Olav Asheim:
THE LUDIC PARENTHESIS

Three grades of somnial realism involvement
Is anything real in a dream? Some will say no. Somnial antirealism to the strongest degree argues that nothing can be real in a dream because dreams are so flimsy. This is one extreme position. Moderate somnial antirealism insists that real objects can never be imported into a dream, declaring quantification into somnial contexts meaningless. Somnial antirealism to the third and weakest degree maintains that somnial qualities alone will never suffice to constitute an object that can be referred to when you are awake.

Corresponding by negation to these three degrees of somnial antirealism there are in the reverse order three grades of somnial realism involvement: The first grade is to hold that something can be real in a dream; the second grade is to maintain that real objects can enter into dreams; the third grade is to vindicate that dreams can create objects that are in possession of extrasomnial qualities, hence having an extrasomnial reality. This is another extreme position, but it may well be the truth.

Let me introduce a few logic operators: The first operator I shall introduce is the well known existential quantifier "∃": "there is". A quantifier binds a variable, x or y, or Donald if you care for variable names that long. A quantifier has a scope. Its scope in standard logical notation is delimited by a left-parenthesis and a right-parenthesis. The parenthetical content is in all interesting cases an open sentence, containing at least one variable that is free in it. An open sentence is neither true nor false in itself, but if it contains only one free variable it is either true or false of any object its free variable can take on as a value[1]. In the general multivariable case we imagine all of these variables minus the one we are interested in to have been assigned values beforehand. As an operator the existential quantifier then closes the open sentence in a way that is similar to the linguistic operation of making a passive-construction out of an active-construction, like the transformation from "Kain kills Abel", holding Abel a constant, to "Abel is killed", binding the open sentence's remaining free variable, Kain, to produce a complete, generalized sentence with a definite truth value. A simple schematic example is the transition from "Fx" to "∃x(Fx)": there is an object x such that Fx, where "F" is a placeholder for some so far not defined predicate. (Since the scope of the existential quantifier is unambiguous in this case, I could have omitted the parentheses, but I shall use them consequently in this exposition.) An apparently more concrete example is the transition from "Donald is a Duck" to "∃Donald(Donald is a Duck)": there is a Donald such that Donald is a Duck. As long as the meaning of a duck with a capital "d" has not yet been stipulated, it is open to question what this means, so we end up with a schema

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[1] In Quine's view (Quine 1961), "to be is to be the value of a variable": Existence is what is expressed by the existential quantifier, and, in the famous words of Kant, it is not a predicate. I agree with Quine and Kant in this.

once again. Then there are the sentence-logical operators of negation, conjunction and disjunction; we will go into them if we have to.

The first new operator I shall introduce is the S-operator, "S" from "somnium", Latin for "dream"[2]. Like the existential quantifier is has a scope delimited by parentheses, but unlike quantifiers it is not the governor of a variable. Instead it has two subscripts: a "d"-subscript to refer to the person dreaming, and a "t"-subscript to refer to the time of the dream episode. Within the somnial parenthesis a whole story is told, call it "p" for "propositional dream content". Since p is bracketed the way it is, there is no pretension that it be true. However, the somnial operator builds an assertion, an utterance that is either true or false, on the basis of p. This assertion is that in the dream dreamer d had at time t, it is the case that p. This is different from asserting that p. Even so a first-degree somnial antirealist will insist that no such assertion can be made. Extreme somnial antirealism takes objection to the very idea of including dream contents in reality. Talking about dreams is a way of entering them again, somnial antirealism of degree one argues, and there can be no veridical cognitive content referentially anchored in this kind of somnial activity at all. I don't know whether anyone really thinks this about dreams, but I would find it likely, because some people seem to think something similar about fiction[3]. Somnial antirealism to the first degree will have nothing to do with a somnial operator for the reason that a somnial operator performs the function of turning the content of a dream into a fact by a simple transformation, and that is the reason I have chosen to include this position in my introduction to the ontological problem of virtual reality. A first degree somnial antirealist should perhaps stop reading here.

Moderate somnial antirealism accepts sentence constructions combining somnial operators with existential quantifiers as long as the quantifiers are within the scope of somnial operators and not the other way round. Writing "Somnially" for "$S_{d,t}$" for convenience, we have, according to moderate somnial antirealism, a decisive difference between

Somnially(∃Donald(Donald is a Duck))

and

∃Donald(Somnially(Donald is a Duck)).

