

The Paradigmatic Shift of Interactive Theatre into Aleatory, Tribal Playspaces

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Abstract: As a way of envisioning futuristically appropriate player experiences, this paper speculates on the emergence of participatory virtual environments as a metamaterial phenomena resulting from the confluence of aleatory, tribal playspaces and human-computer interaction (HCI). Using a set of revolutionary influences from 1960s, namely Thomas Kuhn, Marshall McLuhan, Victor Turner, and John Cage, the stage is set for virtual playspaces and postulations are made about the ability of these influences to affect theatre's core axioms. Reflections are made on the resistance that might occur, notably in the form of audience reticence, and requisite conditions are laid out for the emergence of a new paradigm in the landscape of theatre.

Introduction

In the early 1960s, Thomas Kuhn's *Structure of Scientific Revolutions* introduced a new way of thinking about the structure and evolution of knowledge. In this book he stated that a new theory is seldom or ever just an increment to what is already known and that a paradigm shift can be brought about, in part, by novelties of discovery and invention that are based on awareness of an anomaly within a previous fact or theory. At about the same time in the mid-twentieth century Marshall McLuhan, Victor Turner, and John Cage were on revolutionary paths of discovery and through their acts of identifying anomalies within currently accepted facts or theories, were shifting paradigms in their respective fields of endeavour. And not any less importantly in the mix of the 1960s, the second generation of transistorized computational technology was increasing the reliability of human-computer interaction (HCI).

How do these things cohere? Can analogies be drawn between trends in the structure and evolution of knowledge as set out by Kuhn, and the emergence of a new paradigm in the landscape of the theatre due to something that evolves as a result of these diverse influences? Further to that, does it have the power to transform a user group into a new discipline? In this essay, I will attempt to string together the revolutionary 1960s trends of John Cage's aleatory being-in-the-moment, Victor Turner's liminoid collective play ritual, Marshall McLuhan's audio-tactile interplay, and early HCI to trace the effects that these revolutionary influences from 1960s are endowing to current theatre and games.

Anomalies and Discoveries

In *The Gutenberg Galaxy: The Making of Typographic Man*, Marshall McLuhan looked back at print literacy and perceived a flaw in the way phonetic technology had provoked mankind's detribalization. McLuhan (1962) discovered that the reversal away from alphabetic culture, due to the anomalous audio-tactile quality of the new electronic media, made his age of the 1960s, as he said, "connatural with non-literate cultures" (p. 60). He felt the resonating interplay of the audio-tactile of the new media of the day, notably electricity and radio, would "regenerate what [Joseph] Conrad called 'the Africa

within' the Western experience" (p. 70) He further elaborated this audio-tactile interplay as "a new world of all-at-onceness ... a global village ... a simultaneous happening" (McLuhan, Fiore 1967).

At about the same time, Victor Turner was extending Johan Huizinga's theory about the human seriousness of play into a study called *Liminal to Liminoid, in Play, Flow, and Ritual*. In liminality, Turner says, people play with elements of the familiar and defamiliarize them, thereby giving rise to anomalous novelties of collective liminoid phenomena that, among other things, generate inventive sites for playful subversion and chance social engagement. In his words, they "have collective or 'mass' effects' ... apart from work settings assigned to 'leisure' activities" (Turner, p. 54).

John Cage's aleatoric music compositions and stage "Happenings" of the 1950s and '60s were dependent upon chance and random accident in a way that was influenced by his anomalous revelation that one must first discover silence in order to know percussion. In his autobiographical statement, he says he accidentally found out that silence is not acoustic and Cage (1991) stated, "My work became an exploration of non-intention. To carry it out faithfully ... I made my responsibility that of asking questions instead of making choices" (Cage). He was also influenced by Zen Buddhism and its "being in the moment," a state of being in which anything can happen anytime.

In their own ways, and at about the same time, Kuhn, McLuhan, Turner, and Cage were all claiming that knowledge and human expression were less linearly accumulated than was commonly accepted at the time. They were all on revolutionary paths of discovery that were changing paradigms in their respective fields of endeavour, and they were also making practical and theoretical expansions of knowledge that called into question the limiting aspects of linear aesthetic and structural values.

Analogies Between Science and Theatre Art

Before continuing a discussion of this unique nonlinear, random, audiotactile, communal site for playful subversion and chance social engagement, or more simply the "aleatory, tribal playspace," I would like to briefly explore the similarities that exist between creative scientific pursuits, as seen by Thomas Kuhn, and creative artistic pursuits, as I see them. For this task, I will use the visual image of a constellation of items that Thomas Kuhn introduces as a way of thinking about science. He sets up the arguments in his book by stating, "If science is a constellation of facts, theories, and methods collected in current texts, then scientists are the men who ... have striven to contribute one or another element to that particular constellation" (Kuhn 1996, p. 1). Kuhn indicates that scientific facts, theories, and methods are dynamic and interconnected like a web of influences and can embrace "relationships" of scientific views, (p.3) and "truth" that is not as simple as constructing what is "really there" (p. 206).

