

# The Metaphysics of Avatars and Their Relation to Players

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## 1. Two Questions

The theme of this conference is 'Player Identity'. I was asked to speak because I know something about personal identity, and the players of computer games are people. What is personal identity? Philosophers, psychologists, and social scientists use the term to mean completely different things. But the philosophy of personal identity, construed broadly, has to do with philosophical questions that arise about ourselves by virtue of our being people (as opposed to questions arising about ourselves by virtue of our being for instance conscious beings, or physical objects, or living things).

Do computer games raise questions about personal identity? Well, many of the characters in computer games are people--or they at least appear to be. They are people in the Lockean sense: rational, intelligent, self-conscious beings. (A person in this sense need not be human: gods and angels and intelligent Martians would be people--or, as some philosophers prefer to say, 'persons'). So we can ask: How do the people in the game--the characters--relate to us, the players? This might seem an odd question. No one would ask how the characters in novels relate to us, the readers. That's not a very gripping question--not, at least, if it's a metaphysical question. But we seem to have a more intimate relationship with certain computer-game characters than we have with literary characters. In many computer games there is a character whose actions I control, and whom I refer to as 'me': my avatar, as the jargon has it. So how do players relate to their avatars? Are the player and the avatar identical or distinct?

As I see it, the way to answer this question is to work out what sort of thing an avatar is. What is its metaphysical nature? What is it made of? Is it, for instance, a material object? For that matter, do avatars exist at all? Is the moving image on the screen really a picture of anything--that is, any specific object? Or is it just a picture? So if we want to know how the characters in computer games relate to us, the players, we need first to know something about the metaphysical nature of such characters.

## 2. Three Answers

So what sort of thing, metaphysically speaking, is an avatar? (We can set aside other computer-game characters for now.)

Three sorts of views come to mind. First, avatars are 'virtual' or 'digital' objects. They are created by the computer, or by the computer together with the designer or the player. We bring them into existence by pressing keys and clicking the mouse. They are computer-generated objects. This implies that players and their avatars are distinct: we are not digital, computer-generated objects. I am not my avatar

because he or she has properties that I lack. Of course, I might 'identify with' my avatar in a psychological sense--in the sense that I control her behaviour and see her interests as an extension of my own. Her actions are, in a way, my actions. Her success is my success; her failure is my failure. The nature of this 'identification' is an interesting psychological question. But I want to talk about metaphysics, not psychology. We might call this the virtual-reality view.

A second view is that there are no avatars. The reason would be that there are no virtual or digital objects at all. When playing the game we may appear to be referring to avatars and other characters: Mario has just got a hole in one; Yoshi is going to miss his putt. But this is mere pretend reference. Describing what happens in the game is like telling a story. If I say, 'Cinderella fled the ball at midnight but left behind her shoe,' I'm not really referring to a girl called Cinderella, or to a ball or a shoe. I'm only pretending to do so. The view is that avatars and other characters in computer games have no more reality than Cinderella. And if there are no avatars, the question of how players relate to their avatars does not arise. Call this the no-nonsense view.

A third view is that avatars are not digital objects, but real human beings: they are the players. My avatar is me. She may not look like me, but there's no reason why I have to look the same in the game as I do in real life. Some of the other characters in the game might be real objects too. If the game is set in London, then the London I see in the game might be the real London. Other characters will presumably not be real objects existing outside the game, e.g. the space aliens infesting London and lying in ambush for you and your friends. These other characters might be purely digital objects. Or they might not exist at all. This implies that the characters in the game come in two different metaphysical kinds: some are real human beings, places, and so on, while others are either purely digital objects or have no existence at all. Call this the mixed view. At the end of the paper I will consider a more complicated variant of the mixed view.

There may be other views about the metaphysics of avatars that haven't occurred to me. Suggestions welcome.

### **3. The Virtual-Reality View**

Consider first the virtual-reality view: avatars, and presumably also other computer-game characters, are virtual or digital objects. They exist only in the game, and have no reality outside it. There is no more possibility of my meeting a computer-game character in a dark alley on the way home from work than I might meet Sherlock Holmes or Bilbo Baggins.

Here are two considerations in support of this view. First, it's natural to say that we create our avatars. We bring them into existence. And if I choose to delete a character, or if all traces of it are erased from the computers' memory, it will cease to exist. So I can bring an avatar into existence, and I can destroy it, simply by pressing the keys on my computer. What sort of object could I create or destroy in

that way? Well, some sort of digital or virtual object.

A second argument derives from the thought that computer games are electronic versions of old-fashioned 'analog' games played with real physical objects. Pong, for example, is just air hockey with the puck, the bats, and the rectangular surface replaced with electronic or virtual objects. Here is a brief history of computer games that illustrates this thought. The history is fictional, but philosophically illuminating, I hope.