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[2] A parallel fiction operator to my S-operator was first introduced to the literature as far as I know it by John Hayden Woods (Woods 1974). Woods emphasizes that his fiction operator does not reduce to the adverb "fictionally". The question of quantification into fiction contexts is not raised in his book. For a treatment of quantification combining with a fiction operator see my (Asheim 1996)

[3] See for instance (Walton 1990) and (Everett 2005).

Accepting the S-operator, moderate somnial antirealism admits the first construction as meaningful while holding that the second is not: There can be no quantifying into somnial contexts, it maintains, to the consequence that you never meet a friend or enemy from reality in your dreams. When you think you have had a dream about x, it was not really x you dreamt about, but a somnial counterpart of her. Besides, you are a somnial counterpart of yourself and not your real self in your dreams, according to this view. The thought that you alone are real in your dreams does not only lead to somnial solipsism, but it opens up for (restricted) quantification into somnial contexts as well.

Weak somnial antirealism accepts quantification into somnial contexts while taking refuge to a new type of counterargument to somnial realism of grade three. Weak somnial antirealism concedes that it is simpler and more economical to be a somnial realist as to people, places and other existents that enter into your dreams, but it excludes objects that are merely somnial in the sense that they have no extrasomnial individuality. I shall explain what this means.

What weak somnial antirealism accepts are sentence constructions of the form

∃Donald(… Somnially(… Donald is a Duck …))

when Donald has an individualiy outside the somnial parenthesis, and only then. By "individuality" I mean an identifying predicate of some importance: it is true of one and only one object if true of anything at all, and it should not be question-begging the way the predicate "is identical with Donald" is by bringing in an illegitimate reference to Donald by name. Nor should an individuality be question-begging the way the predicate "is in somnial possession of the Donaldian individuality" is question-begging when the question is whether an object can be somnially individuated at all. I shall go deeper into this.

Taking a hint from Quine[4], I will use the expression "Donaldizes" to represent an individuality predicate, so that we get:

∃Donald(Donald Donaldizes & Somnially(Donald is a Duck)).

This is a construction weak somnial antirealism will accept when the two conditions I mentioned before are met. On Condition One, "Donaldizes" should not lean on the property of being identical to Donald, illegally preserving Donald himself as a constituent of Donaldization. What weak somnial antirealism will not accept as an individuality predicate, then, is, first,

"__= Donald"

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[4] (Quine 61)

and similar more elaborate predicates, because

$\exists$Donald(Donald = Donald & Somnially(Donald is a Duck))

says as much as

$\exists$Donald(Somnially(Donald is a Duck)),

no more and no less, because every Donald admitted by logic is self-identical.

      What weak somnial antirealism opposes directly, is that it makes sense to quantify into a somnial context when there is no Donaldizing going on outside of somnial parenthesis. Invoking Condition Two, weak somnial antirealism will not accept

"is in somnial possession of the Donaldian individuality"

as a valid interpretation of "Donaldizes", for this seems to say the same as "Donaldizes somnially", and in our symbolic notation substituting "Donaldizes somnially" for "Donaldizes" turns

$\exists$Donald(Donald Donaldizes & (Somnially(Donald is a Duck))

into

$\exists$Donald(Somnially(Donald Donaldizes) & (Somnially(Donald is a Duck)).

The Donaldizing takes place within a somnial parenthesis of its own, and there is the beginning of an infinite regress in it. This is not a respectable individuality.

      Real things can be imported into dreams, but nothing can be exported from them to reality, according to weak somnial antirealism.