Interpretive artistic methodology can also be looked at philosophically as intuitive or relational knowledge in which glimmers of truth in the form of beauty or meaning can be reinterpreted for further exploration. Whether from a scientific or an artistic perspective, stars flicker in a constellation, firing off from each other's energy to create a communal

site for the growth of knowledge and beauty. Kuhn asked, as if responding to this image, “Does it really help to imagine that there is some one full objective, true account of nature?” (p. 171).

The Aleatory, Tribal Playspace at Work

This ethereal analogy between art and science open us up to re-connecting with this metamaterial constellation of beautiful and revolutionary ideas from the 1960s. How can this aleatory, tribal playspace be put to use? Who supports it and who resists it?

A use that has already been made of a space like this, based on the assumption that there are still no computers involved, is for improvisational theatre like Keith Johnstone’s *Theatresports* and activist theatre like Augusto Boal’s *Forum Theatre*. Actors and audiences interact in chance encounters, sometimes for fun and sometimes for social commentary; time can be fragmented; things happen spontaneously; and first-person embodiment in evolving action is *de rigueur*. As I see it, Thomas Kuhn described an enterprise like *Theatresports* or *Forum*, as paralleled in science, as a novelty of fact and theory.

Produced inadvertently, or anomalously, by a game played under one set of rules, their assimilation requires the elaboration of another set of rules. After they have become parts of science, the enterprise, at least of those specialties in whose particular field the novelties lie, is never quite the same again (p. 52).

A paradigm change occurred as a result of the acceptance of these novelties of theatre and a new user group was transformed who did not mind playing by a new set of rules.

In retrospect, and looking back at the paradigm shift and the new discipline it engendered, one could say that *Theatresports* and *Forum Theatre* were revolutionary — almost as if, as Kuhn parallels in science, “the professional community had been suddenly transported to another planet where familiar objects are seen in a different light” (p. 111). Did this paradigm shift and revolution in the 1970s and 80s, however, cause a redefinition of the central axioms of theatre’s core nature?

Theatre is many-faceted and a flexible shape-shifter and can easily accommodate to paradigm-shifting pursuits like interactive *Theatresports* and *Forum theatre* or other spin-off variations such as *avante garde* and performance art. The theatre landscape is broad, wide and deep; relativistic and subjective, it shares of itself and spins off spheres of influence to pollinate and embellish the creativity of new pursuits. Drama theoreticians who are committed to properly serious theatre history and literary text may chalk this malleability up to a resilient flirtation with contemporary culture and necessary social operations. Others who have an affinity for the spiritual may claim it is the spirit of the artistic muse that enables this kind of generosity and societal awareness. If theatre has a central core or axiom of value, it may be like the heart of this gently guiding muse.

It is into this generous, relativistic, subjectively re-interpret-able landscape of theatre, infused with the aleatory and tribal playspace and primed for interactivity by

improvisational and activist theatre — that we stage the next phase of this investigation. What happens when the final component of the 1960s revolution is added, namely computational technology and a mandate to achieve human-computer interaction? Might this finally rock the foundations of theatre's basic nature of thinking?

Human-Computer Interaction and Digital Playspaces

Computers are everywhere in the theatre. They run lighting boards, sound systems, and enable scenographic projections. It is, however, out of the ordinary to invite a computer to collaborate as a creative theatre partner. The Association for Computing Machinery Special Interest Group, Computer-Human Interaction (SIGCHI) defines HCI as

... a discipline concerned with the design, evaluation, and implementation of interactive computing systems for human use and with the study of the major phenomena surrounding them ... it is clear that varying what is meant by interaction (of) human and machine leads to a 'rich space' of possible topics (Hewitt, et al, 1996).

The potential of integrating HCI into theatre holds exciting prospects for the mobilization of this rich space. However, by definition, the computer has to generate and mediate interactions with humans and this task clearly brings with it obstacles and resistance, even in a flexible and nurturing art form like theatre and in the rich space of the aleatory, tribal playspace.

According to Thomas Kuhn, this difficulty is not at all unexpected and he states, in fact, that changes of paradigm categories and procedures are often accompanied by resistance, guaranteeing that anomalies leading to paradigm change will penetrate existing knowledge to the core (p. 62). Given that HCI is generally conducted in front of a screen with one or several participants and theatre generally involves an audience of several hundred, there are clearly obstacles and points of resistance in the hybridization of theatre and digital playspace experiences. One problem is that a theatre venue may have a computer projection display system available as part of its inventory, but is unlikely to have access to human-computer interaction (HCI) to address issues of user control, making it difficult to implement electronic participant interactivity. Another problem for the theatre artist working in the all-at-onceness of aleatory, tribal playspace is a lack of expertise in content creation and scriptwriting, but the most notable problem, or point of resistance, is the reticence on the part of traditional theatre audiences to take part in action that is less linearly accumulated than is commonly accepted.

