

# Disturbing the Global: liquid connections shaping the future

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## Abstract

*A range of interesting community-based media initiatives have emerged from the chaos of New Zealand's broadcasting system. This paper theorises experiences of innovations in community television in this environment. It considers the significance and relationship of these local new media practices to the dynamic complexity of the global media system.*

I am involved with a small television enterprise given the ironic, but also provocative, title - BigTV. This is a community and university based television enterprise, which has been in operation as a broadcaster since December 1999. Based in Hamilton<sup>1</sup>, New Zealand. BigTV is a partnership between MacArthur Publishing and Investments, a local entrepreneurial company, and the University of Waikato, which leased the broadcast license from a defunct student television station. There is an independent Trust BigTV-Trust that has control of all assets and is used as the applicant for any funding. It utilises a financial model designed to keep costs at a minimum, although income is required to maintain the license, finance administration, pay wages for the compilers who work up to twenty hours per week, as well as develop and maintain technology. Freedom from large debt allows the enterprise to at least survive without the domination of constricting commercial needs. This situation offers opportunities for a closer examination of the role of television, exploring new conceptions of audience, more creative approaches to broadcast formats, the role of voluntarism in a burgeoning television enterprise, and the ways in which an enterprise of this nature, given the climate of technological change, is shaped and develops.

As someone interested in media I welcomed the chance to research television through the practice of television. I perceive BigTV as a media laboratory exploring established and innovative approaches to the medium. This integrated theory/practice relationship gave me insight into the practicalities of television broadcast. Further, I used a theoretical framework as an important guide to facilitate decisions that would ensure BigTV might develop in particular ways. This is an approach that is examining what television might be rather than recreating the commercial model.

The question arises, however, what theoretical framework would be useful for this enterprise to ensure that it did have a chance of success? The recognition of the viability of particular frameworks, in relation to the success of the enterprise, must play an important role in understanding an appropriate choice. In this context theorising and practice are not understood as discrete approaches, but supplement each other in a dynamic process of cross-reference in which the theory facilitates practice while practice tempers theory. It is this strategising within the borderlines of theory and practice that gives me the opportunity to position myself within the debate about possible futures for the media and consider what this might mean in a global context.

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<sup>1</sup> Hamilton is the fifth largest city within New Zealand with a potential audience of approximately 120,000.

### An emerging framework

There is a sense that the world has changed and media technologies have played an important role in the changes. This is frequently articulated in relation to the configuration of space-time. A 'spatial compression of the "knowable" world, the fragmentation of new consumptive communities and the general speeding up of our shared cultural world' (Stevenson 1999:35). At one level time is the same everywhere, 'a structure of temporal synchronicity which makes space irrelevant' (Ang 1996: 151), while at another, space demands a special recognition. 'At the level of the day-to-day, space cannot be annihilated because social specificity of any locality is inevitably marked by its characteristics as place' (Ang 1996:151). Tomlinson reiterates this notion of a reconfigured space-time describing globalisation as a social process 'making the world seem smaller and in a certain sense bringing human beings "closer" to one another' (1996:165). It also "stretches" social relations removing the relationships, which govern our everyday lives, from local contexts to "distaniciated" global ones' (Tomlinson 1996:165).

What are the effects of changing parameters on the local? For instance, does this determine a new 'cultural tribalism' implied by Castells with "the coexistence both of the monopoly of messages by the big networks and the increasingly narrow code of local micro-cultures around their parochial cable TV's' (1983: 16)? Does the global commercial culture, itself, shape the local to feed its own designs where 'the new culture of enterprise enlists the enterprise of culture to manufacture differentiated urban or local identities' (Morley and Robins 1995:346)? How do we understand the relationship between the temporal immediacy of the global and the spatial specificity of place? Are these two distinct arenas or do we agree with Ang that the global and the local are 'complexly articulated, mutually constitutive' (1996: 153)?

More specifically, how might we understand the framework of local television, especially in relation to BigTV, given this idea of global connections highly mediated by communications technologies? How can we discuss the tension between the apparent shrinking of space due to temporal synchronicity and particularities of place?

One approach, following An's conception of "social specificity" might benefit from the articulation of the relationships of everyday experience within a particular place. It would need to include relationships with global media shaped by the context of this situated experience – geographic and subjective. Audience communities can be categorised in terms of residence, those who live at a particular place, and in relation to groups who share specific interests often unconstrained by place.

