A Fascination for Empty Rooms

Andri Gerber and Ulrich Götz in Conversation with Francine Rotzetter, April 9, 2019, Zurich

Andri Gerber: Prior to studying game design, you studied architecture. What was this experience like for you?

Francine Rotzetter: During my studies in architecture I was taught how to react to a certain place, to a specific need with a designed space. For me both aspects are equivalent in architecture. It is similar in game design but with a stronger focus on the user's needs.

Gerber: Do you think designing a game allows for greater freedom than designing architecture? Or is it just about different types of restrictions?

Rotzetter: When designing architecture, you face many norms and standards. There are far fewer such constraints in game design. Of course, games are also restricted by rules and guidelines, but they reference the player's representation and behavior. When you design a room, the player needs to understand how to move around within in. These kind of general questions and conditions must be respected. At the same time, you basically start with an empty space, which will slowly be shaped by the conditions you create.

Gerber: The initial emptiness—is it that what fascinates you about designing games?

Rotzetter: Absolutely! But also the fact that you need to create constraints in order to make the game understandable and playable.

Gerber: We know that games need rules in order to provide freedom and choice. Paradoxically, you can hardly be free outside of a defined frame. It is interesting to hear you speak about emptiness, because there is a *topos* of fearing the blank page in creative professions.

Rotzetter: You need to have an idea when you start to fill the empty room. You have to limit the player in ways that support the game. After that, you can start removing some constraints, up to the point that the game doesn't work anymore. Then you add new constraints again.
Gerber: So, you would describe the design process as a kind of subtractive procedure?
Rotzetter: Yes, absolutely. At least this is how I do it.
Ulrich Götz: You spoke about filling the empty room. According to my observations, architects are not likely to fill this empty room with a narrative. They shy away from imagining what might happen within these rooms once they are inhabited. In game design, the absolute opposite is the case. To slightly exaggerate things: it is all about anticipating actions and narratives within a game. Almost every cubic centimeter of space needs to be considered in anticipation of what might happen there, which stories might unfold. In contrast, architectural space is oriented by its subjection to strong formal and legislative limitations—nobody dares to ask what kind of narratives the occupants will bring into such a space once they are there.
Rotzetter: In this context, I realized that today's market asks for flexible plans and the possibility to change the function of buildings. It seems to be all about providing maximum flexibility. When I think back to my architectural studies, this was never the case, as we always were given a task with a pre-determined function. But to be honest, we never had to think about the kind of narratives you just mentioned.
Gerber: When you design a video game, do you have people to test your game during development?
Rotzetter: Admittedly, I don't have this much experience yet, and that's why the reference has always been me.
Götz: You need a clear idea and hypothesis about how your game should work. It was really impressive when we visited the offices of Ubisoft in Paris with students, where they showed us a two-hundred page catalog from their research department. Ubisoft had visited Washington, D.C. for several weeks, taking thousands of photos, and meeting and interviewing as many people as possible. They talked to representatives from politics, as well as members of the subculture, in order to get a realistic picture of the city. All of this resulted in the game *The Division 2* (2019). Behind the development of such a dense narrative lies a huge amount of work. And

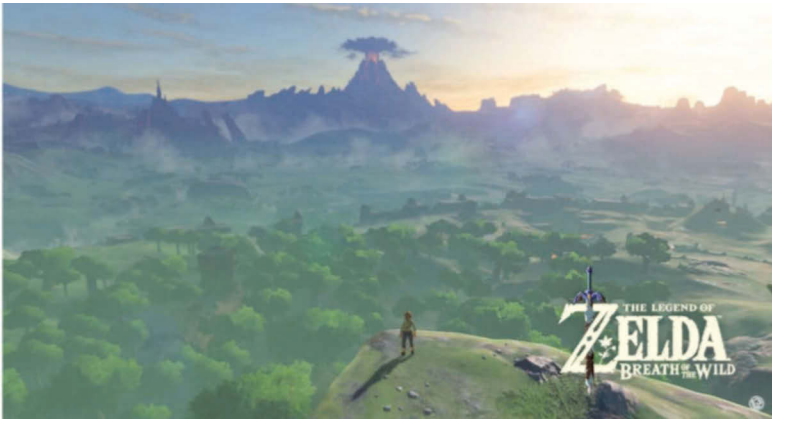
this effort is even integrated in the promotion of the game: Ubisoft wants to let people know how realistic the game is.

Gerber: The relationship between reality and its copy in games—between "real" and "virtual" architecture—is a fundamental issue we address in this book. How would you describe the relationship between these two counterparts?

Rotzetter: I would say that they are very close, maybe even too close. Very often, game designers stick to what they know and translate it into games. There are obviously exceptions, particularly in indie games, but in "AAA" games, they really try to copy reality.

