

many sub-quests that are part of the main quest. It also has lots of side quests, given to you by characters you meet throughout *Arcanum*, which you can choose to do or ignore. (Though you can gain experience and, thus, more experience points to distribute to your character if you do them.) By the time you finish, your character is very different from the characters other players would have built, and the game you have played is very different from what it would have been had you built your character differently initially and throughout the game.

THREE IDENTITIES: VIRTUAL, REAL, AND PROJECTIVE

A game like *Arcanum* involves playing with identities in very interesting and important ways. When one plays *Arcanum*, and role-playing games like it, three different identities are at stake. All are aspects of the relationship: “A real person (here James Paul Gee) as a virtual character (here Bead Bead).” They operate all together, at once, as a larger whole.

First, there is a *virtual* identity: one’s identity as a virtual character in the virtual world of *Arcanum*—in my case the Half-Elf Bead Bead. I will represent this identity as “James Paul Gee as *Bead Bead*,” where Bead Bead is italicized to indicate that, in this identity, the stress is on the virtual character Bead Bead acting in the virtual world of *Arcanum* (though I am “playing/developing” her).

In the virtual world of *Arcanum*, given the sort of creature Bead Bead is (a female Half-Elf) and how I have developed her thus far, there are, at any point, things she can do and things she cannot do. For example, at a certain place in the game, Bead Bead wants to persuade a town meeting to fund the building of a monument to please the town’s mayor. To do this, she needs to be intelligent and persuasive. Half-Elves are, by nature, pretty intelligent, and I had built up Bead Bead to be persuasive during the game (i.e., given her points in this area). Thus, she was able to pull off the task at the town meeting (something I very much doubt a Half-Orc could have done, though Half-Orcs have other talents). These traits (her intelligence and persuasive skills) and her accomplishment at the town meeting—for which she received ample praise—are part of my virtual identity as Bead Bead.

The successes and failures of the virtual being Bead Bead (me in my virtual identity) are a delicious blend of my doing and not my doing. After all, I

made Bead Bead and developed her, so I deserve—partly, at least—praise for her successes and blame for her failures. Yet Bead Bead is who she is—a female Half-Elf—and must move through the world of *Arcanum* and be formed, in part, by it, a world I did not create. Thus I am, in this sense, not responsible for her successes or her failures. I suppose this is how many a parent feels about his or her child, save that in this case, I (James Paul Gee) am my own child (Bead Bead).

A second identity that is at stake in playing a game like *Arcanum* is a *real-world identity*: namely, my own identity as “James Paul Gee,” a nonvirtual person playing a computer game. I will represent this identity as “*James Paul Gee* as Bead Bead,” where James Paul Gee is italicized to indicate that, in this identity, the stress is on the real-world character James Paul Gee playing *Arcanum* as a game in real time (though Bead Bead is the tool through which I operate the game).

Of course, in the real world I have a good many different nonvirtual identities. I am a professor, a linguist, an Anglo American, a middle-age male baby boomer, a parent, an avid reader, a middle-class person initially raised outside the middle class, a former devout Catholic, a lover of movies, and so on through a great many other identities (most of which need not be mentioned here). Of course, these identities become relevant only as they affect and are filtered through my identity as a video-game player playing *Arcanum*. And, indeed, any one of my real-world identities can be so engaged whenever I am playing *Arcanum*. Which of these identities, for instance, was at play—positively or negatively—when I got such joy at having Bead Bead pick rich people’s pockets? When I chose to be a female Half-Elf in the first place? When I chose to use my points to make her as strong and good as a male at melee fighting with a sword?

A third identity that is at stake in playing a game like *Arcanum* is what I will call a *projective identity*, playing on two senses of the word “project,” meaning both “to project one’s values and desires onto the virtual character” (Bead Bead, in this case) and “seeing the virtual character as one’s own project in the making, a creature whom I imbue with a certain trajectory through time defined by my aspirations for what I want that character to be and become (within the limitations of her capacities, of course).” This is the hardest identity to describe but the most important one for understanding the power of games like *Arcanum*. I will represent this identity as “James Paul Gee *as* Bead Bead,” where the word “as” is italicized to indicate that, in this identity,

the stress is on the interface between—the interactions between—the real-world person and the virtual character.