The idea of place, as a constraint on decisions and responses, is further elaborated by Lee's (1997) idea of cultural dispositions, which he has appropriated from Bourdieu's habitus. He focuses on the myriad influences of a particular spatial location, which, he believes, tends to impose a corresponding propensity for a particular manner of response. This culture of location develops out of the:

range of certain objective conditions of existence, or social and material "facts", as these confront social actors who share the same social space *through time* [and] give rise to particular cultural dispositions or ways of viewing the world which appear to those actors as entirely spontaneous or natural forms of cognition (1997:133).

Within this perspective local television and its viewing communities is shaped by the cultural dispositions of place, and particular approaches to this televisual practice are coloured by, 'a propensity or inclination, rather than a compulsion, towards certain types of action' (Lee 1997:133). This propensity is naturalised in relation to a particular place.

Another conception of local television has responded to commercial imperatives and the perception that network schedules have commodified audiences for prospective advertisers. Strong feelings of disenchantment with the limitations placed on the potential of television broadcast and a further wariness to the seeming loss of democratic participation, especially at a local level, in a medium with extensive influence politically, economically and culturally, has further generated creative responses.

Ang targets the potency of mediation in her discussion of the influences of the global and believes the effects of globalisation are reflected in the acceptance of those forms utilised to produce and distribute programming. It is not necessarily the content of the programmes but the processes involved in production that connect a global presence within the local scene. Not only practices such as marketing, advertising and audience research 'all heavily institutionalised, specialised practices which were first developed in the United States' (Ang 1996:154), but also 'a continuous rehashing of relatively constant formats and genres (e.g. the cop show, the sitcom, the soap opera) and a standardisation of scheduling routines' (Ang 1996:154).

It is not helpful to reduce the reasons for local television's development and relationship with the global media environment to an essential or totalising determinant, but it is important to acknowledge that there are certainly important pressures on and within the local. Defining globalism as a binary structure with localism is not beneficial. The local/global relationships cannot be separated despite the possible contradictory effects suggested by Tomlinson. Market pressures are not the sole determinant of the shape of local television strategies although commercial imperatives are obviously powerful shaping forces dictating programming decisions in terms of financial survival. Deregulation of the licensing environment has an obvious connection with the shape of local televisual possibilities but it isn't the sole explanation for the distinctive profiles of different initiatives.

How then is it possible to establish a theoretical framework to articulate my own experience of local television given the multiple and dynamic pressures involved? What approach includes both global and local perspectives, but, at the same time, explains a particular and sometimes unique trajectory? What approach will allow for contradictory and contingent influences creating a multi-determined and not necessarily linear development? How might these questions be answered utilising the experience of the BigTV enterprise? How might this framework help in the speculation of the future for television broadcast?

### **Metaphors of self-organisation and emergence**

One useful framework can be developed through the utilisation of metaphors arising from the paradigm of complex systems. For Waldrop complexity is found at the intersections of chaos and order.<sup>2</sup> This domain 'is where the components of a system

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<sup>2</sup> This reiterates Plant's notion of the borderline, a transitional zone where there is no permanent stability but a constant flux. Connection is 'not the simple interlocutor between separate territories,

never quite lock into place, and never quite dissolve into turbulence, either' (1994: 12). Characteristics of these systems, resulting from this intersection of both order and chaos, include dissipation and self-organisation. These systems are based on the idea of disequilibrium, (neither locked into place nor dissolving into turbulence), as a necessary condition for development, and this enhances their ability to 'dissipate their energy in order to recreate themselves into new forms of organisation' (Wheatley 1992: 88).

Maxfield describes this type of system as one that is open-ended with 'many heterogeneous agents who interact non-linearly over time with each other and their environment and who are capable of adapting their behaviour based on experience' (2000:3). The components within a system, although not co-ordinated by some overarching central determinant, contribute to the emergence of the system along a particular developmental trajectory with 'new entities or stable aggregate patterns of organisation and behaviour arising from the interactions of agents' (Maxfield 2000:3).