Games children play

Having said this about dreams, I want to go into games children play with themselves and others. These games are more inventive and diversified than computer games, as I see them, but I shall not go deeper into the issue. I am primarily interested in what play means to a child. Let me take a fictional example: In the comics strips *Calvin and Hobbes*, Hobbes is a doll in the shape of a tiger Calvin the boy plays fantasy games with. In Calvin's fantasy play Hobbes is transformed into a real tiger. In order to analyze this, I introduce a ludic sentence operator ,"L", syntactically similar to the somnial

operator "S", with a scope delimited as before by a left- and right-parenthesis preceded by the novel L-operator to the effect that everything that takes place in the parenthesized context is ludic. A ludic object may exist only within the ludic context as the value of a variable bound by a quantifier inside the parenthesis, or it may exist outside it as well if the ludic operator is in the scope of an existential quantifier preceding it. Incidentially all of this takes place within a more-encompassing fictionality parenthesis in our example, because it is borrowed from a comics strip. But the outermost parenthesis is not our concern here. My question, limited to the immediate surroundings of the game in question, is whether Hobbes the doll is identical to Hobbes the tiger or whether Hobbes the doll should be seen as a proxy of Hobbes the tiger, maybe in a dynamic simulation[5]. I shall argue that whatever the answer is we have to quantify into the ludic context: Either Hobbes the doll is rendered a tiger ludically, or Hobbes the doll goes proxy for Hobbes the ludic tiger in the extraludic ambience. The proxy-relation is not a relation inside the ludic parenthesis. It is a relation in reality. Because of that Hobbes the tiger must exist outside the ludic parenthesis as well to partake of the relation, as I see it. But others may see it differently.

In the general case there is a prop in a game, and this prop seems to take on the role of a ludic character inside the parenthesis. Let the prop be x and the ludic character y. What is the relation between x and y? Is it identity? This is one possibility. Is it a relation other than identity? This is another possibility. Or is the relation between x and y on some occasions identity while on other occasions a different relation? This is a third possibility.

The first hypothesis is that e.g. Hobbes the doll takes on ludic qualities that render it a tiger within the ludic parenthesis:

$\exists$Hobbes(Hobbes is Calvin's doll & Ludically(Hobbes is a tiger)).

As I see it, this is the most attractive hypothesis. It quantifies in, but its rival hypotheses do the same. It ensures us in addition that objects in a child's fantasy games are by and large toys imported from reality. In addition, this hypothesis is supported by the observation that Calvin more often than not seems to remain himself within the ludic parenthesis of the comics strip. If the ludic Calvin can be identical to the real Calvin, why should not Hobbes the doll be identical to the ludic tiger Hobbes? There is no logical impossibility in that. But, on second thought, this is perhaps not a very good argument, since Calvin at times seems to enter his own fantasy play as somebody or something else than himself. This creates difficulties for the generalized identity-only hypothesis.

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[5] See (Aarseth 2005). Aarseth distinguishes between simulated or virtual objects, real objects, and fictional objects, all of which can be present in a computer game at the same time.

There is more to be said about this. A person a child knows, a mother or a father for instance, is sometimes apparently imported from reality to the inner of the ludic parenthesis. In such cases Calvin's mother is often depicted as a monster. This is one way of doing it. The other way is to let a doll or some other artifact represent your father or mother in your fantasy play. It is often done that way too.

There is a problem with the combination of these two ways of doing it that renders the identity-only hypothesis untenable, as I see it. Say that Calvin owns a doll called "Mom"[6], a doll more or less in the shape of his mom, but easier to handle with its smaller size. Say that within the ludic parenthesis Mom the doll turns into Calvin's mother just like Hobbes turns into a tiger, and say, then, that Calvin's biological Mom suddenly intrudes from extraludic reality into the parenthesis. Calvin promptly makes a fury out of her in order to continue playing. The problem is that we have a total of three apparent objects here, leaving Calvin and Hobbes out: the monster, Calvin's mother, and the Mom doll; but the first hypothesis demands that there be only two: Calvin's mother and the Mom doll. Those are different. This is an extraludic observation. Within the game there are the monster and Calvin's mother. What can we make out of this? Mom the doll is not the monster. If Calvin's mother is identical with the monster, then Mom cannot be identical with Calvin's mother in the game without violating a fundamental law of identity: something cannot be identical to something and different from something at the same time.

Let me put this more clearly: The hypothesis that Mom the doll is identical with Calvin's real Mom in the game he is playing with himself until his Mom intrudes to become a ludic monster has the logical consequence that Calvin's Mom in the game is not identical to herself outside the game, because outside the game she is not identical to the Mom doll. The only possibility I can see then is that Mom and mother are different, Mom the doll representing mother in a way we have yet to go into. Anyway, what I think we can state already is that

$\exists$Mom(Mom is Calvin's doll & $\exists$Mother(Mother is Calvin's mother & R(Mom, Mother) & L_{Calvin}(Mother is a monster))),

introducing an R-relation, even though the nature of the R-relation in this case is so far not decided upon beyond the fact that it is not identity. However, this does not preclude the R-relation in the Hobbesian case from being identity.