A game like *Arcanum* allows me, the player, certain degrees of freedom (choices) in forming my virtual character and developing her throughout the game. In my projective identity I worry about what sort of “person” I want her to be, what type of history I want her to have had by the time I am done playing the game. I want this person and history to reflect my values, though I have to think reflectively and critically about them, since I have never had to project a Half-Elf onto the world before. But this person and history also reflect what I have learned from playing the game and being Bead Bead in the land of *Arcanum*. A good role-playing video game makes me think new thoughts about what I value and what I do not.

I, the real-world person, James Paul Gee, a creature with multiple identities, face the fact that I am fixed in certain ways. Though I am, like all human beings, ever changing, at the moment I am who I am (I wish I had more hair, but I don't; I wish I was thinner, but I am not; I wish I was a better game player, but I am not). At least for the moment, I must live with my limitations. Bead Bead, my virtual alter-ego, is a creature who is, at any moment in the game, also fixed in certain ways—she is skilled in certain areas, not others (e.g., while she was pretty good at picking pockets, she was lousy at picking locks). At least for the given moment in the game, I/she must live with her limitations.

The kind of person I want Bead Bead to be, the kind of history I want her to have, the kind of person and history I am trying to build in and through her is what I mean by a projective identity. Since these aspirations are my desires for Bead Bead, the projective identity is both mine and hers, and it is a space in which I can transcend both her limitations and my own.

To see more clearly what I mean by a projective identity and how it differs from the virtual identity of being Bead Bead and the real-world identity of being James Paul Gee (however myriad a thing that is), consider that each of the three identities I am talking about can fail (or, for that matter, succeed) in different sorts of ways.

The virtual character Bead Bead (my alter-ego) can fail to defeat another character in battle because, as a Half-Elf, at that point in the game, she just is not strong enough to win. This is a limitation I have to live with if I want to be Bead Bead. Of course, I can mediate on what it feels like—in my role as Bead Bead—to be unable to get what I need or want at a certain point because I am physically (too) powerless to get it.

The real-world person (James Paul Gee) can fail to use the game controls in an effective way, thereby causing Bead Bead to lose a fight against a weaker creature she could have otherwise beaten; he can fail to save the game at a good time and place (e.g., saving in the middle of a battle that cannot be won is a bad move); he can fail to find his (Bead Bead's) way in a maze because he has poor spatial abilities (a trait Bead Bead therefore inherits). He can even realize that his former Catholic inhibitions will not let Bead Bead take up a madam's offer of a free trip to her (female) brothel. (This is just an example: there is such a brothel in *Arcanum*, but my former Catholic inhibitions, very real in the real world, did not, in fact, deny Bead Bead a well-deserved night of forbidden pleasure, though, it turns out, she fainted in the middle of things.)

These are limitations in the real-world me as a game player (an identity intersected by a good many other identities), limitations I have to live with if I want to play and eventually get better at games. One sort of limitation video games certainly bring up to real-world baby boomers like me is that they do not reward—in fact, they punish—some of my most cherished ways of learning and thinking (e.g., being too quick to want to get to a goal without engaging in sufficient prior nonlinear exploration).

The projective identity of Bead Bead as a project (mine) in the making can fail because I (the real-world James Paul Gee) have caused Bead Bead (the virtual me) to do something in the game that the character I want Bead Bead to be would not or should not do. For example, on my first try at the game, early on I had Bead Bead sell the ring the old man had given her. This is not a mistake at playing the game (thus not a failure of the real me to play the game properly). It's a move allowed by the internal design grammar of the game and one for which I would have suffered no bad consequences in the game world. It is also not something that Half-Elves can't do or are, for that matter, necessarily too principled or ungreedy to want to do. Thus it is not necessarily a violation of Bead Bead as a virtual identity.

