

EVENT_FIELDS: A VIRTUAL SPACE FOR COMMUNICATION

http://www.dixtio.net/Event_Fields.html

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Abstract

This paper presents the concepts and the design strategy that lead to the construction of Event_Fields, an online virtual space for communication and information exchange. It briefly studies the way information technology has altered the way we perceive traditional notions of space, describes the process and the difficulties of designing a virtual space from an architectural point of view and concludes on the outcomes of a real-time testing. Event_Fields are currently active online and under continuous transformation and reconsideration.

1. Virtual Space – Physical Space

In his book “*Qu’est-ce que le virtuelle*” about the notion of virtual and virtuality, Pierre Levy (Levy, 1999), points out that the word *virtual* roots back to the Latin word *virtualis*, which comes from the word *virtus*, meaning power or force. The *virtual* tends to be activated without yet having achieved a final form of particularization. Thus the *virtual* is not opposed to the *real*, but is simply one way of *being*. In the common language the word *virtual* is used to define the absence of existence, while the word *real* is used to declare the presence here and now. This leads to the faulty conclusion that the *virtual* and the *virtuality* refer to something fake and, particularly in design, to something that only represents something else.

1.1 Adjacency or physical space neighbors, while a virtual space is linked

A physical, tactile location, a defined part of the space has the ability to *neighbor with*, meaning the attribute to be *in the vicinity of* other physical locations. This quality is redefined in virtual spaces, as the meaning of vicinity or territorial proximity is transformed. A space suspended on the internet, being a website or a virtual environment is not *neighboring* with others spaces but it is *connected*, or better, *linked* with them. An immediate result is the absence of the influence of the surrounding environments as an influence of materially carried entities. Therefore a virtual site refers to other sites or is referred by them, a practice that elevates the relation among them to a relation of interconnecting and bi-including ideas that substitute the mechanical interchange of materials.

1.2 History or from a subjective agreement of the reasoning of facts towards an objective recording of actions

The ability of intervention on a physical place is proportional to the persistence of the history connected to this space. A virtual environment seems to be the result of the convergence of the intentions of the creator and the interaction of the users among them and between them and the available resources. Traces of actions have to be dispersed and a diagram of the users' actions has to be constructed to substitute the memory of the space.

1.3 Mutability or a real-time adaptation to ad hoc actions

Although the notion of continuous transformation and movement has already been posed by the modern movement those new abilities of information transform the architectural procedure from a procedure of successive actions leading to a final end to a procedure of continuous transformations. “*The beauty of the end*” (Picon, 2003) can no longer be a characteristic of spaces, because mutability is not only unavoidable but also exists as a fundamental component.

1.4 Limits or from construction of borders to the management of access

As McCullough (McCullough, 2004), accurately observes, in traditional societies the state of being inside or outside the city walls was certainly obvious. As discernible as it can be you were either in or out. Being interconnected by participating in the online world of the internet the ability to specify your own limits is not so concretely defined. Programs that manage the access replace the traditional borders. *Firewalls* manage the outgoing and incoming data from one point of the network to the other, but the average internet user is usually completely unaware of the processes that take place at his machine. In this reality where people try to define their privacy in an interconnected digital realm, the culture of *Open Source* seems to offer an alternative solution to this anxiety, by understating it as an opportunity and not as a danger. Along with the *limits*, the notion of ownership seems to be under reconsideration, raising questions about the potency of copyright authority.

1.5 Texture or a link between digital and physical

A space existing in the physical world is constructed by materials and therefore consists of their attributes. In a virtual environment the use of materials in the translation of *texture* seems meaningless. Materials in the virtual space are the link between our previous apprehensions for the experience of spaces with the new practices of digital realms. Their use intends to import in the virtual space a reference to the physical world, helping the designer or the client to visualize the future final product and the user to connect the abstract environment he inhabits with concrete and measurable qualities.

2. Existing networked realms and underlying rules that appear to govern their function and design strategies

In order to specify to what extent the above theoretical background has affected the designing process and the functionality of virtual worlds, some case studies have been chosen and studied. Among those are the most common chatting programs, usually referred as *instant messengers* like IRC, MSN, AOL, Yahoo!, ICQ and Skype. This technology, by providing the necessary infrastructure for essential communication, has transformed the way people interact in order to socialize or entertain themselves. Today, any game needs to have multiple users' capabilities in order to be competitive in the global market. With today's reality of MMORPGs (Massively Multiplayer Online Role-Playing Game) and with some of them surpassing the 6 million users worldwide (World of Warcraft), it seems difficult any more to imagine games as software that is executed in a single machine.

2.1 Simulated and non-simulated rules

Another characteristic of those worlds is the inclusion or exclusion of specific rules. They have been built on the way societies have been built so far, where rules are introduced in order to define the common accepted behaviors and ethics. This is partially a result of the deterministic way programming and computers work, where the same actions will lead to the same result, excluding uncalculated events as being errors. It is the multiple results from the interaction among the users which gives birth to the emergence of multiple events, providing the infinite complexity of collective actions.