Götz: One main difference between the real world and open-world games is that the former is the result of many authors, while the latter is the product of very few.

Fig. 58: The Legend of Zelda: Breath of the Wild, 2017



Rotzetter: At the same time, when a game has only one author, you can feel his or her personality within the game, and you also can identify with it in a way you mostly cannot with open worlds—precisely because they lack this sort of personality.

Götz: That's an interesting point. The "reality" outside has been shaped over centuries and by many architects, urban designers, administrators, politicians …

Rotzetter: Absolutely. And if you look at Le Corbusier's (1887-1965) urban design concepts, they all failed—which was because he imposed them

top-down, without negotiating. The same would happen if one designer would create an open world game alone. That simply could not work!

Gerber: But how do you deal with history? Games do not simulate history. They represent a current state. One exception: In a game like *Mafia* (2002), the course of time is simulated: Buildings get erected throughout the duration of play.

Götz: I think we should address the question as to how participation could be possible in the design of game spaces. I do not mean participation in form of later modifications, since then, once again only one author defines the space of the game, in a god-like fashion.

Rotzetter: I assume this is really difficult. One possibility I could imagine is rather undesirable: when a game references or copies another game—because it works well and people like it—then you get some kind of layering, in which someone else uses the principles of your world and develops them further.

Götz: I think that the factor of coincidence is very important in the making of "real" cities. So many people participate in different ways in shaping these spaces. In this sense, I think it would be interesting to let architects participate in competitions for the design of buildings in game spaces. This would be a way to introduce a different level of authorship in game spaces and make it more "real." The editors of games use catalogs of buildings—we should open that up, and fill the virtual cities of games with the contributions of architectural competitions!

Gerber: That is an excellent idea!

Götz: We just came up with an example of what we could import from architecture—now let's talk about the differences between architecture and game design. Is there something particular to game design that cannot be found in architecture?

Rotzetter: I find that architecture is less interested in the user of the created space, and the way events and interactions will unfold there. In contrast, this is a fundamental aspect of game design.

Gerber: If we accept the definition of architecture as the design of space, where do you see the main difference between "real" space and game space?

Rotzetter: I would say the main difference is the limited sensory perception of game spaces. You can use many tricks to overcome such limits, for example, using sound; however, you will never be able to convey the sensation of touching a stone and feeling that it is cold. You can use the

sound of gravel when your avatar walks on it and the player understands what goes along with it, but it is not the same. Here, architecture has a huge advantage: it is real [laughs].

Gerber: Is this sensual design specific to architectural knowledge? Or is it knowledge that comes from game design?

Rotzetter: This clearly comes from architectural knowledge! Another example: architects traditionally include natural lighting in their planning. Just think of Louis Kahn (1901-1974), who defined architecture as the interplay of light and shadow.

Gerber: Which other specific aspects of architecture did you learn in your studies that you now apply to game design?

Rotzetter: For example, how to design a plan in such a way that the space feels more exciting or less easy to explore. Architectural studies made me aware of the emotions that can be connected to spatial design.

Götz: In your research, you have worked on "non-verbal guidance systems in open-world games." To what extent was this subject influenced by your education as an architect? Were you interested in such topics during your studies, or did this evolve out of your studies in game design?

Rotzetter: The actual trigger was a game I used to play, *The Elder Scrolls V: Skyrim* (2011). I always try to trick a game, going beyond its borders and getting to somewhere the game designer would not expect me to go. In this game, I had the feeling I managed to do so—but then I realized that the game designer had envisioned this possibility, leaving an "easter egg" there. This was a eureka effect! I started to ask myself: how could they know I would try to get there?

Götz: You examined guidance systems in very large open worlds. Do you think the same principles could be applied to small-scale worlds, such as buildings?

Rotzetter: It definitively also works in architecture. When you enter a house, you usually follow the light; you will be attracted to brightness, or you will look out a window onto an open space. This works exactly the same way in video games, in which game designers use light to guide one's movements. On the contrary, if they want to scare you, they will situate you in a dimly lit place. Having said that, I have to state that in comparison to the possibilities of video games and virtual reality, architecture is still in the Stone Age.

