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VRML: Writing The Space of Identity on the WWW

Introduction

As artists, designers, theorists, and scientists we have before us an opportunity of mythical proportions. We have before us the opportunity to create worlds. Worlds to explore and learn through, worlds in which to discover and create new aspects of ourselves, worlds in which the greatest limit to the extent of our existence is our imagination. This opportunity is now made possible to us on such a scale through the introduction of the Virtual Reality Modeling Language (VRML): a computer lan-guage which will allow anyone, with a bit of effort, the potential to create a distributed multi-user virtual environment. Along with this opportunity comes a responsibility: the responsibility to use this enormous potential to its full extent. In this paper I will propose a paradigm for understanding the vast potential available to us.so that we may accept that responsibility with integrity and insight, and create worlds which defy and transcend our very existence as we know it.

I am going to discuss understanding and creating distributed multi-user virtual environments, specifi-cally VRML environments within a linguistic paradigm. This paradigm is based upon the communica-tive, gestural, and social aspects of language, particularly a pragmatic view of language and its role in the gestural construction of self and society (Mead). My point of view Is that in the case of a VRML envi-ronment language is experientially and existentially active. Unlike other gestural modes of communica-tion the aspect of virtuahty produces grammatically anarchic and nearly Irnrnerstve experience, and as such provides the opportunity to create a profound grammar, which manifests itself in unique spaces of experience, identity, being, and self.

At a fundamental level in linguistic communication, and I will propose in VRML, we are dealing with the transference and signification of signs. It is through the process of signal to sign with signification that we have both the act of communication and the process of the creation of meaning in language (Eco). Within this semiotic framework the sign that is transferred need not be verbal or textual, it can take an infinite variety of forms. Within the concept of a sign we can even begin to include such modes of expression as those *involving* the body and the construction of and interaction in *space*. Specifically of interest here is the movement of the body throughout both space and time as the sig-nification of something particular.

With the conscious inclusion of the construction of space and the interaction of the body within that space as a form of linguistic communication we begin to develop a sensory rich form of language that returns us back to ourselves, rather than utilizing a more arbitrary system of codes such as alphabets and phonemes for the creation meaning.

The VRML EnvironmentAl Unguistic

With the acceptance of the movement of the body throughout space and time as the signification of something particular, that is as a communicative/linguistic action, we can begin to speak about the communicative act as a gesture. To gesture is to make an action of meaninqand defining communi-cation *as* gestural changes its nature (Mead). The defining of the communicative act as gestural implies 2 things: the first being that communication becomes again a conscious *and* conspicuous act, and secondly that the communicative act is social in its nature. The basis of the concept of gestural communication is the actuality of the communicative act: a definable, consoous and conspicuous action, which can entail speech and writing, but which also necessarily produces/observes the physi-cal and social phenomena in another, more experientially direct manner.

The language of the VRML environment has 2 primary levels of complexity and gesture. The first is the virtual structure of the environment, its polygons and their ordering, and the second is the interaction of the user within that environment, creating a narrative discourse through interaction. The grouping together of the polygons into their organization begins the structure of the language of the environ-ment. These shapes and forms can imply meaning in and of themselves as distinct entities. Their visu-al and auditory presence become signals which become signs and represent meaning through the process of signification. Often these virtual objects may present some representation of some thor-oughly known object such as a chair or a room and as such carry a didactic meaning with them. At times they may be completely abstract fonms and expressions transmitting a meaning of a more essentially visceral nature. Whether representational or abstract m form these objects within *the* vir-tual environment begin the transference and creation of meaning by their individual existence and potential for engagement with the participant.

By the communicative act in the VRML environment being gestural, we require both the *author* and the participant, in the construction of meaning: they both must assume responsibility for the commu-nicative act therein, and in doing so, the communicative act becomes social. By this placement of ulti-mate responsibility upon the author and the participant we have a communicative experience of pro-found nature, in that the displacement of an arbitrary grammar requires a grammar of thorough and thoughtful implicitness.