Those rules are susceptible to changes as the users can exercise pressure for alterations or complete elimination of them by contacting the administrators of the worlds. This direct collective influence of the users will stand opposed to the representative democracy of our days, where people must base their hopes on others in order to determine their own future. Without being a utopian world where the users can act as they wish and without being the contemporary society where the will of public can be

ignored by politicians, those rules are far more flexible to alteration than physical ones.

2.2 Identity

The most basic characteristic of any online communication system is that in order to log in you have to choose an identity. In this way you create a network of contacts that subsequently include or exclude others. The limits of your space are defined by allowing or blocking other people to contact you. In network games, the identity is of immense importance, as the users are very keen in creating and sustaining their fame.

Obviously identity in a virtual world can be the result of free choice for any individual. In a continuously increasing demand for identification in the tactile physical reality, the ability to navigate through spaces with a constructed identity provides a haven for the users of the internet. The ability of system administrators to trace anyone from their unique IP (Internet Protocol), which provides a unique identity for every user, suggests that actions can only stay in obscurity if a behavior complies with the laws of the real society.

2.3 Dialogue as an unexpected layer

Although the possibilities for actions can mathematically be perceived as limited, there is one characteristic of virtual realms that comes in unlimited extensions: *speech*. This fundamental characteristic for communication among users is the one that leads to a complexity that seems impossible to be subdivided into discrete elements. This layer of the unexpected and unforeseen creates a multiplicity far beyond the ability for subdivision. It seems that this is a fundamental reason why chatting engines provide more than enough interaction abilities than virtual realms where graphical interfaces represent the users outlook. This kind of continuous multiplicity emerging from the interaction of users seems to come in reality only by adding the uncertainty of the dialogue layer.

2.4 Socialization: Competition - Cooperation - Advancement

The main aspect and function of those spaces is the socialization of the participants. This includes different aspects of the physical life, such as competition, cooperation and advancement of the individual. Each of those aspects has different importance in different worlds. In some cases cooperation is excluded and in others it is the only way to progress or even survive. Although competition among individuals in network games is always a fact, in order to achieve personal advancement, the first thing users seem to do is to form alliances. It is also very common that in those groups a gradation of privileges exists, where some users have more power over the registration of the group, by being able to exclude or include others. Having the support of others in order to improve your social status and increase your influence is

an inner substance of capitalistic economies, where the ability to participate in more exclusive groups is considered a privilege.

2.5 Reference System - Navigation Ability

A fundamental characteristic of virtual realms that include a graphical representation is the navigational system. If a graphical environment exists where the user can immerse into, there is also the necessity for a navigational system and therefore the need for a reference system. As a result referral points exist, from the simplest ones to the creation of whole digital cities. In addition, the real time adaptation of action requires a *time* reference, including, as a result, the *time* dimension in those worlds. By doing so, space acquires the parameter of distance, another characteristic of real space. It could be therefore argued that this realistic approach of the interface deprives those spaces of a virtual logic and lowers them to simplified representations of real spaces.

3. Designing Event_Fields

The main functionality of Event Fields was the ability to communicate with other users through text exchange and also publish text for other users to read. The notions that have been mentioned above, such as *limits*, *history*, *mutability*, *texture* and *adjacency* were exposed to reconsideration, on the basis that they are expressed as extensions of a virtual reality. The *history* of the space should be constantly recorded in a log file, providing the ability of the instantaneous review of the past. *Mutability* was perceived as the ability of the space to be altered according to the real time actions of the users. It should therefore provide the users the ability to alter their interface and also generate unexpected events even for the programmer itself. *Adjacency* was conceived as the ability to refer to other places or to other users not by neighboring with them but through information exchange. Additionally, *limits* were thought to express the ability of the users to negotiate the access of others in their space. Finally *texture* was considered as the medium of expressing color differentiations among different places of the space.

3.1 While the function of the program could have been achieved even by simple cubes, it was important to experiment with complex, but more importantly with more abstract, shapes as representations of a not yet concrete idea. It was initially attempted to place the objects in random positions, but an initial positioning of them on the grid was satisfying enough in order to advance to the next levels of the program.

3.2 The next step that was considered necessary was to introduce the ability to navigate in the space and select one of the objects. It was considered interesting to try to avoid the typical navigation system of most graphical virtual worlds, where the users, in a realistic way, move into the space as if walking in a physical environment. If the same technique was to be used then reference points

would be created and consequently a map of the space. In contrast the users observe the totality of the space from the outside, rotating the whole space around itself, being able to understand it as a whole at any given moment. Therefore the interface was handled as the way of examining an object on your hand, avoiding by that way the immersion in a Cartesian system of points and references.

3.3 When a user accessed the specified site he was randomly assigned one of the total twenty five points of the space. He was initially assigned a name as (*anonymous_#*) but had the ability to change his name to one of his preference. This identity was not saved to the system, providing the user the possibility to log in each time with a different name. Identity therefore resembled more to the way it is dealt in chatting rooms than in network games, and it was perceived as an ephemeral declaration of each individual's will. That would allow the users to choose their identity according to their temporal attitude yet still anyone could operate in the space by being an *anonymous* one.

