signlanguage as physical gestures, and so on. In this sense Korzybski is absolutely right. Paper, ink, sounds, and gestures are obviously different from the things which they refer. What is hard to grasp and a source of error is that, when 2.order resolutions are negotiated as 1.order solutions, they no longer negotiate related differences. The beat<sup>1</sup> - solved as a territory - is not the same as the beat (of beat) - solved as a map - i.e. the beat<sup>2</sup> treated as simply a beat<sup>1</sup>.

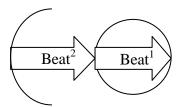


Figure 14

The lefthandside beat<sup>2</sup> becomes an object unto itself when treated as a beat<sup>1</sup>.

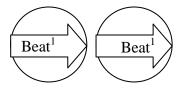


Figure 15

The move from a higher order to a lower order constitutes a breakdown in a Heideggerian sense. Do not think of hammers, but consider text, speech or any other type of communication. You will when the communication breaks down find an 'embodiment' or materiality of communication comparable to physical objects. Compare with the metaphor of negatives vs. developed pictures. If somebody without knowledge of photography came upon a negative, the negative would at most seem like an odd picture, but more importantly, the possibility of using the negative to produce a positive developed picture wouldn't be discernable from the negative. In more prosaic terms, they wouldn't see a negative. They would see a positive. Like the detective stories of deciphering Mayan hieroglyphs or Linear B, there has to be a presupposition of meaning, before we can search for it. One would have to know not to solve for an object, but reverse a resolution of differences, which is then 'used' to solve for an object.

<sup>&</sup>lt;sup>11</sup> Despite Heidegger never having used the term, 'a breakdown' has found its way into the literature as Heideggersk. See Winograd & Flores (Winograd & Flores, 1986) and Koschmann, Kuutti & Hickman (Koschmann, Kuutti, & Hickman, 1998)

#### The inversion

It is this reversal which allows us to treat any object as a sign. We have arrived at a crucial point made by Actor-Network Theory, which explains how statements are stabilised into hard facts from conjectures and guesses.

"Once the statement begins to stabilise, however, an important change takes place. *The statement becomes a split entity*. On the one hand, it is a set of words which represents a statement about an object. On the other hand, it correponds to an object in it self which takes on a life of its own.[...]. Before long, more and more reality is attributed to the object and less and less to the statement *about* the object. Consequently, an inversion take place: the object becomes the reason why the statement was formulated in the first place. At the onset of stabilisation, the object was the virtual image of the statement; subsequently, the statement becomes the mirror image of reality 'out there.'" (Latour & Woolgar, 1986, s. 177)

But unlike the constructionist argument we do not have to contend that the dichotomy of 'in here' opposed to the 'out there' of objective reality is dissolved in favor of an inclusion of traces of production in the produced. We simply have to amend the statement, that

"It is small wonder that the statements appear to match external entities so exactly: they are the same thing." (Ibid)

They are not the same thing, they are the same difference. Considered as things, they are most certainly different.

The inversion is the inverse of the breakdown. Just as we are capable of moving from a higher order to a lower, the opposite is possible. We can choose to treat the differences separately differentiated in a medium (figure 16 left side) or we can choose to simply work with the object (figure 16 right side).

Beat<sup>2</sup> broken down to give Beat<sup>1</sup> Beat<sup>1</sup> inversed to give Beat<sup>2</sup>

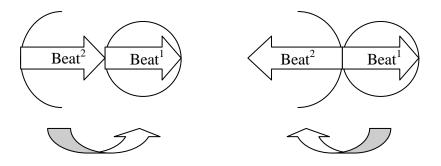


Figure 16

Being interested in an object, not in itself, but in the differences which produces it constitutes instrumentality or utility, i.e. treating it as, not a cast, but as a mould for a mould allows us to treat the object as referring the sign (sic). Moulds are made by enveloping a resin version of what is to become the cast in clay, which is then burnt. This produces a 'positive' version of a 'negative' mould. Treating an object as mould for a mould is simply an inversion of our priorities. A well-known and prototypical inversion is the substitution of goods for money. Money initially receives its value from re-solving the differences goods make, e.g. a barter-

economy allowing tokens of IOU's. Soon however the money becomes value par excellence and goods are simply commodities valued in relation to money.