Audience Reticence

As was indicated earlier in this paper, interactive theatre is a playful endeavor and changes the dynamics of the performer/spectator relationship by putting responsibility on everyone to become more active participants, with or without digital intervention. As cited by Daniel Feldhendler (1994), Augusto Boal described lived dramatic experience as being "the place where deep psychological processes are expressed" (p. 87). This assists in the understanding of why people who are looking for a unique and meaningful theatrical experience might wish to join in on the action by becoming "embodied" in a

character. As a way to get people involved, Boal's dramatic techniques activate passive spectators to become embodied as spect-actors — audience members who take part in the action. In this light, one can only hope that at least some people in an audience will drop their reticence to become involved, so they may empathize directly with a character though lived experience or at least get in on the action in one way or other.

The concept of “embodiment” is important to recognize, especially as it pertains to input and output symmetries of control and display, or participatory “interaction” in digital media. The term embodiment itself, as it is encountered in both drama studies and in game studies, is heavily indebted to the phenomenology of Edmund Husserl and Maurice Merleau-Ponty who claimed that one discovers the essence of something as it is experienced. In the 1920s, Husserl turned Descartes' rationalist “I think therefore I am” tenet around into an assertion that “I am therefore I think,” effectively proposing that the self is an embodied being whose life is manifest in action in the surrounding world, therefore assuming the form of an interaction (Macann, 1993. p. 52). Merleau-Ponty moved Husserl's empirical method of thinking about experience into the subjective realm of the body asserting that the body itself is the very subject of awareness and can be veritably “possessed” by the perceived. Like Husserl, Merleau-Ponty (2002) describes perception as an “interaction” by saying

Every perception is a communication or a communion, the taking up or completion by us of some extraneous intention or, on the other hand, the complete expression outside ourselves of our perceptual powers and a coition, so to speak, of our body with things. (p. 397)

Critical here is an acknowledgement of the powerful phenomenological affinity between embodiment and perception, and how that affinity consequently assumes the form of an interaction. Theoretical linguist and enthusiastic video game analyst James Paul Gee (2003) says that digital games encourage and recruit situated, experiential, and embodied forms of thinking and that real or virtual embodied experiences cover all the perceptions, choices and mental simulations of action and interactivity (p. 76).

But when it comes to theatre, for the most part the mass audience just likes to watch, being content with what Marshall McLuhan (1967) derogatorily calls “packages of passive entertainment” (p. 22). Providing an interactive “all-at-onceness” and expecting an audience to become “a creative participating force” invested in the idea of symmetrical interactivity and embodiment via a computer with a bunch of strangers calls for an alternative theatrical terrain.

The New Terrain of Participatory Virtual Playspaces

One of the ways that these constraints and resistance can be overcome is by moving away from real-space as a theatrical environment and relocating the aleatory, tribal playspace, along with the characters, and actions of the random, non-linear narrative, into the original HCI domain of the computer. It means bypassing the diffidence of assembled audiences by allowing humans to interact with other humans via their computers in privately accessed but still-aleatory rituals. These new terrains are virtual worlds such as

Second Life where the rich space of HCI is charged with the potential for embodied performances within non-linear structural and aesthetic ecologies.

Unlike Theatresports or Forum Theatre which bent the rules of conventional theatre but were still able to assimilate into theatre as an alternative discipline, I believe that interactive digital theatre of the sort that takes place in virtual worlds can lead to a paradigm change and revolution that could rock the muse of the theatre to her very core. Will she be accepting? As an emerging new paradigm, interactive digital theatre poses exciting research questions. Do further analogies exist between trends in science to contextualize the emergence of this new paradigm in the landscape of the theatre? Does interactive digital theatre, like Theatresports and Forum, have the power to transform a user group into a new discipline within theatre or is it entirely within the realm of new media? In that light, how might it compare with the previous media phenomenon of broadcast television or cinema?

Thomas Kuhn might well assess these questions as being symptomatic of the professional insecurity that he stated so often precedes the emergence of new paradigms (p. 67). If so, can theatre get over its professional insecurities and think of its legacy in terms other than as a cumulative history of real-space events? Even in its current state of infancy, interactive digital theatre and digital video games draw heavily upon the influences of theatre. In theory, they may well enhance the culture and creativity of theatre in ways that are just making themselves known. Virtual worlds can provide a lively and exciting playspace for aleatory, tribal, liminoid spaces of the type that Marshall McLuhan, Victor Turner, and John Cage espoused. Spontaneously created scripts can be acted out by embodied characters who have, piloting their actions and decisions, humans at their computers setting action objectives. The humans at their computers may also move those resolution-generating practices into networks of trust to evolve knowledge and promote social change. One thing that is certain: the revolution has already begun. My advice to the muse of theatre is to embrace it and make it her own.

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