

Notes and Observations on Artificial Games

Bill Seaman

"Notes on Artificial Games", in Visual Proceedings - Computer Graphics Siggraph '93, Anaheim 1993

--Include a scan of the Definition of 'Artificial' and of 'Games' as images.

In 'real' games the 'game' is already often once removed as a symbolic set i.e. the pieces in a chess set are symbolic of an ancient system of territories, lands, people, power strategies and relative positions within a social structure... An 'Artificial Game' is a metagame. A Game of Games. An exploded territory in which one manoeuvres with sliding rules, open to the definition of their author and the interpretation of their participants. Play in this instance is an open category spinning off in different directions. The boundaries of these games have been blurred, become plastic, are floating. In interactive works often the strategies of games are employed but are not formulated in an absolute capacity. There is a user learning curve, a 'place' of entrance, navigation, exchange, an interface and qualities of use. Fields of potential readings are overlaid. The level of game abstraction is amplified and multiplied, sometimes camouflaged or concealed within the qualities and potentials of participation. Artificial Games may become transparent at their highest level of use. The rules of such a 'game' may never be spelled out. As viewers take an active role in the navigation/participation in a work, they may literally create game type roles for themselves because that is one way of anchoring their understanding of such an experience. In viewing my work THE EXQUISITE MECHANISM OF SHIVERS an audio/visual poetry generating machine, some viewers attempt to generate a 'pleasing' sentence or their 'favourite' set of relations. Viewers that are accustomed to interactive systems (hackers and the like) try to find the limits of the system, the edge of the environment, or quickly pass through the user learning curve and take an extremely perceptive role in the perusal of the system.

The definition of 'Artificial' is in question as we live increasingly telematic lives, where 'real' feelings and behaviours are triggered through abstracted involvements with artificial structures, and illusions. Thus the navigation of the 'set' of 'illusionistic' experiences becomes a real experience none the less. In fact it is the strength of such art experiences which bring electronic media art into a popular position in contemporary art practice.

The definition of Artificial Games is exploded because the set of readings which is engendered through the word Games is extremely inclusive. The game is to define which game is of importance to this definition - in this case it is a game of equivalence. All of the fields carry equal weight. There is no ultimate game (although Russian Roulette has many people betting on it). Can we project a virtual Russian Roulette? Certainly many creators of Artificial Games have shot themselves in the foot in the process of authoring and creation.

One can quickly change channels as a media spectator, jumping from game to game (or even out of the game and then back in) a currently limited level of media interaction, but the media environment is rapidly changing. Some interactive works build this form of navigation into the rules, jumping from realm to realm. The slippery field of Artificial Games slides from popular culture to the most obscure scientific visualisation of artificial worlds - a game which pits simulated facts against real potentials played "for keeps" on a magnificent if not frightening scale (A synthetic virus is a virus none the less). The creation of a computer engineered synthetic virus is both a potential life saver if it is applied in an appropriate manner i.e. a vaccine is manufactured, but is also a real potential danger if a strain is generated which has no mechanism for control. Again we see the blur between the "real" world and the potentials of the synthetic... the Artificial Game.

The architectures and spaces of Artificial Games form a fascinating range of foci - the fields of play [at play]. These realms can range in size from the vast distances of international communication space, to the space of a synapse (mind games). Many actual games depend on boundaries, edges, defined fields, real estate. Artificial Games navigate the boundary, explode the edges (or at least redefine them) and tend to explore artificial, illusionistic, electronic, synthetic, linguistic (hyper textual) and/or conceptual space. Illusionistic space takes on an increasingly palpable role in terms of Artificial Games. The economics of arcade game virtual realities, and electronic home game units, will in one sense (trajectory) drive the VR and interactive industries. The proliferation of these systems, when abstracted into the artistic realm, will provide a potentially vast viewing apparatus for poly-linear/omni-spatial electronic art works. One can only hope for a system that translates digital information generated on any one of a dozen platforms into a format which can be read by a SEGA or Nintendo game system. Wouldn't it be great to be able to play poly-linear Quicktime movies on a home game system. We are all watching the "format" wars...

Games, both conceptual and physical, play an intriguing role in sexual activity. More "real than real" a phrase used in Blade Runner to suggest the intimate potentials of cyborges in terms of sexually charged situations points at this potential. Artificial Games capitalise on this fact. It is easy to project the growth of an industry based on Artificial Reality in terms of sexuality. Such games range from the most subtle use of language, to role playing, to pure force feedback interactive pornography. Certainly a stimulating range for Artificial Game participants. The role of late night advertising for phone sex hides the fact that technology is mediating sexual activity on a high level and yet points a finger at the potential of telematic interchange/intercourse.