#### The re-entry

If we allow our odd monkey the capacity to negotiate both modes simultaneously, he would be capable of breaking down the communication and thereby arrest his automatic reactions to what now can be recognized as signals. He could choose to be alarmed alongside the other monkeys. But let us assume that he's the boy who cries wolf. He will soon realize that manipulating the medium makes it possible to manipulate his fellow monkeys. In a sense they 'obey' his scream, since they do not have the choice of disabling their automatic reactions.

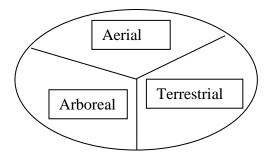


Figure 17

Our monkey may simply choose to enjoy his newly won sovereignty, but let us jump to his first crisis. Let us assume that power is paranoid and greedy. He will constantly be looking to enlarge his domain of control by naming everything around him. Will there be anything this sovereign will have to bow to himself?

Yes, there is. The moment he utters 'monkey scream' or any other term which breaks down his medium, his reign is over. The unique scream chosen, will have to obey the same rule as any other scream, but it also paradoxically refers (brings back) all screams. <sup>12</sup> The figure in the middle of figure 18 signifies such a 're-entry' term. <sup>13</sup>

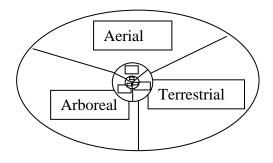


Figure 18

Note how the middle figure itself contains a middle figure. When a re-entry is employed the entire 'world' re-enters the world as an object within the world causing what has traditionally been known as an infinite regress. A world within a world within a world.... This is however a

<sup>12</sup> In our complex language we have to use terms such as 'everything,' 'existence,' 'all,' or the like. The same effect can be obtained by uttering 'me' or 'I' in relation to the subject or 'language' or 'medium' in relation to language.

<sup>&</sup>lt;sup>13</sup> Spencer-Brown introduced the term 're-entry' in Laws of Form (Spencer-Brown, 1972) which Luhmann developed in his oeuvre.

misunderstanding equal to the map-territory confusion. A term which is all-encompassing reproduces the entire field of differences, making it equivalent with the first mark. Crossing into this difference is thus equivalent to crossing out of the sum total of differences. We can ascertain this by revisiting the turtle. If we mark within the mark, there is no difference in journey for the turtle in PQ vs. PR in figure 19. In both cases it crosses two lines of distinction. If it started on the outside it ends on the outside and vice versa.

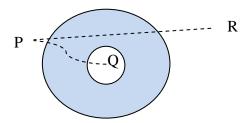


Figure 19

Again we have to countermeasure our reasoning which jumps ahead. We have to recall that our monkey until recently hasn't been able to see 'the other side' as we have been able to all along, i.e. he would e.g. be in one of the states in figure 17, but would have no idea that it differed from the other states, but more importantly the border circumferencing all of the states would not 'be there.' His world regardless of state would in that sense have no outside borders, but only the inside borders crossed when changing state. Crossing into Q in figure 19 is equivalent to crossing out to P. This changes everything. The outside border (to P) wasn't there until the inside border (to Q) was created. A monkey with such a capability transcends his conditions in the sense of being able to differentiate between states in the form of the observation of different screams. He will know that the aerial threat call *is not* the terrestrial threat call. In short he has taken a place among us as observers of figure 17.

If an inversion in relation to 1.order differences elevates us to 2.order and a breakdown of 2.order differences demotes us to 1.order, then the same thing will have to apply to 3.order differences. So a 3.order breakdown gives us 2.order signs and inverting the 2.order sign elevates us to 3.order. We have in one fell swoop become capable of indirect manipulation, not only of others but of ourselves. Whatever we posit about this re-entry applies to ourselves. Not because our situation is analogue to another, but simply by the force of our own insistence. If we want to maintain our insistence in the 2.order re-entry, we have to submit to its 3.order inversion. If I want to say something about philosophy of games as such, I will have to accept that it applies to what I write in equal measure.