However, the act just seemed *wrong* for the creature I wanted Bead Bead to be (or to have become, however partially, by the end of the game). I felt when I (Bead Bead) had sold the ring that I was forming a history for Bead Bead that was not the one she should have. I wanted her to be a creature who acted more intelligently and more cautiously, a creature who could eventually look back on the history of her acts without regret. I felt I had “let her down” and started the game all over again. Thus, in my projective identity—Bead Bead as my project—I am attributing feelings and motives to Bead Bead that

go beyond the confines of the game world and enter the realm of a world of my own creation.

It is not uncommon, even when young people are playing first-person shooter games featuring a superhuman hero (like Master Chief in *Halo*, a game for the Xbox)—a character that, unlike Bead Bead, they usually cannot choose or develop but must take as is—that they will redo a given fight scene because they feel they have “let their character down.” They want to pull off the victory more spectacularly as befits a superhero. They feel responsible to and for the character. They are projecting an identity as to who the character ought to be and what the trajectory of his or her acts in the virtual world ought, at the end of the day, to look like.

Likewise, while some young people will let a superhero first-person shooter character kill “civilians” and not just enemies, a good many others will not, since they feel that it just isn’t fitting for such a superperson—that is, the person they are projecting into the world—to do such a thing. In fact, I once had remorse when I let/made Bead Bead kill a pesky chicken, an action for which she was also suitably castigated by the self-righteous follower I mentioned earlier. Players are projecting an identity onto their virtual character based both on their own values and on what the game has taught them about what such a character should or might be and become.

This tripartite play of identities (a virtual identity, a real-world identity, and a projective identity) in the relationship “player as virtual character” is quite powerful. It transcends identification with characters in novels or movies, for instance, because it is both *active* (the player actively does things) and *reflexive*, in the sense that once the player has made some choices about the virtual character, the virtual character is now developed in a way that sets certain parameters about what the player can do. The virtual character redounds back on the player and affects his or her future actions.

As a player, I was proud of Bead Bead at the end of the game in a way in which I have never been proud of a character in a novel or movie, however much I had identified with him or her. I can identify with the pride characters in a novel or movie must or should feel, given what they have done or how far they have come. But my satisfaction with Bead Bead is tinged with pride (or, it could have been regret had things turned out differently), at various levels, in and with myself. This feeling is not (just) selfish. In a sense, it is also selfless, since it is pride at things that have transcended—taken me outside of—my real-world self (selves), if I am playing the game reflectively.

IDENTITY AND LEARNING

The theme of this book is that good video games reflect, in their design, good principles of learning. We turn directly to some of these principles in the next section and in following chapters. Now I want to discuss how and why the sort of play with identities at work in *Arcanum* is relevant to learning outside video games.

A game like *Arcanum* is powerfully caught up with playing with identities. However, all deep learning—that is, active, critical learning—is inextricably caught up with identity in a variety of different ways. People cannot learn in a deep way within a semiotic domain if they are not willing to commit themselves fully to the learning in terms of time, effort, and active engagement. Such a commitment requires that they are willing to see themselves in terms of a new identity, that is, to see themselves as the *kind of person* who can learn, use, and value the new semiotic domain. In turn, they need to believe that, if they are successful learners in the domain, they will be valued and accepted by others committed to that domain—that is, by people in the affinity group associated with the domain.

It has been argued that some poor urban African-American children and teenagers resist learning literacy in school because they see school-based literacy as “white,” as associated with people who disregard them and others like them. They don’t believe that a society that they view as racist will ever allow them to gain a good job, status, and power, even if they do succeed at school-based literacy. Thus they will not envisage themselves in the new identity that success in school-based literacy requires—that is, as the “kind of person” who learns, values, and uses such literacy and gets valued and respected for doing so. Without such an identity commitment, no deep learning can occur. The students will not invest the time, effort, and personally committed engagement that active, critical learning requires. In fact, they resist learning in school in the name of another identity that they see such learning as putting at risk.

The tripartite play of identities that a game like *Arcanum* recruits is at the root of active and critical learning in many other semiotic domains, including learning content actively and critically in school. Let’s take good school science learning as an example.

First, let’s consider *virtual identities*. In a good science classroom, a virtual identity is at stake. Learners need to be able to engage in words, interactions,