Once upon a time, in the innocent, predigital age before most of us were born, people played things like computer games with real physical objects. There was a large box filled with a miniature landscape of buildings, streets, bridges, rivers, and so on. Each player had a puppet that he could move within this landscape. In the earliest period it was a marionette moved with strings: a man, a teddy bear, a princess, or whatever. As the games became more sophisticated, the marionets were replaced with motorized, robot-like objects whose movements could be controlled with a joystick, as with remote-control cars and aeroplanes.

Then the mechanical hardware was gradually replaced with computer animation. First the windows through which the players peered into the box were replaced with video cameras, so that the players didn't actually have to meet together in the room with the box, but could play the game from their own computer terminal at home. Then photography gave way to computer-generated images. This meant that you didn't have to look at dull video footage of puppets moving around in a cardboard landscape. Everything could be embellished. Both the characters and the background could look completely different from the physical objects they represented. Rather than a crude cardboard model of London, you would see a three-dimensional computer model, showing London as it appears only in the imagination of the game's creators. And the avatars too could look very different on the screen to the way they are in reality. The dusty robotic teddy bear stumbling about inside the box might look like a muscular, graceful, and sweaty elf-warrior on the screen.

Finally it was possible to do away with the box and the robotic figures altogether and run the whole thing on a computer. The robotic puppets were replaced by electronic puppets, whose movements the players controlled not mechanically but electronically. The cardboard landscape was replaced by a digital or virtual landscape. Physical objects and mechanical actions in real space were replaced with electronic or virtual objects performing virtual actions in virtual space--much as in today's offices paper documents have been replaced with electronic documents and the physical action of marking on them, mailing them, and so on have been replaced with electronic equivalents. Whereas old-fashioned games consist in people moving physical objects about in space, computer games consist in people moving 'virtual' or electronic objects in a 'virtual' space. Moving your 'raquet' up and down to meet the ball in Pong, to take a crude example; controlling the movements of an avatar in more sophisticated games.

#### 4. The Crude Virtual-Reality View

But what sort of thing is a digital or computer-generated object? It might be a physical object literally located within the computer. It might be a material thing: a spidery object made of copper and silicon, consisting of those bits of the computer hardware that are responsible for the image on the screen. Its size and location would presumably change as the game is played. You could actually see it by looking inside the computer, though as it would not contrast in any visible way with its surroundings, it wouldn't be much to look at.

Or maybe it's not a material object but an electrical event going on within the spidery, wiry thing. This might be better because you don't seem to bring any physical piece of computer hardware into existence when you play a computer game. But you do bring about certain electrical events within the computer.

These spidery objects or events have few of the properties that computer-game characters appear to have. They are not human beings or animate beings of any other sort. They don't run or speak, or think or feel pain. You might say that they are 'human' or 'run' or 'speak' in a special 'virtual' sense, different from the sense in which you and I are human or run or speak. The idea would be that for every way a 'real' object can be, there is a corresponding way that a computer-generated object can be. When, in the course of playing or creating a computer game, you do what we call create a man or a woman or a monster, you do create something, but not really a man or woman or monster. Rather you create something that is 'virtually' a man or woman or monster. So there is a function mapping 'virtual properties onto 'real' properties. We don't know what the function is: we don't know--or at least I don't know--how a spidery, wiry object inside the computer has to be for it to be true to say, in the context of the game, that it's a man, or is running, or is feeling pain. But maybe that is something we could find out.

Call this the crude virtual-reality view. It sounds like the right thing to say about electronic documents. The object stored in the computer's memory doesn't really have such properties as double spacing or Arial Unicode font; it's not in English or Greek. Rather, it has 'digital' or 'machine' properties that the computer turns into something we can read. And there is a function mapping these digital properties onto the visible properties displayed on the screen or the printout.

But it sounds like the wrong thing to say about computer-game characters. These characters don't seem to be spidery, wiry objects or electrical events within the computer. The image on the screen is not an image of some wiry object or electronic event behind the screen. The image doesn't depict that wiry object. What goes on within the computer causes the image on the screen, but it's not what the image represents. Why am I so sure? Well, if computer-game characters are physical objects inside the computer, then computer-animation characters should be too. Though Buzz Lightyear appears on the screen as a man (sort of), in reality he's a wiry thing within the computer; and his being a man in the story is really his

having some unknown wiry property. That can't be right. If there is such an entity as Buzz Lightyear, he couldn't be that sort of thing.