#### A frame

The re-entry makes the jump from the odd monkey to us. The oddest monkeys so far. It allows us the possibility of re-negotiating the conditions of our meaning-making in toto. A reentry can be given many names. Bateson calls them frames, Barad calls them apparata. In game research we may call them games.

"Psychological frames are related to what we have called 'premises.' The picture frame tells the viewer that he is not to use the same sort of thinking in interpreting the picture that he might use in interpreting the wallpaper outside the frame. Or in terms of the analogy from set theory, the messages enclosed within the imaginary line are defined as members of a class by virtue of their sharing common premises or mutual relevance. *The frame itself thus becomes* 

part of the premise system. Either, as in the case of the play frame, the frame is involved in the evaluation of the messages which it contains, or the frame merely assists the mind in understanding that these messages are mutually relevant and the messages outside the frame may be ignored." (Bateson, Steps to an ecology of Mind, 1972, s. 187) (my emphasis)

A frame is an elevated 2.order sign signifiying a 3.order totality of signs. Make a change in the frame and you do not re-arrange a phenomenon, but your entire perceptual apparatus.

"...the nature of the observed phenomenon changes with corresponding changes in the apparatus."
(Barad, 2007, s. 106)

The observant reader will have inferred that such a totality will have to be differentiated within a 4.order. We find ourselves in the same situation as the monkey earlier. The world is simply the world. As such it has no borders. We may change world, but this would mean the same thing for us as the turtle crossing from one state to another. We change state, but are not capable of observing the change. Breaking one order down allows us to treat the problem of 4.order relating to 3.order as equivalent to 3.order relating to 2.order. Breaking down a 3.order world into 2.order allows us to extrapolate that our 3.order world relates to an outside 4.order, but from within the 3.order.

The re-entry allows the compartmentalization of reality; not into different parts, but different wholes. If we reconsider the position from which we observe the cosmic egg looking for the first difference which sets off creation, we can see that it is exactly a 4.order observation of all of existence marked as a 3.order difference. We also have an answer for what it is at the other side of the end of the universe? The answer is another (different) universe. Regardless of whether or not we believe in the many-world theory the circumferencing of all of existence simply serves the purpose of providing existence with an outside (or a mark) which qualifies it (the inside) from other comparable (possible) existences (outsides). 14

The progression through the different orders look like this (numbers signify order):

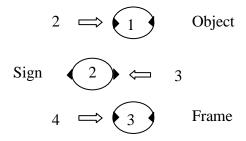


Figure 20

The black triangles signify that the border we cross are equivalent, in the sense that they bring together an inside and an outside, regardless of order (imagine a wrapping inside out of the circle). The change only resides in what is considered inside and what is considered outside. A re-entry (breakdown followed by an inversion) looks like this:

<sup>&</sup>lt;sup>14</sup> We have in effect created a statespace diagram of possible worlds.

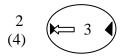


Figure 21

### A frame is a dorsi-ventral relation

We have arrived at a very simple statement. A frame (line of distinction) consists of an outside (dorsal or back) and an inside (ventral or front). The complex part is that an outside is the observation of a lower order system state by a higher order system state; while the inside is the production of said lower system state. The outside marks the production of a difference (the inside).

A re-entry produces the the observation of its own lower order system state by the breakdown and inversion of said state to a higher order system state. This is the autopoietic system. In Kantian terms we might say that an autopoietic system is transcendentally capable of establishing its own conditions of cognition. It observes its own production or if you like, inside and outside are on the same side. A little less enigmatic: an autopoietic system is capable of self-ordering vis-a-vis its capacity to read its own state from the lower order states it encounters. <sup>15</sup>

The effects of the re-entry are however not restricted to the position of the observer. As we have seen the production of the mark (or the observation) can be considered a higher order production (which in turn can be marked itself) and can be instantiated as differences, e.g. a map. What the dorsiventral relation shows is that the production of the inside difference simultaneously produces the higher order outside difference, since the outside difference is folded into the inside difference (to get at the beat of a beat, you have to have the beat). A stone produces the difference of a stone, blissfully ignorant that it simultaneously produces the mark of a stone. <sup>16</sup> The territory is territory because it, in spite of itself, imitates a map. We observers do not see an infinitely differentiated world. We see a world parsed out according to relevance criteria, interests and mappings, in short a marked world.