Momentartly I will call up a profound figure in the history of linguistic thought, that of Benjamin Lee Worf. The Worf-Sapir hypothesis was one which posited a radical idea: that language was not only a communicative act, but the defining factor in our reality, in that language, or rather the expression of language, or if I may, the gesture of language, is a concrete manifestation of our thoughts. This theory proposes language as a unique structure, a structure which provides the architecture for its content, it content being thought, and thought: our subjective realities.

The Worf-Sapir hypothesis in the light of the concept of gesture suggests that our gestural act of communication creates our reality; akin to the adage "as above, so below'. "As above" in that what has been conceived of as the higher plane of thought *is* "as below" that which we manifest thought to be through our language. Our gesture as language fonms a structure both of and for the very expression

ofthought,and as such an expression of thought, a mediation of reality and how we experience it.

Meaning and Knowledge Wtthin The VRML Environment

Meaning within the virtual environment begins to compound itself, it begins to create a narrative discourse by the ordenng of the distinct fonms and objects to one another. As these individual objects are brought together within the environment their identities become relational to one another and expand meaning *by* the creation of a discernible context (Sarles). The room with the chair and lounge becomes a psychiatrist's office, or the abstract representational forms become the virtual manifesta- tion of the patients Rorschach tests. These objects create a dialogue of signification both amongst and dependent upon each other. This dialogue, this structural narrative discourse, is then read by the participant through interaction within the environment.

The experiential grammar which is chosen and developed throughout the organization of shapes and interaction within the virtual environment is by no means arbitrary, in fact they are necessarily not *so*. This grammar of experience is explicitly defined by the author of the environment, and while the textual words used by any author or the verbal words by any speaker are also by choice, the chosen grammar within the virtual environment is explicitly rather than arbitrarily defined by the nature of the complexity involved in the gestural situation. Meaning within the virtual environment is actively constructed by an experiential grammar. This then is enacted by the conscious and conspicuous will of both the author and the participant within the environment.

The Vastness Of The Virtual

The fluidity of a VRML environment is manifested by the complex emerging grammar of VRML as a grammar of experience ... of *happening*. Space and time exist in the virtual environment, but space and time need not be relative. Motion exists in the virtual environment but that motion need obey no laws of gravity. Within VRML grammar is a structure we create.

This difference ofvirtuality allows for an experiential motivation and capacity behind the knowledge product of the environment. The difference of virtuality provides the opportunity for the evaluation of information in the immersive, sensory realm. Pierce has positied that confronted with experience we try to create knowledge to explain it Fundamentally, this is the goal of the full experience within a VRML environment We, as participants, are confronted with the experience of the desktop immer- sion and interaction within a virtual space through which we must find knowledge. This experience is the cause to the effect of knowledge, of knowing, and ultimately of being. Within the VRML environ- ment we must come to not only know of that experience, but we must more so come to know that experience. To know that experience is foremost to actively and intimately partake in it, to be able to claim first-handed-ness. Beyond even that though, it is to be able to define it, to give it meaning beyond even its representational form, to imbibe it with thought and reflection, and ultimately to create identity, self, and society within it.

The introduction of these new manners of language, these new methods of authoring and reading which we find in VRML environments, increases the level of interaction and experience beyond what was previously possible in the communicative act and places it within a realm of infinitly more risk, and potential for substance. Through VRML one can now, and does, consciously employ means in communication which were before primarily enacted only unconsciously. Motion, sound, space, and time. These all had the potential for inclusion in linguistic convention within non-virtual communica- tion, but not necessarily conscious inclusion. Even in those rare moments of opportunity for the con- scious inclusion of these matters their inclusion was dictated by a set of parameters which were based on a physical reality rather than on pure imagination. Now, in this realm of a VRML environ- ment these parameters have ceased to necessarily exist

Beyond Our Being

This ceasing of the parameters of corporeal existence within a virtual environment is where the opportunity for a radical writing of identity and being emerges. VRML provides an opportunity for the creation of an existence of being which can both represent and transcend by difference our cor- poreal existence, and in doing so, alter our very way of knowing, our very way of being.