Let me now introduce the C-operator, "C" for "causes __ to be a truth". The open space is to be filled in with a sentence, i.e. the expression of a proposition, p. In addition the C-operator is in need of an agent that we denote by a subscript, schematically "a", so that we get

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[6] There is nothing wrong with this. Everybody knows at least two people who go by the same name.

$C_a(p)$.

An instantiation could be

$C_{\text{Osama Bin Laden}}$ (George W. Bush is mad),

in words, the way I choose to paraphrase it: Osama Bin Laden causes the sentence "George W. Bush is mad" to be a truth on some interpretations of it, given a context and situation. There are problems with the concept of truth, and the concept of causal agency is very problematic, but I shall not go deeper into these issues. I just want us to pay attention to the fact that when Osama Bin Laden causes the sentence "George W. Bush is mad" to be a truth, then a relation obtains between Bin Laden and Bush, the relation of the former affecting the latter causally. Let us denote this relation by an "A":

A(Bin Laden, Bush).

Now let us make some replacements: let us replace "p" in

$C_a(p)$

with the sentence "L_{Calvin}(Hobbes is mad)" while at the same time letting the a-subscript to C be "Calvin". This results in

C_{Calvin} (L_{Calvin}(Hobbes is mad))

from which it follows by analogy that there must be a relation between Calvin and the ludic Hobbes: Calvin affects Hobbes causally. In symbols:

A(Calvin, Hobbes).

What is presupposed here, however, is that a construction like "L_{Calvin}(__ is angry)" is a legitimate predicate, true or false of objects even though it contains a ludic operator. Only ludic antirealists to the weakest degree will accept this, and then only within a domain restricted to preexisting objects. A further question is whether constructions starting with "C_{Hobbes}" can be meaningful. There will unfortunately be no time to go into that now.

Who dies in a videogame killing?
Turning finally to videogames and related phenomena, I will start by discussing identity criteria for the denizens of virtual worlds in order to assess their reality. Are we

committed to ludic realism of grade three when we play these games? Are some merely ludic objects, i.e. objects that have no respectable individuality outside the ludic parenthesis, even so the values of variables bound by existential quantifiers preceding and taking precedence over the ludic operator? Many objects in videogames can be seen advantageously as values of variables bound by existential quantifiers within the scope of the ludic operator, with no real reality, and they have to be seen that way too when their identity is not clear, as when it is not clear whether the monster met with at one stage in the game is identical to the monster met with at a later stage. Instead of a monster it could be a tree, say, or some other piece of stage scenery. In such cases the ludic object can have no extraludic existence. But are there cases in which we have to quantify in over ludic objects? I am afraid there are.

I have the feeling that ludic objects are becoming more and more real these days, not only in the vulgar sense of becoming more money-infested, but in other ways too. In the deepest sense I think they have been real all of the time, even though there are some reasons for doubt. One of the reasons is that I have killed Lara Croft more than once. For example, I have let her fall to her end from the roof of a high building; not as an intentional act, but as an unintended side effect of not being agile enough to ludically bring her securely by a long jump from this roof to the next. I am not alone in having killed her. Lara Croft has died so many times in so many game episodes played by so many players. How can there still be a Lara Croft?

One hypothesis is that there is one Lara Croft dying repeatedly to end a multitude of ludic lives. Another hypothesis is that there are as many Lara Crofts as there are beginnings of episodes of someone playing a Lara Croft game regardless of the ending. Which is more likely? Neither hypothesis commits us to strong ludic realism, but they both seem to be compatible with it. However, the first hypothesis, that there is only one Lara Croft, shared by all players, renders her more intersubjective.

Now consider what happens when a person as an example of an object is apparently imported from extraludic reality into a videogame and given a role there. For instance, J. F. Kennedy, the American president who was shot to death in November 1963, seems to recur as the target in the First Person Shooter game *JFK: Reloaded*, released in 1999. Apparently the ludic Kennedy is identical with the real Kennedy. However, we can also see the JFK character as a proxy of Kennedy in a simulation of the fatal shooting while at the same time seeing the bit-pattern on the screen as a proxy of the JFK character if we prefer to see it that way. Then there is no identity between the three, and there may be as many JFKs as there are episodes of playing the game. I will take no final stand on this question here.