From an observers perspective the outside difference 'controls' the inside difference. Naming (i.e. marking) the world is a type of creative act. From an agents perspective the control depends on whether or not the agent is simultaneously an observer. If so, then any production of difference is reflexive. If not, then there's simply production of difference. This is extremely significant, because the inside difference possesses a diffent type of power than the outside difference; a type of power which is usually overlooked. We may say that the inside difference 'compels' the outside difference.

An example will clarify what I am aiming at. Let us posit that an actor is reflexive insofar he's capable of observing (i.e. marking) his own actions. If we assume that a reflexive agent seeks to throw a ball a certain distance. Throwing the ball is a negotiation of the 1.order differences (a material negotiation if you like) and simultaneously a negotiation of the 2.order

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<sup>&</sup>lt;sup>15</sup> The transcendental ego

<sup>&</sup>lt;sup>16</sup> It would do this even if there were no observers. The tree in the forest is a tree in the forest and it does make a sound regardless of us. What realist disregard is that a tree is many other things than a tree. There are worlds in which a tree is not a tree, i.e. it is not marked or mapped as a tree and has as such no relevant 'tree' features. Anti-realists on the other hand fail to listen to Korzybski: a mark is a mark not a tree.

mark 'throw ball 20 meters.' Whether or not he makes it, any (capable) observer including himself is compelled to negotiate the 2.order mark on the basis of the 1.order difference. The agent may wish for a certain result, but he is forced to submit to the 1.order difference (i.e. the result). If he throws 19 meters, he fails to differentiate the mark. Enter a monkey. Let us assume that this is a non-reflexive monkey. He simply throws the ball without intent or purpose. An observer of such a throw would still negotiate the 2.order mark 'throw ball 20 meters,' and still be forced to submit to the result, but the monkey would like a stone be blissfully ignorant, that it has prompted a 2.order mark (and consequently of its 'submission'). The monkey may have thrown 19 meters or 20 meters, regardless, it doesn't make a difference to him. 17

If somebody were to issue the order 'throw the ball 20 meters' to the agent and the monkey, only the agent would be able to comply, regardless of the monkey capacity to throw the ball. The monkey is fully capable of negotiating the 1.order difference, but because it cannot generate the 2.order mark there is no outside, and without an outside, there is no inside. In other words there is no intentionality and hence no instrumentality.<sup>18</sup>

#### What are the marks then?

Within a given frame differentiations are accomplished by marks. What is seldom realized is that the order of the frame is retained in the order of the marks, although these too can be broken down or inversed. E.g. we may say about an object that it is green, but it carries no meaning to talk about a sign or a frame being green unless 'green' is spoken metaphorically or sign and frame are broken down to objects (i.e. they are 'literally' green). Bateson uses the terms 'connections' to explain how orders relate. Connections can very loosely be equated with beats in this model.

- "1. The parts of any member of *Creatura* are to be compared with other parts of the same individual to give first-order connections.
- 2. Crabs are to be compared with lobsters or men with horses to find similar relations between parts (i.e., to give second-order connections).
- 3. The *comparison* between crabs and lobsters is to be compared with the comparison between man and horse to provide third-order connections." (Bateson, Mind and Nature, 1979, s. 20)

1.order marks allows us to talk about the world. 2.order marks allows us to talk about the things we say about the world and 3.order marks allows us to talk about talking. Because talk about talking in itself is talking we quickly encounter the reflexive paradoxes which Russel tried to solve with his theory of logical types. <sup>19</sup> We can shortcircuit the problem by asserting that in order for a 3.order frame to take its place alongside other 2.order frames, it needs to broken down. Any subsequent inversion reinstates the frame to 3.order but also have to apply