The acceptance of openness to both internal and external influences, and the ability to adapt to changing circumstances through feedback mechanisms, is a significant factor in attempting to understand cultural processes. Television broadcast can be perceived as a self-organising system in the sense that it needs to be sensitive to contingent factors, which influence its developmental trajectory. Further, its development is open-ended, shaped by relations with audiences, competitors, commercial and cultural interests, technologies, and a myriad of other determinants in its sphere of operation. At the same time the enterprise is self-referential in the sense that while responding to pressures, and changing because of these, it endeavours to remain consistent with a sense of its own identity even if that sense itself is also changing.

To appropriate a paradigm, especially one situated primarily in the sciences, is a practice that always attracts criticism. For instance, in a review of *Strange Attractors: literature, culture and chaos theory*, Barrow chastises the author for this application of a scientific paradigm to literature. He considers the paradigm to have a specific function 'to describe particular complicated phenomena, like turbulent flow or changing weather patterns, in a precise way' (1999:127) and if applied to texts 'there is no guarantee that it will amount to more than a notation' (1999:127).

But is this criticism entirely legitimate?

Prigogine and Stengers, state 'that societies are immensely complex systems involving a potentially enormous number of bifurcations exemplified by the variety of cultures that have evolved in the relatively short span of human history. We know that such systems are highly sensitive to fluctuations' (1985:312-313). Plant suggests that 'as theories of chaos and complexity leak out from the sciences, an emergent connectionist thinking is beginning to blur the distinction between the arts, sciences and humanities' (1996:203). The new perspectives developing from these fields are helping to establish a different engagement with the world. These theorists are able to extrapolate from a rigorous mathematical paradigm and associate this with a conception of the socio-cultural as a means of perceiving the latter in a different manner.<sup>3</sup>

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rather... a position in and between; never fixed, always moving, always in the middle, always becoming one territory or another without ever achieving totality' (Deleuze and Parnet, 1987 cited in Wood 1999: 93).

<sup>3</sup> Hayles (1991) affirms the connections between the scientific paradigm and perspectives in the social domain but argues what occurs are similar configurations of ideas in different disciplinary arenas and

My own appropriation of aspects of complex systems applied to a media context, is an attempt to develop a metaphorical framework rather than a rigorous replication of that model, associated, as it is, with an abstract mathematical discourse. This is a tactic which seeks to develop new perspectives and ask new questions about a field of study, or, as Slack has explained, to utilise a 'mechanism for shaping intervention' (1996:112). This metaphorical approach connects a 'source' field of associative ideas with a 'target' field as though there were parallels. 'The metaphor selects, emphasises, suppresses, and organises features of the principal subject [the target] by implying statements about it that normally apply to the subsidiary subject [the source]' (Black: 62 cited in Holland 1998: 208).

The model of a dynamic complex system challenges the usual reductionist approach seeking to separate relations and objects as simpler and autonomous entities and no longer assumes that an understanding of these separate elements will allow for an understanding of their combination. Wheatley reiterates that 'we need to stop seeking after the universe of the seventeenth century and begin to explore what has become known to us in the twentieth century' (1992: 6) and I am certain she would agree with the need to reference ourselves now within the twenty-first century.

Further, Cilliers (1998)<sup>4</sup> reiterates the difficulty of not only establishing an essential determinant, when discussing the myriad interconnections within a system and between it and environment, but also, the difficulty of anchoring one comprehensive or complete interpretation. He states that 'instead of trying to analyse complex phenomenon in terms of single or essential principles, these approaches acknowledge it is not possible to tell a single exclusive story about something that is really complex' (1998: viii).<sup>5</sup> This perspective suggests an emergent system. 'What we have here is a self-organising process in which meaning is generated through a dynamic process, and not through the passive reflection of an autonomous agent that can make "anything go"' (Cilliers 1998:116).

Another aspect, reinforcing the partiality and consequent unpredictable quality of these dynamic complex systems, is that they can be influenced by non-linear determinants. A small input does not necessarily equate to small effect but can result in large disturbances. For instance, contingent factors shaping the developmental trajectory of a television enterprise can have unpredictable results and can have disproportionate consequences unrelated to their initial significance.

What then are some of these concepts that catalyse a different engagement with the idea of the local and television enterprise?