Artificial Games played in the service of war experience, also present a blurring and intermingling of the fields (from the battle field to the field of the computer screen, to direct stimulus of the field of vision in the latest incarnations of VR/VE (Virtual Reality/Virtual Environments). [One wonders what relations this Artificial Game plays in terms of sexual drive]. Military applications abstract warfare and distance the soldier from their direct actions. At the same time simulations reflect the cold precision of war with an alarming accuracy. If we examine our cultural reality - the economics of battle type children's games [and we know which companies are making the most money]. It is only a hop, skip and a jump from this "Artificial" childhood to the battlefield.

Playing fields - fields of readings / meanings / levels of abstraction, the realms and methods of navigation, all contribute to the daze related to the intermingling between realities and artificial situations, in terms of our day to day living. The fields of transmission are one area for examination. Broadcast games presents an interesting mode of armchair experience. Are broadcasts "Artificial Games"? Networks present mass spectacle from a distance, a level of abstraction once removed. Navigating the levels of abstraction in an instant the viewer can be stimulated and moved. In interactive Artificial Games the level of participation is enhanced and thus the quality of participation is shifted into a heightened physical/conceptual realm. Anyone who has flown a virtual jet can attest to this. I flew in such an apparatus at last years SIGGRAPH and found it to be an extremely moving experience.

One can project the merging of artificial realities, behavioural actorless cinema, and virtual environments into a seamless poly-linear 'set' of possibilities for the player or participant in Artificial Games. Such a viewing architecture, once computing power is geometrically improved and possibly made portable, will provide a wide scope of experience from military play to the virtual entrance into popular movies, and on to experimental theatre and dance. Although one can also project the potential negative psychic manifestations exhibited by people who "populate" such worlds in an unbalanced manner i.e. never coming out. In the old days (pre-electronic media paradigm shift) these people might have been called bookworms. If we think of Marcel Duchamp shifting his art activity to a life of chess,

might some of the artists of tomorrow, enter and live in a perceptual end game... as yet a gleam in a contemporary artist's/programmer's eye/mind.

Duchamp was a champion at Artificial Games including such works as 3 Standard Stoppages - a game of length, Monte Carlo Bond - a work which attempts to break the bank or to define a system which beats the system, as well as his numerous games of naming, not to mention his Chess game as a replacement of art or the beautiful notes for the Large Glass - an elaborate "set" of "plays". The abstraction of games also is evident in Man Ray's works, not to mention the bulk of dadaists and surrealists at one time or another as well as many works by Fluxus artists. Artificial Games play a large role in experimental music composition and also in contemporary dance and performance art.

If we break down the definition of Game (in English) we find some interesting linguistic relationships. Foul (an internal breaking of the rules) of a game should not [but could] be confused with Fowl. Artificial Games might be read as "Artificial Fowls". If VR, Videodisc, and computer games are populated by illusionistic animals, are we exploring artificial animal nature, the nature of the game... or abstract qualities of extending and bending the rules of participation/reflection? The name of the game is changing as fast as the technology that drives it. Is this a lame excuse for playing with naming or just another facet of the game, accessing floating levels through qualities of naming. The artificial name, is a name just the same. Magritte is well aware of this kind of game in relation to a number of his works including the painting THIS IS NOT A PIPE. An artificial game of names defines a particular range. A slippage in the set, a stretching of the rules - the oscillating name may be fixed as a game can be fixed... the outcome driven by an outside force or a name can suggest a field of possible readings. When abstract poly-valent words are used in a continuously changing context, the viewer takes an active role in their interpretation. A linguistic game is as good as any (many). A flip of the coinage is a chance definer. Such surrealist games as Exquisite Corpse present a mechanism for the exploration of context - placement and displacement. Artificial Games may present a situation where a viewer navigates the pleasure of nonsense, a game whose goal is to defeat itself. Puns thrive on this form of punishment (this is used here in memory of Jim Pomeroy a punster of enormous proportions), Where the breaking of rules illuminates their larger function, found elsewhere in usage... Where delight is taken in how language can be used and how it can malfunction as well as how chance intersections can create a humorous beauty of juxtaposition and misalignment.

An Artificial Game can be a diversion [see the definition of game]. It may function as an abstraction that leads no where, for no reason, that may even cause real injuries through the process of navigation. Such a game may bring to light a contest played according to rules, which is decided by skill, strength or luck. The skills of navigation and the learning curve involved in the acquisition of proficiency of use/exploration of an Artificial Game could be considered as relative/relevant to this definition.

To 'play the game' figuratively means to observe the rules or behave honourably. An interesting inversion of this notion applies to Artificial Games in that the viewer/participant may take on quite violent roles which are the anthesis of those she/he navigates in "real" life. Such activities can provide relief from mundane existence. The focus of much contemporary critical thought [worry] focuses on how Artificial Games will change society.

Betting on the Artificial Game or "gaming", means betting on the future of a given technology [Is this like a real player of sports betting on the potential of a bodily injury?] Much work goes into the creation of Artificial Games. Real economic stakes mingle on an intrinsic felt level with those stakes at play on a lower illusionistic level. Economics drive many an Artificial Game - the stock market is just one. Computers trading in information amongst themselves defines a sub-realm. The agents are active just as in espionage. One might be active in both fields simultaneously. Language may be used to 'make points'.