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<sup>&</sup>lt;sup>17</sup> This type of power is a mute power related to 'passive resistance.' It is an indirect control of the production of the 2.order marks through the only means a mute has, the manipulation of the 1.order mark, which is his body. By refusing to be a docile body under the willfull command of those in power of the 2.order, counterpower is produced.

produced. <sup>18</sup> One of course have to recognize that monkeys and other animals do seem to have some sort of selfawareness and that considerable evidence points to animals being able to use instruments. What I am suggesting here rather points to the development of reflexiveness as lying on a scale starting with perception, and the re-entry as a necessary event in the development of higher order cognizing.

<sup>&</sup>lt;sup>19</sup> Russell's rule states that no class can be a member of itself. See (Stanford Encylopedia of Philosophy, 1995)

to all other 2.order frames, making the observation (marking) of the 3.order only possible in 4.order. In short to provoke the paradox, you have to use a re-entry.

"The measurement of the apparatus entails a different phenomenon from the original one, and the connection of the two different phenomena would require a third, yet larger phenomenon entailing these." (Barad, 2007, s. 161)

# A map of maps

This finally brings us to the crux of the matter. A frame is an outside/inside (dorsi-ventral relation) or way of ordering the production of differences (marks), with the re-entry as a special case of self-ordering. Frames (or autopoietic systems) relate to each other by marks. The marks that mark frames qualify frames differently from the marks we use to characterize objects.

There is the subordination of frames of different orders. A higher order contains a lower order, but not vice versa. This is afunctional marginalization used in organizing. Each subgroup or organ serves a function in relation to the whole or superstructure.

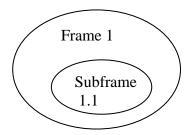


Figure 22

Marking the subframe creates relevance criteria for the extraction of utility. <sup>20</sup>The subframe(-s) is/are effectively reduced to their functional utility. Frames can be chained or nested within each other, so we might imagine a subsubframe 1.1.1, which allows the coupling of systems (economies), i.e. systems nested one within the other.

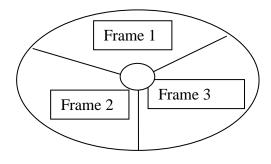


Figure 23

There is the competition of frames of the same order, which require that the frames are capable of metacommunication, by characterizing themselves indirectly via a higher order, i.e.

<sup>&</sup>lt;sup>20</sup> Compare with Marxist 'processess of intensification where labor is exploited in order to create surplus value. See also Deleuzes notion of the overcoding of the body without organs in A Thousand Plateaus (Deleuze & Guattari, 1987).

the frames need to be capable of the re-entry. Without an outside perspective of the frame, the respective frames would not be able to recognize each other as in competition. They would not ignore each other; they would be oblivious of each other. With an outside the competition of frames of the same order or will result in translations or deteriorate into basically either a fascist attempt by one frame to subordinate the others or a representational communal overcoding of all frame.

The fascist attempt would consist in one frame attempting to overcodes all others. This frame would simultaneously have to maintain a higherorder metaframe governing (including) all the frames and restrict access to this metaframe, excluding all (other) frames, citing their lower order status. The democratic inclusion inverses (in principle) this selfsame argument, by including all frames in the metaframe, citing their lower order status (i.e. one man one vote).<sup>21</sup>

The metaframe is a privileged center; one which circumscribes all other frames; one which we can always step out into. This is our everyday perspective, which has been un-covered elegantly by Goffman in his many studies of juxtapositioning the frontstage and backstage.<sup>22</sup> What he shows is that all people are quite skilled at differentiating between layers of reality, in order to discern when or if they are being manipulated, who is manipulating what and how they can see what is really going on. What is missing from this picture is that no frame is capable of resisting a breakdown. There is no such phenomenon as a single frame providing us with reality. We always seem to step out into the 'real' world, because the movement from lower to higher order is provided by the breakdown, and hence 'reality' seems omnipresent. The privileged center is a confusion of a change of order with a reduction.<sup>23</sup> Whenever marks such as illusion, fantasy, reality, work, seriousness, etc. are used, we see an ordering of frames which allows subordination.