Let us instead take a brief look at MMORGs like *Second Life* and the inhabitants of their universes. It seems that some pieces of inventory in an MMORG universe are intersubjective in the sense that many players relate to them, in some cases perhaps several thousands directly at the same time. In addition, the players are real people who communicate with each other. Does not this make their avatars and other ludic objects

real in the sense that they must have an existence outside the ludic parenthesis as well as inside it, given the R-relation?

There are apparently many reasons to think that ludic objects can have an extraludic existence. One argument is the economical one: Objects in a computer game sometimes have a price; they can be bought and sold outside the ludic parenthesis and this makes them real. The counterargument to this is that what is bought and sold is a legal right only, and there may be no real object involved in the transaction. The Disney company has for instance bought the Norwegian version of Winnie the Pooh, Egner's Ole Brumm, even though Brumm is a fictional object and dubious beyond that since it seems unclear if Brumm is really identical to the Pooh.[7] That you can buy something does not mean that it exists.

Ludic objects are our primary concern here, however. Do they exist? A different argument in favor of that is that objects, for instance objects of art, can be created within the game. What is the difference between a virtual work of art and a real work of art? Isn't a painting, a sculpture or an installation in *Second Life* a piece of art in reality as well?

Many games, computer-based or not, are simulation games. This means, as I see it, that the game makes use of actors and props that go proxy for the objects whose behavior they simulate. Occasionally an actor or prop goes proxy for themselves. Props in videogames can be identified with pictures on the screen and their associated sounds. Props are there to help the player have a parenthesized experience of something going on, like a lucid dream, though of poorer quality. Even so, in the way that you may sometimes be in doubt as to whether you are dreaming or not, there are also occasions on which players of simulation games have reason to doubt that what they are engaging with is only simulation and not the real thing. A player of a FPS game could be killing someone in reality. How can we decide at the moment of having an experience whether it is veridical or not? This old Cartesian doubt has become even more vexing in our postmodern electronic age. My modest conclusion is that what our awareness is directed at in a simulation game is not only the prop, but also the thing it goes proxy for. So there is at least an intentional relation to virtual objects. The question is whether this is a real relation, or something that is a relation only if there is a real object to relate to.

If we extend Gareth Evans's theory of thoughts[8], and choose to follow his advice, as many do, we should distinguish between veridical experience and something that feels like experience. The distinction between a dream and a real experience should, according to this view, fundamentally be a distinction between experience-feelings which are in lack of a referent for some of their references, and those that are not. This cannot be decided within the phenomenological realm because the possible referents are

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[7] See (Everett 2005) for a discussion of this kind of vague identity.
[8] Evans's posthumous work *The Varieties of Reference* (Evans, 1983) has influenced modern direct reference theory to a not negligible degree.

transcendent in the Husserlian sense. In Evans's view you cannot infallibly know whether you have a thought or not. You may have a thought-feeling, but you cannot make sure on your own alone by introspective or proprioceptive means if it corresponds to a thought. At a certain point the world takes over. Many, maybe most reference theorists today, think that way. Transferred to the field of simulated objects, direct reference theory in the tradition from Kripke[9] has a choice between accepting these objects as real or construing direct ludic experience as devoid of a (complete) propositional content, reducing it to a kind of experience-feeling. If the name "Lara Croft" as used to name the heroine in a series of videogames is empty, then there is no ludic story or simulation of her, according to extended standard Kripkean reference theory, but only something that feels like that. One could see this as extreme ludic antirealism, taking it to insist that a game experience is never propositional in the sense that there is nothing that could be true in it because it refers to nothing, but I think it is better construed as moderate ludic antirealism, accepting a ludic sentence operator while rejecting quantification into ludic contexts.

      I shall not dwell on this, however. My aim here has just been to introduce some conceptual tools that I think will be useful in the analysis of certain man-made objects.

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[9] Kripke's *Naming and Necessity* (Kripke 1980) caused a paradigm shift in reference theory. The movement in this directction was instigated by Keith Donnellan (Donnellan 1966).