## 5. The Extravagant Virtual-Reality View

Is there anything else that digital or computer-generated objects could be? Maybe I'm being too unimaginative and literal-minded. I'm not taking seriously the idea that these are virtual objects. That means they're not physical objects literally located within the computer hardware. I'm looking for them in the wrong place. They inhabit a virtual world of their own. Isn't that what we mean when we say that they exist only in the game? The wiry physical objects and electrical events inside the computer don't exist only in the game. They exist in reality--that is, in our world. But computer-game characters should have no more existence in our world than characters of fiction have. That's why there's no more chance of meeting Mario on the golf course than there is of meeting Bilbo Baggins on a woodland path. So maybe the action in a computer game takes place in a virtual world--a place that is not in a subregion of our world, perhaps with different laws of nature. This would allow that computer-game characters might really be men or women or Martians, and they might really run or speak or feel pain. We wouldn't need any troublesome function from virtual properties to real ones.

I am tempted to call this the extravagant virtual-reality view. It's extravagant because it would mean that the screen in a computer game is a window into another universe. The action on the screen depicts events that take place outside our cosmos. We can learn about this other universe by watching the screen, and affect it by pressing buttons on the keyboard. (Curiously, The beings in that other world do not have the same powers to affect our world. They can make a difference to what appears on our computer screens, but they can't directly control the movements of people in this world, or injure or kill them. With us it's the opposite: we can't, usually, affect the images on their computer screens because they usually haven't got computers.)

Players of computer games would have enormous moral responsibility. Our actions in the game would have real effects for real sentient beings--that is, beings who can literally suffer and feel pain. To injure or kill someone in a computer game would be to injure or kill someone differing from ourselves only by inhabiting a different cosmos. The creators of computer games would have even more to answer for: they would be godlike creators of whole universes. Presumably this would be true not only for computer games but for ordinary fiction as well: storytellers and filmmakers would also create worlds inhabited by sentient beings.

But I needn't go on. This is absurd. There are no virtual objects.

## 6. The No-Nonsense View

So the 'digital' objects in computer games cannot be physical objects inside the computer, and they cannot be 'virtual' objects in virtual worlds. I don't know what

else they could be. So I have to conclude that there are no such objects. That is, there are no computer-generated objects that are characters in computer games. The virtual-reality view is false.

This suggests that the images on the screen don't depict anything. They're just pictures. They may depict or represent certain kinds of objects and events, but they don't depict any particular things. It's as if I draw a picture of a cat--not a portrait of some specific animal, but just a generic cat picture. The images on the screen in computer games are like that. This is what I called the no-nonsense view: there are no computer-game characters. None of the pictures on the screen represent any specific object, and all reference to avatars and other characters in the game is pretend or make-believe reference. We can say within the context of the game that Mario is running, but we don't thereby refer to anything that does anything analogous to running. There is a moving picture on the screen of someone running, but that's it.

But I don't think the no-nonsense view is right. Some of the images on the screen do depict specific things. Some of the characters or objects in the game really exist. If a game is set in London, then the background on the screen really does depict London. London is a character, so to speak, in the game. Particular London landmarks might be as well: we might recognize Trafalgar Square, St Paul's cathedral, Tower Bridge, the Thames. The image of St Paul's on the screen is not just a generic picture of a church. Nor does it represent a 'virtual' church. It's a portrait of the real, stone-and-mortar building, even if it looks different in the game from the way it looks in reality.

So at least some of the characters in computer games really exist. There might be real people in computer games too: Hitler, say. And some of the characters might be ourselves, the players. They're the avatars. My avatar really is me, just as the London in which the game is set is the real London. The image on the screen is a picture of me, just as an image on the screen is a picture of St Paul's. The picture may not look like me, but it's still a picture of me.

This is the mixed view. Some of the characters in computer games exist and some do not. We say the same thing about fiction: some of the characters in War and Peace exist and some don't: Napoleon and Tsar Alexander and Moscow exist; Pierre Bezukhov and Andrei Bolkonsky do not. There is no intrinsic difference between those screen images that represent real people and things and those that represent nothing, and it may be far from obvious which is which. That's because representing something is a relational property.

## 6. The Mixed View

The mixed view raises a number of questions and objections. I will mention two.

First, if a player is her avatar, there cannot be any difference between them. My avatar cannot have any property that I lack, or lack a property that I have. This is surprising, and sounds wrong. My avatar might be shocking pink, winged, and

eight feet tall. But I'm not (as you can see). Likewise, I am a middle-aged academic living in Yorkshire but my avatar is not. Why would I want to play a computer game that's just like real life? How, then, could I be my avatar? How could I be both a middle-aged academic and not a middle-aged academic, both winged and not winged?

I don't think this is a serious problem. Suppose I'm an actor playing the role of Widow Twankey. Widow Twankey is female and Chinese; I am neither female nor Chinese. Must we infer, then, that there are two beings on the stage, Olson and Widow Twankey? I hope not! Surely I'm simply pretending to have the properties of Widow Twankey: to be female, Chinese, and so on. And in the computer game I'm pretending to have the properties of my avatar: being pink and winged. At any rate, I have those properties in whatever sense I have the properties of being female and Chinese when I'm on the stage.