"...to perceive this system as a cosmology requires that we observers take a further step, this time out of the worlds of culture in which the lives of all other humans are said to be confined. What the anthropologist calls a cosmology is, for the people themselves, a lifeworld. Only from the point of observation beyond culture is it possible to regard the Cree understanding of the relation between hunters and caribou as but one possible construction, or 'modelling', of an independently given reality. But by the very same token, only from such a vantage point is it possible to apprehend the given reality for what it is, independently of any kind of cultural bias." (Ingold, 2000, s. 14)

Compare with Huizingas eloquent breakdown of a rite:

"The sacred performance is more than an actualisation in appearance only, a sham reality; it is also more than a symbolical actualisation – it is a mystical one. In it something invisible and inactual takes beautiful, actual, holy form. The participants in the rite are convinced that the

 $<sup>^{21}</sup>$  In Kuhnian terms we see an impotent version of democracy. The incommensurrability of paradigms bestows a kind of immunity on each frame, based on their inclusion. In other words the criteria which include the frames in the metaframe are the same that prevent any meaningful marking of them. Hence the metaframe becomes incapable of differentiating.

<sup>&</sup>lt;sup>22</sup> (Goffman, The presentation of Self in Everyday Life, 1959)

Because I can break down a frame I presume that I have reduced it to a subdomain of my frame. What I don't recognize is that unless the breakdown is exhaustive, my frame can equally well be broken down by the other frame. In other words the higher order is communal, only by force can I prevent others from joining me in the higherorder frame.

action actualises and effects a definite beautification, brings about an order of things higher than that in which they customarily live." (Huizinga, 1970, s. 33)

We read from this that although the participants are clearly delusional (sham, symbolic), there is something gained, namely 'a definite beautification,' as opposed to the dreary experience of everyday existence. Huizinga's very outside position accomplishes a breakdown. Our position as observers enforces the breakdown regardless of any intention of our part on keeping it real or 'uncontaminated.

When we turn to 'playspheres,' 'magic circles' or 'games' from this perspective, what we notice is that we always seem to approach them from the outside.

"...play is not 'ordinary' or 'real' life. It is rather a stepping out of 'real' life into a temporary sphere of activity with a disposition all of its own' (Huizinga, 1970, s. 26)

These frames are marked even before we enter them; making their breakdown and thus our return to the metaframe of ordinary life a given. Ordinary life is at a standstill, but can always intervene and claim supremacy.

"The power of what Winnicott called 'transitional' experience comes from the fact that 'the real thing is the thing that isn't there.' In order to sustain such powerful immersive trances, then, we have to do something inherently paradoxical: we have to keep the virtual world 'real' by keeping it 'not there'. We have to keep it balanced squarely on the enchanted threshold without letting it collapse onto either side." (Murray, 1999, s. 100)

Why shouldn't it collapse to the side of the virtual world? I suggest that we subordinate play worlds, with terms like 'play' and 'games,' to a pervasive backstage or 'real world' simply because a play world by default threatens the supremacy of the frames which takes precedence, first of all work frames. In plain words: If the unreal world becomes 'too real' it is horrible, because it threatens the stability and supremacy of ordinary life frames. The fragility of the immersive trance does not stem from the virtual world, but the strength of the 'real world' breaking down the virtual world, hence Coleridge's term 'willing suspension of disbelief.'

By marking something play or a game or a sacred performance we are able to suggest a function or utility by which the real frame subsumes the frame at hand. We are at the same time given a handle, i.e. an entry condition which at the same time functions as exit condition of the frame (the re-entry). Huizinga has accounted for many different types of utility bestowed on play and games in Homo Ludens.

On this basis, I suggest that Bateson's famous statement about play as a type of metacommunication, should be revised.