Fig. 59: The Elder Scrolls V: Skyrim, 2011

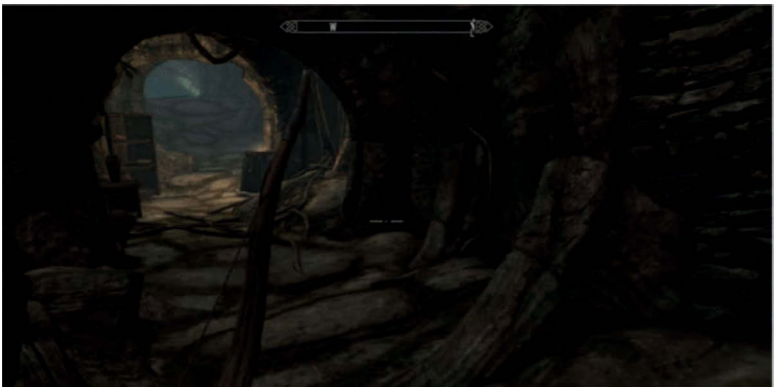
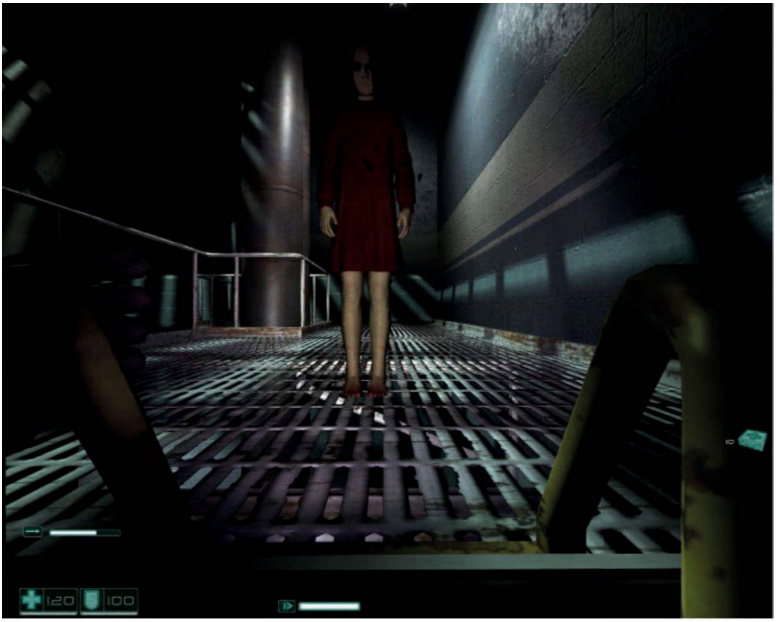


Fig. 60, F.E.A.R, 2005



Gerber: Do you think this difference in possibilities is specific to the discipline of architecture, or does it have to do with games *per se*?

Rotzetter: I think it is both. Games often remain looked upon purely as entertainment products. Some people even consider games a waste of time, even though they can be very productive. Architects, on the other hand, have been debating the same issues, over and over again, for centuries. I think it will take more time to understand the potential of games.
Gerber: I have the impression that few architecture students play video games. At least, this was the result of a survey we did for a research project.
Götz: I don't fully agree. Established architects probably don't play games—and wouldn't admit if they did—but I am pretty sure that architecture students do.
Gerber: Interesting—because years ago, talking about soccer was an absolute no-go in the architectural community, until several soccer stadium competitions were launched, and star architects such as Peter Eisenman (*1931) or Jacques Herzog (*1950) and Pierre de Meuron (*1950) turned out to be absolute soccer fanatics! [laughs]. Now you just need Peter Zumthor (*1943) to declare his passion for video games....
Götz: Which is quite unlikely.... [laughs]. Francine, do you think that other established forms of fictional spaces have been more successful in influencing architecture? What about film architecture, stage design, or even comics? All of them feature elaborated spatial design strategies.
Rotzetter: Film definitely had a lot of influence, and more recently, comics too—especially since the recent Marvel film adaptations.
Götz: How do you think architects are inspired by film?
Rotzzetter: Think about *Inception* (2010), and how urban space was depicted: this had quite a strong influence on architects and urban designers.
I do not mean the structure itself but more the atmospheric effect which is also very important in architecture.
Gerber: Film is an established and well-respected art form—games haven't yet achieved this status.
Götz: Does your research in game design help you in your current work?
Rotzetter: At the moment, I am working on the creation of VR scenes and I feel definitively sensitized about many aspects of game design, for example the importance of audio, which in architecture usually does not get that huge amount of attention.
Götz: Audio is definitely a very important aspect of games. Are there any other examples?
Rotzetetter: An important aspect I learned from working on video games was the importance of setting a starting point. I was often asked by clients

to set a starting point in VR right at the entrance of the apartment. Not in front of the entrance, that one would first have to open the door, which in turn would lead to a completely different arc of tension, after the door. The starting point would be mostly in the corridor. I usually try to make them aware that this is not an appropriate way to get started. Usually, I set the starting point where you get an overview of the scene.

Götz: So, because of your game design experience you chose the establishing shot in a VR architectural setting in an entirely different way. You chose a point from which you can overlook everything, and then decide to approach the scene more closely.

Rotzetter: Indeed. Or maybe in an even more dramatic way: creating an obstacle which must first be overcome in order to enter the scene. This was definitively influenced by my research into games. These are small tricks and you can definitely learn something about them by designing video games!