A crucial consideration is the relationship between the global and the local. If individual components can act independently, without the necessity for an overarching guiding principle, the local is invested with a greater independence from the global while, at the same time, being part of the global. Although a local television enterprise can be seen in

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not necessarily direct adaptations of the scientific model. Discussing the influence of chaos theory, the precursor to complexity, she states that 'it should not be surprising ... to find other sites within the culture that also embody the presuppositions informing chaos theory...the question of how such isomorphisms arise is not easily answered' (Hayles 1991:7).

<sup>4</sup> Cilliers offers ten elements relevant to a complex systems approach and proceeds to relate these to similar perspectives developed through a postmodern perspective.

<sup>5</sup> Cilliers supports the project of using the paradigm of complexity theory to help engage with social and cultural issues. For him 'the point about complexity is that it is useful - it helps us to understand the things we are trying to understand' (1998:7).

conjunction with a multiplicity of other local television enterprises also operating independently, together, they can contribute to the emergence of television networks at other levels: regional; national; international; and global.

A major problem with the local/global dichotomy is the imposition of a totalising binarism implying a simplistic structuring of two levels. A more effective approach is to consider the local/global debate symptomatic of a multiplicity of levels that can be viewed in relation to micro and macro relations. For instance, in relation to the characterising of levels, Goldstein cites Wimsatt, who stipulates a focus on a particular level is achieved 'on the basis of recognising that this level consists of entities and their relations that hang together more strongly with one another than they do with other units and relations on other levels' (1999: 61). The implication here is that there can be numerous levels in which the micro components are distinguished from a macro aggregate and that the local/global relationship is one aspect of this multiplicity. The micro components of BigTV, such as volunteers and their relationships, comprise the macro enterprise BigTV at another level, and the BigTV enterprise, in conjunction with the other regional television enterprises throughout New Zealand, constitute the macro level of regional television for that country.

This situation articulates both an autonomy and inclusiveness in which separate elements shape an emergent system.

In the world of self-organising structures, everything is open and susceptible to change. But change is not random or incoherent. Instead, we get a glimpse of systems that evolve to greater independencies and resilience because they are free to adapt, and because they maintain a coherent identity throughout their history. Stasis, balance, equilibrium-these are temporary states. What endures is process - dynamic, adaptive, creative (Plant 1996:98).

Plant implies the power of innovative approaches within an enterprise, and the creative potential of local television enterprises within other macro systems. The top-down implications of globalisation can be reassessed in relation to the possibility of non-linear effects, due to elements within the local, as these might disturb the system to the extent that it results in emergence at another level. The creative input acting as catalyst for change has the potential for punctuating stable conditions. This paradigm also accepts the necessity of disequilibrium and how this state implies a creative opportunity for emergence, where the openness of the system to the environment, and the catalytic potential of an unpredictable input, can result in the emergence of new forms for that system. This suggests that a local television enterprise can have a potentially unpredictable effect on macro domains, especially if it is able to maintain a sensitivity to change, enhanced by its own disequilibrium and need to maintain its own survival. Further, it suggests that the competition for survival at the local level may result in a collaborative emergence at another level. In New Zealand, for instance, this has occurred with the formation of the New Zealand Regional Broadcasters Group.<sup>6</sup>

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<sup>6</sup> There are approximately fifteen regional television stations either utilising commercial or non-commercial licences registered as part of the Regional Television Broadcasters Group. An outline of this RTB group – its composition, characteristics and relations will be the subject of a further essay.

However, this potential effect from a local must be measured against Wheatley's claim that 'a self-organising structure is no mere passive reactor to external [or internal] fluctuations...It establishes a basic structure [that] facilitates an insulation from the environment that protects the system from constant, reactive change' (1992:92). There are periods of stability for the system punctuated by disturbances and possible emergence. In fact the model of complexity is only useful at those times of non-equilibrium when the internal and external pressures move the enterprise to thresholds of change.

The approach taken in this paper is not to celebrate a free-market liberalism, but to stress the multiplicity of options that are operating within complex systems. The autonomous decisions, shaped by different contexts, made on one level, influence the emerging system at other levels. These relations are not chaotic, but result from the dynamism of complexity powered by the disequilibrium generated from the tensions between dissipation and self-organisation. A variety of different relations, both competitive and collaborative, on a multiplicity of levels, are involved and to prioritise competition is to simplify these operations.