"...this phenomenon, play, could only occur if the participant organisms were capable of some degree of metacommunication, *i.e.*, of exchanging signals which would carry the message 'this is play." (Bateson, Steps to an ecology of Mind, 1972, s. 179)

I would rather suggest that games and play phenomena are called games and play, because they are not able to carry the metacommunicative message 'this is real.' We should tread cautiously here. The message 'real' and 'play' are simply conveyed by the breakdown of a sphere. We have to keep in mind that these 4.order marks are not marks in the same sense as 3.order marks. 'To carry the message' should in this context be taken rather literally, as in 'carrying a state,' i.e. winning a state election. This reversal would let us out of the paradoxes created by play being functionally denoting 'real signals' or carrying the meaning 'not real'

"We face then two peculiarities of play: (a) that the messages or signals exchanged in play are in a certain sense untrue or not meant; and (b) that that which is denoted by these signals is nonexistent." (Bateson, Steps to an ecology of Mind, 1972, s. 183)

Bo Kampman Walther (Kampmann Walther, 2003) has shown how a significant part of play is concerned with the play with reality. A child gleefully running from a parent desparately trying to make the child go to sleep, is playing with the the parent's breakdown of 'playtime' from a frame of 'sleep time.' In the famous cartoon 'Calvin and Hobbes' when Calvins teacher appears in one of Calvins Sci-fi fantasies, he (spaceman Spiff) negotiates her as an alien. Most classroom teachers would manage to re-instate 'real' life by their simple presence.

On the other hand claiming supremacy doesn't necesarily involve a direct breakdown from the outside. Introducing a broken down object belonging to a different higher ranking frame<sup>24</sup> into a frame is enough to compel the onset of the intruding frame. E.g. a streaker, somebody's cellphone ringing or a public breakdown requires negotiation.

Given that no frame can resist a breakdown, does 'reality' become a matter of playing 'King of the Castle?'

"Disneyland is presented as imaginary in order to make us believe that the rest is real." (Baudrillard, 1994, s. 12)

Rather than capsizing on this postmodern reef. I suggest that reality becomes a matter of triangulation. Reality doesn't need to be a frame which resists all attempt of breakdown. Nor does it need to fix itself as the real center amidst a sea of copies, illusions, fakes and distortions. Reality is rather a floating center continously redrawn based on the relative weights given to the frames encountered.

If I know that big brothers soccer game takes precendence over my claim on the lawn for sitting and reading and my Mother's calling to dinner subordinates both, I know that the latter is closer to the center than either. I do not need to know, if Mothers calling in fact subordinates all other frames. But even Mothers call to dinner would have to yield for the sudden car accident on the road outside the house (It's all fun and games, until somebody gets hurt.) and so on. In the Robert Altman movie 'Short Cuts' three fishing buddies continues their fishing trip despite finding a dead man in the water. The horror one of the fishermens wife experiences is not a reaction to their reasoning (he was dead anyway), but to their dismissal of the 'real' worlds breakdown of their fishing frame (considered less real by the wife) On the other end of the scale are movies portraying post-nuclear apocalyptic worlds, which are exceptionally good at showcasing the breakdown of all that is considered real in an everyday manner. Who would care about any of our sophisticated cultural games during a nuclear winter?

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<sup>&</sup>lt;sup>24</sup> Not higher ordered!

In a slightly different line of thought Goffman uses the concept of transformation or keyings to cast light on how we play with reality and ordinary frames. His point can however be translated directly.

"When the key in question is that of play, we tend to refer to the less transformed counterpart as 'serious' activity; as will be seen, however, not all serious activity is unkeyed, and not all untransformed activity can be called serious." (Goffman, 1986, s. 46)

If something is really, actually or literally occurring we simply affirm its power to take precedence over other interpretations. We somehow knows this when we use the term 'serious' in relation to games. The attempt to reframe games as 'serious' can be seen as a way of debunking the ontological discussion. Huizinga struggles with the term when defines play as 'a free activity standing quite outside 'ordinary'life [..] being 'not serious,'' but at the same time claims that 'games have their own seriousness.' (Huizinga, 1970). The definition of serious games, as digital games and equipment with an agenda beyond entertainment, places games outside both categories (learning and entertainment) in that both the phenomenon of a game and the players experience (learning) of the game is real, although the game may somehow still be considered 'make-believe' by the users. It is a claim to be taken serious without challenging everydaylife.