3.4 When entering the site the user's space was turned into the color *red* and the space started to animate in order to indicate the position more clearly. For him he would always be red, or, when he published information, *dark red*. Anyone else who logged was light *blue* for the user, except if they published something so they would be assigned the color *green*. The lights assigned to the scene by default included a spot light projecting from 45 degrees. These characteristic created shadows on the objects, providing the only orientation attribute of the space.

Although by moving the mouse pointer over a space the user could obtain information about the people participating in it, by this manual-like color scheme, *texture* became one of the fundamental tools of perception of the action taking place in the space, an attribute that instantaneously connected the physical with the virtual world.

3.5 Chatting was conceived as the most important and fundamental action in the space, as it would generate originally and by default unexpected dialogues. In order to chat with someone the person had to visit his space by pressing the left mouse button on it. When two or more users existed simultaneously in the same space the shape started to "sparkle" in order to be obvious to other users that in that particular space there is action taking place.

3.6 The actions of the users were constantly recorded in a log file, providing the ability to review the conversations and the published text at any given moment. A time and IP tag gave the exact time of the users' actions and their real position in the internet. Although this was happening in order to obtain an objective recording of the past, it soon became evident to me that a major factor that would provide me this ability was lacking: *the intention of what it was said*. Apparently the conclusions from the reading

of the logs could only be another interpretation based on personal assumptions.

4. Conclusions

From the use of the program, and from conversations with the users and their reports, interesting outcomes have emerged. A common observation was that the space looked too *concrete*. Most of the users were feeling confined because they couldn't move their space inside the global one and have asked for the ability to reposition their ground wherever they wanted. It was of importance to them to be able to choose the position of the place than just have a place in the world. By being able to move their space the users seemed to be aware of a referential system that was resulting only from the existence of all the individual spaces. All spaces have the same weight in means of position and at different times important are those where action takes place. The second most common comment was the inability of the users to manage the accessibility to their space. Surprisingly, this is the usual practice in most instant messengers, where someone is able to talk to you, whether you reply or not. Now the users seemed to feel the limits of their privacy, probably because it was expressed in a graphical way.

Furthermore a lot of users wanted to see more events taking place. They were expecting their shapes to change according to the number of the people that were participating in a conversation or event and the ability to alter the shape of their space itself, and also ability to personalize their space, in order to differentiate from the others. Most of the users have also suggested the ability to keep their space even when they log off the system. The ephemeral participation was commented as interesting in means of temporal dialogues and publications but they were very keen to the ability to own a space.

An interesting outcome has been the worry of the users that they were monitored by the administrator (me). For most of them it was not important to be monitored by unknown people as they assumed that this could not compromise their privacy. Although their actions and messages are constantly recorded in a real time frequency while on the internet, the inability to identify the observer provides them with a feeling of security. It is considered that this recording would not affect their real lives, because the person that observes is a stranger. This feeling of security in a constantly monitored reality offers the certitude that someone will face justice only if he acts in a criminal way or in general in a way that is not considered as *predictable*. The power of defining what is considered to be predicted, or not, falls on the administrators of the systems who by controlling the information flow, obtain an unsurpassed power over the users. New ways of preserving privacy should be invented.

Finally and most important, another notion seemed to obtain immense importance in this attempt to bridge the gap between theory and practice, that of the *tool*. By understanding the interface of each tool – specifically in

programming - the user has the privilege not only to alter the way he uses it, but also change the tool itself. The programming knowledge limitations have kept me from transforming my instantaneous thoughts to reality - or virtual reality - preventing me from realizing my imagination. This limitation is also apparent to the users of the program, while most of them are not programmers and can only use it for the predefined functions. The Open Source programs where programmers publish the source code offer the possibility for the users to create their own outcomes, but still in order to do so, programming knowledge is necessary. It came as surprise to realize that for the average user and for architects with limited programming knowledge, virtual worlds are more concrete and difficult to alter than a physical tactile wall. While in physical life the inhabitant of a space can use a hammer in order to demolish a building in a virtual world he lacks the force analogous to the hammer. Nevertheless the virtual worlds and in general digital entities are considered and mentioned as flexible and mutable. This seems to reflect the wish of the users to participate in the shaping of their world but in order to achieve that they have to be provided the ability to understand and even alter the interface of the new tools.-

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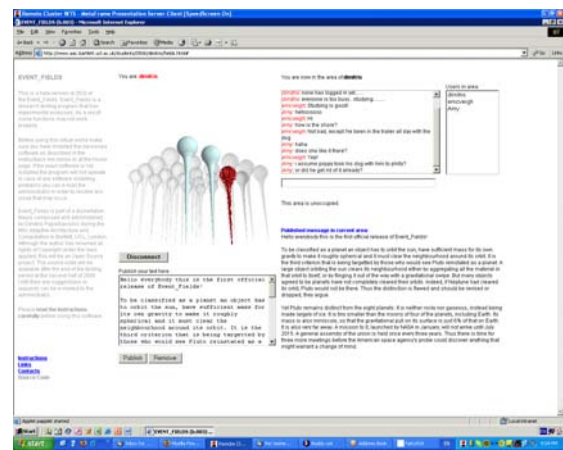


Figure 1 (Event_Fields website)

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