The general solution is to distinguish the properties I have in the game from those I have in reality--that is, those I just plain have, without qualification. You can point to the character on the screen and say, 'That person has wings'; or you can say, 'That person is an middle-aged academic'. As long as you don't try to say both at once--that she is both winged and an academic--there's no problem. The distinction between the properties we have in reality and the properties we have or are ascribed within the context of a game--whether a computer game or an old-fashioned make-believe game--is an interesting one, and there is much to be said about it. But it's familiar enough. If there is any problem here, it's not specific to my proposed view about avatars.

What about the fact that we create our avatars? I brought my avatar into being. I didn't bring myself into being. And bringing my avatar into being is not a property I have merely in the game. In fact I don't have it in the game at all. Here we need a different solution. If I am my avatar, I can't have brought her into being. She must have existed for as long as I have existed--even (if I am so old) before there were any computer games as we know them. So I don't really create anything when I devise my avatar. I merely make a decision about how to appear in the game, like an actor choosing a costume and mannerisms and accent. We call this 'creating a role', but it's not really a case of bringing an object into existence.

## 7. Complications

Here is the second objection: Can't the same computer-game character be the avatar of more than one person? Suppose we're playing Mario Golf (my son's favourite computer game). Today I'm Mario and you're Yoshi. Tomorrow we swap. But you and I can't both be identical to one thing. Nor can I be one thing today and another, numerically different thing tomorrow. We could put the objection like this: If players are their avatars, then

1. I = the thing that is Mario today.

2. You = the thing that is Mario tomorrow.

But it's the same character both days, played today by me and tomorrow by you:

3. The thing that is Mario today = the thing that is Mario tomorrow.

From this it follows that

4. I = you,

which of course is false. Another version of the objection turns on the apparent fact that someone can have more than one avatar. I might be Mario today and Yoshi tomorrow.

5. I = the thing that is Mario today.

6. I = the thing that is Yoshi tomorrow.

It follows that

7. The thing that is Mario today = the thing that is Yoshi tomorrow.

But this looks false: Mario and Yoshi are different characters. No character in the game starts out as a man and turns into a dinosaur.

This problem is not so easily solved. We could try rejecting 3--that is, denying that there is any character that is both my avatar today and your avatar tomorrow. The Mario that is my avatar today is not the Mario that is your avatar tomorrow. It's like the case where I play Widow Twankey in tonight's production and you take the role tomorrow night. In that case 7 would be true, just as it might be true that tonight's Widow Twankey is tomorrow night's Aladdin.

But this too is problematic. Consider these statements:

8. Mario has been a character in more than 200 different games.

9. Mario is the most famous character in video-game history.

10. Mario was created by Shigeru Miyamoto in 1981.

These are claims about the history of computer games. I got them from a Wikipedia article, so they must be true! But if Mario is an avatar and avatars are just players, they can't be true. No player has been a character in more than 200 different games, or is the most famous character in video-game history. Nor, I suppose, was any player created by Shigeru Miyamoto in 1981. (He might have fathered a child in that year, but that's not what 10 says.) It seems to follow that Mario is not identical to any player of the game.



This sort of argument is familiar from the philosophy of literature. Consider

11. Sherlock Holmes has been a character in many stories and films.
12. Sherlock Holmes is the most famous fictional detective in literary history.
13. Sherlock Holmes was created by Arthur Conan Doyle in 1887.

It is difficult to account for the truth of these statements--and they certainly appear true--without admitting the existence of Sherlock Holmes and other fictional characters. But of course Holmes is not identical to any 'real' human being. This leads some philosophers to conclude that fictional characters such as Holmes really do exist--though they are abstract objects and not human beings or detectives or the like.

If these philosophers are right, then there is such a character as Mario. He is not a concrete object located inside the computer, or a man inhabiting a 'virtual world', but something abstract and not located in space at all. And maybe characters in computer games that are not avatars exist as abstract objects too. This would complicate my proposal. Now there are two candidates for being the avatar appearing on the screen at any moment: the player currently manipulating that image, and the character itself, who may be 'played by' other human beings at other times. The image on the screen represents two different beings, the player and the character, though it represents them in different ways. It would be nice to know what these two different modes of representation are.

I'm not too worried about this, however. For one thing, the problem is not specific to computer games. Suppose I play a certain character in a puppet show: Punch, perhaps. I both move the puppet and speak his lines. Then the puppet on the stage represents two different beings: both me and Punch, the character played by other puppeteers on other occasions. It represents these two beings in different ways. And they seem to be the same modes of representation that figure in the case of avatars. In this regard at least, the metaphysics of computer games is no more baffling than the metaphysics of puppetry.

Nor is the existence of abstract computer-game characters of much interest to questions of identity. It's clear that no player is identical to an abstract character. The interesting question about player identity is whether there are concrete, active computer-game characters distinct from the players. That I think I have ruled out.