Play can also be fatal. A game may bridge a set of fields - trigger a symbol set of signifiers and shifters which have devastating ramifications.

The logistics of testing the variables at play in poly-linear works reaches an impossible degree when the series of potential combinations, trajectories and alternate behaviours, become too vast to accurately reflect upon/monitor. This also suggests that Artificial Games are being created, the ramifications of which can not be understood at the time of their creation. This is true of the potentials of many technological advances.

When one examines the relationship between the life of the creator/generator of the game versus the life of the spectator relative to the Artificial Game, variable foci come into the picture including intensity of play, physicality of the game, and biological stimulation. One exciting attribute in high level poly-linear experiences allows the creator of such variable environments to function as a viewer/player/participant as well as originator, in that the potential experience in some specific works always present an expanding set of complex occurrences. In THE EXQUISITE MECHANISM OF SHIVERS the user of the system could spend their entire life experiencing the variables. This also suggests a problem for critics/theorists of such work - how can one talk about an work of infinite scale and duration.

Artificial Games may include the navigation of an illusionistic maze or labyrinth. It may have a very definite structure or may function with a floating structure/non structure. One set of observations are made by following the rules while another set is engendered by breaking the rules.

It is interesting to watch Children make up ad hoc rules while at play. I believe it is often a child like wonder which is driving the field of Artificial Games. We are now at the moment of first steps. One can project a time when such systems will run on their own, building their own parameters with an intelligence we can now only see as an horizon. It will be interesting to watch as Artificial Intelligence plays a larger role in Artificial Games. Smart Games will certainly take their place beside computer chess. It is also interesting to watch the shifting game of AI. At one time a game of chess seemed like an impossibility. Now it is a matter of course.

In the following sections I will talk about THE EXQUISITE MECHANISM OF SHIVERS. One section will talk about the piece in relation to the technical parameters of the work. The last section will examine some of the intentions of the work, written in a more poetic style.

THE EXQUISITE MECHANISM OF SHIVERS - In the realm of the Artificial Game - A 'SET' of Parameters.

THE EXQUISITE MECHANISM OF SHIVERS is an interactive videodisc installation which combines poetic text fragments, modular music segments and image sequences. The work incorporates a videodisc and computer to facilitate the combination and re-combination of a set of specific word/image/sound modules. Each module is presented as a word (or words) superimposed over a related visual image, accompanied by a musical fragment. A linear video, 28 minutes in duration, edited to an audio recording consisting of 33 short musical 'movements', forms the foundation of the work. Each of the 33 sections presents a sentence comprised of 10 sentence fragments.

The installation functions in the following manner. The viewer selects "Words" from a poetic text on a Macintosh menu generated with HyperCard 2.1 and the Voyager Press VideoStack. This selection process is facilitated by scrolling through 10 lists of word variables. These words function as modular linguistic sentence fragments in a preconceived sentence template which when selected, trigger corresponding images and sound housed on a videodisc. The computer facilitates the instantaneous

substitution of word/image/sound segments within the sentence template structure as derived through viewer choice. The viewer experiences the active navigation of a series of changing poetic audio/visual sentences. The work explores pluralistic meaning through the presentation of material in continuously changing alternate contexts. Humour, visual puns, word/image/sound play, modular musical composition, 'canned chance', as well as sense/nonsense relations are all explored.

HyperCard menus allow the viewer to watch for as long as they wish, exploring the material at their own rate. The participant is presented with a series of options through various linked menus. They are able to explore the linear material as one option, a selection of linguistic variables from the template structure as another option, various sentences which they build through their selection process as a third option, as well as image/sound/language poetry which (if selected) is generated by the computer. This semi-random poetry is generated by having the computer randomly select one choice from each stack of specific sentence function variables, making sure to maintain the proper order, to derive new sentences. These word/image/sound modules are called-up from a videodisc for the poem generator using sets of random numbers tied to specific locations (segments) on the disc (one set for each segment's function in the sentence). The computer facilitates the instantaneous search and play of the appropriate text/image/sound fragments on the videodisc, maintaining the correct sentence syntax.

A non-interactive installation has also been constructed using the linear version of the image/sound modules. Video wall technology is used to position the words in sentence format, across 10 monitors presented side by side. The video wall displays the sentence one module at a time while the linear soundtrack plays. After each motion segment plays on a particular monitor, the system grabs the last frame and holds the given word/phrase, then the next monitor is activated playing the next word/phrase, and so on through the piece. After ten segments the next sentence begins from the first monitor, until all 330 segments have been played at which point the process starts over.

Part 3

Notes on THE EXQUISITE MECHANISM OF SHIVERS

is only included in printed form in this envelope.

It begins

Thought bridges. ...