The Infinite Possibilities (Induding the Impossible)

If we invoke to the Worf-Sapir hypothesis on language and the construction of rrallty through the poss1b1hty to conaetize thought we then have our key to unlock the infinite potennahnes of being wrthm the virtual environment. The language of a virtual environment allows us to concrenze thought, and thus to create a reality, which is impossible outside of the confines of a virtual environ- ment. It allows us to create a reality and existence of being which is not bound to preconceived notions of time or space, which is not limited to the realties of blo-acoustics or the realties of physio- logical existence, which is not bound by an arbitrary system of signs as is verbal/textual discourse. It

allows us to create an existence of being, a manifestation of reality and identity, whrch rs limited only by the limitations of ourselves, of our imagination.

This experience which translates into knowledge, and ultimately into identity and self, lends itself to methods ofcreating not only a new grammar, but a new way of be-ing, a new knowledge of being. This new knowledge of being by its existence as such radical other-ness, ushers in with it before unknowable knowledge. ln this virtual environment of experience where knowledge and ultimately identity and self is manifested through the process of virtually be-ing that which was before the"un- be-able," the "un-knowable" has the potential to become known. By unknowable l mean that which can nerther explicitly nor implicitly be transferred as knowledge through verbal/textual language.

The Ultimate Potential

We have caught glrmpses of this alternate reality before, they have existed throughout time in discrete and highly codified moments. George Bataille said that it is "action which introduces the known (the manufactured), then understanding, which is linked to it, relates the non-manufactured, unknown ele- ments, one after another, to the known• (Bataille, p.11). This a fonms a feedback loop of meaning con- fined to knowing only the knowable. But he concedes there are moments when this is not exactly so. They have existed in all things transgressive: laughter and comedy in the face of misery, poetry and its assault on the convention of verbal/textual/rational discourse, and above all in the ritual moment in which the transubstantiation of materials and time and space occur to create an event of being which transcends all others.

Within the virtual environment we are able to undo this circle of knowing the knowable and not knowing the unknowable that Bataille has elaborated. We are able to do this through the realm of manufacture, that is the necessity of referring to that which is already known. ln the virtual environ- ment that which is manufactured, or at least that which may be manufactured, is not necessarily that which can be actually manufactured outside of this environment. This possibility allows for, and with integrity demands, a new creation. This allows for the manufacture of the non-manufactured, that is the un-known: the opportunity for the creation of an experience which executes the act of the impos- sible. This is an experience like those distinct moments of transgression, a moment in which all that was before non-knowledge by its being outside of the realm of our physical and/or linguistic reality can be known through the particularities of a virtual environment The virtual environment becomes a space for unlimited experiential moments of being and the creation of an identity and self beyond even that which has ever been imagined: lt becomes the opportunity for knowing and being the un- knowable.

l want to conclude by proposing another metaphor for these ultimate possibilities for extended moments of difference withrn VRML environments. Paradoxically, it is a metaphor drawn from text; biblical text The metaphor is that of Eden, a mythical place of being. ln the story of Eden God dispels Adam and Eve from the garden for their consumption of the an apple which gives them a knowledge of themselves that was before unknown. Virtual environments have the potential to become Eden: a place of infinite and glorious being. However, the metaphor has a fundamental difference, the tree of knowledge is not what will expel us from the garden, the tree of knowledge is that which we need to pick to keep the garden. As artists, designers, theorists, and scientists it is our responsibility to create this space, these virtual environments in all of their potential glories. lt is our responsibility not only to eat the apple, but to intoxicate ourselves with it. ln this Eden there will be no damnation for the pursuit of the unknown, but a consequence of banality for not doing so.

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