What is the opposite of serious? Frivolous? Any frame which isn't taken serious looses its appeal. It ceases to be able to differentiate and is by default broken down. It is no longer engaging. On the playing ground these negotiations take place every day. Who wants to play alone? Empires have fallen because priest haven't been able to procure rain, the people defecting no longer believers (they are no longer serious or rather something much more serious is taking place).

Games and play are real and they are being taken seriously as such as long as they are played, but they are no match for other more established frames. They are readily broken, giving way to something which is taken more serious and therefore considered more real, the 'realest' of which is IRL or 'life' as we know it.

So many different worlds, so many different suns And we have just one world, but we live in different ones Mark Knopfler, Dire Straits, Brothers in Arms Barad, K. (2007). Meeting the Universe Halfway. Duke University Press.

Bateson, G. (1979). Mind and Nature. Glasgow: William Collins Sons & Co.

Bateson, G. (1972). Steps to an ecology of Mind. Chicago and London: University of Chicago Press.

Baudrillard, J. (1994). Simulacra and Simulation. The University of Michigan.

Borges, J. L. (1975). A Universal History of Infamy. London: Penguin Books.

Borges, J. L. (1998). Collected Fictions. NY: Penguin Group Inc.

Crawford, C. (2003). The art of Computer Game Design. New Rider Publishing.

Deleuze, G., & Guattari, F. (1987). A Thousand Plateaus. University of Minnesota.

Fichtel, C., Perry, S., & Gros-Louis, J. (2005). Alarm calls of white-faced capuchin monkeys: An acoustic analysis. *Animal Behaviour*, 165-176.

Frasca, G. (2003). Simulation vs. Narrative: Introduction to Ludology. I M. J. Wolf, *The Video Game Theory reader* (s. 221-235). Routledge.

Gibson, J. J. (1986). *The Ecological Approach to Visual Perception*. Hillsdale, New Jersey: Lawrence Earlbaum Associates, Inc.

Goffman, E. (1986). Frame Analysis. Boston: Northeastern University Press.

Goffman, E. (1959). The presentation of Self in Everyday Life. NY: Doubleday.

Henricks, T. S. (2006). Play Reconsidered. Urbana and Chicago: University of Illinois Press.

Huizinga, J. (1970). Homo Ludens. London: Paladin.

Ingold, T. (2000). The Perception of the Environmenet. Routledge.

Juul, J. (2005). Half-real. Cambridge: MIT Press.

Kaiser, H. (14. Kanuary 2007). A comment on Spencer-Brown's Laws of Form. Hentede 8.

August 2009 fra Law & Society Blog: http://www.lawsocietyblog.com/archives/349

Kampmann Walther, B. (May 2003). PLaying and Gaming, Reflections and Classifications.

Hentet fra Game Studies: http://gamestudies.org/0301/walther/

Koschmann, T., Kuutti, K., & Hickman, L. (1998). The Concept of Breakdown in Heidegger, Leont'ev, and Dewey and Its Implications for Education. *Mind, Culture and Activity*, 25-41.

Latour, B., & Woolgar, S. (1986). Laboratory Life. Princeton University Press.

Murray, J. H. (1999). Hamlet on the Holodeck. Cambridge, Massachusets: MIT Press.

Saussure, F. d. (1986). Course in General Linguistics. Open Court.

Spencer-Brown, G. (1972). Laws of form. N.Y.: Julian Press.

Stanford Encylopedia of Philosophy. (8. December 1995). Russels Paradox. Hentet fra

Stanford Encylopedia of Philosophy: http://plato.stanford.edu/entries/russell-paradox/

Tække, J. (2006). http://home16.inet.tele.dk/jesper\_t/Mediesociografi.pdf. Hentede 8. August 2009 fra http://home16.inet.tele.dk/jesper\_t/Mediesociografi.pdf

Winograd, T., & Flores, F. (1986). *Understanding Computers and Cognition*. Ablex Publishing Corporation.