A further concept, which also challenges the free-market paradigm, is the idea of co-evolution. Within the complex systems of macro/micro dynamics the processes of adaptation and emergence operate in multiple and intersecting ways. The constitutive elements within a system, as well as systems of relationships either imbricated with, or independent from, other systems, are adapting and emerging at the same time. Systems and their contexts are changing because of mutual interaction and exchange. This points to the ways in which independent and imbricated systems are influencing each other, and the need for a mechanism of intervention that can acknowledge this co-evolving texture of connections.

The complex systems approach recognises the unpredictable creative potential of individuals and their connections within enterprises, and of local enterprises themselves within other levels of the system. It stresses the importance of disequilibrium to enhance sensitivity to environments, and acknowledges interconnection between different levels of system networks. It also introduces some problems. For instance, how do we theorise the boundary between elements within a system and the system itself? What do we mean by the identity of an enterprise? How do we differentiate the various levels of micro and macro connections? What are the actual conditions for a punctuated equilibrium? What does the equilibrium of an enterprise mean?

### **Theorising through practice: a liquid architecture**

One way of dealing with some of these issues is to relate them to the BigTV enterprise discussed in the introduction of this paper. Theoretical speculation acts as a component for facilitating the operations of the enterprise and is perceived in these terms as contributing to the processes of self-organisation and emergence.

Within this particular local enterprise the release from commercial constraints offered a window for creative responses. This creativity is stimulated by the co-evolving convergence with other technologies such as the Internet, the infrastructures of virtual information that are becoming connected in some communities and even cities, as well as the theoretical paradigms developing in conjunction with these new technologies. As these develop connections are made between different modes of communication stimulating new approaches to established media. For instance, the intersection of

broadcast capability and the Internet has created a strong drive to establish connections between BigTV's broadcast capability and the possibilities of relationships with the Internet, especially through web construction and web/broadcast convergence.<sup>7</sup> It has also opened the possibility to access programmes from a more global pool, so that BigTV becomes a conduit not only for local programming, but also, potentially, a broadcaster of other local programmes exchanged throughout the world.

The openness to participation, and the fluid relationships of those involved, create the possibility of a wide range of individuals and groups establishing relationships with BigTV and each other. Connections could be established through the local community, with BigTV acting as a nexus for this network. The BigTV enterprise would be a tangible reason for making connections; people have a focus for their agendas as well as a vehicle to achieve them.

This multiplicity of connections within the enterprise through voluntarism, and between the enterprise and the wide range of community interest, foreshadows the beginnings of a self-organising complex system, sensitive to its environment, and able to adapt and emerge, as it co-evolves with other local enterprises in the community and elsewhere. The process has been reflected in BigTV through the fluid relations of the volunteers as these have transformed from the initial start-up. An ill-defined group without specific roles has changed to a more defined, but still fluid, collection of smaller groups, who work independently, but whose members can be involved in more than one group.

This experience reflects the dispersed pattern of relationships that can be found in the enterprise. Individuals take on flexible roles, sometimes committed to a project and at other times not being involved at all, while they are also involved in a wide range of other commitments, such as those of student, participating in other groups or organisations, and involved in social domains of their everyday experience. Particular individuals have a much greater effect on the developing profile of the enterprise as their skill levels, enthusiasm, and communicative talents, allow them opportunities to develop relationships to achieve their objectives. The patterns of relationships develop along informal lines, while the principle of voluntarism struggles against the demands of the discipline and reliability required by the production process, and the expectations of those who are driving it.

This focus on the pattern of relationships, rather than on individuals and on particular relationships between individuals, is a useful way of understanding the nature of the television enterprise, its identity, its relationships with other enterprises, and the contexts in which these enterprises are defined. Instead of a rigid boundary clearly delimiting the formal television enterprise, the idea of dispersed patterns throughout the enterprise and beyond, creates a picture of the actual formation defined as BigTV. People are committed to this enterprise in various degrees, and the relationships both within the organisations of the enterprise, and between BigTV and other contexts, are also changeable.

Extending this idea, four different categories can be introduced to articulate the types of relationships occurring. These categories are: the formal, relating to the legal and organisational structures of BigTV, as well as between this enterprise and the legal

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<sup>7</sup> A text-based messaging facility is being developed and the possibilities utilising new approaches for audience research are being explored using this broadcast/web convergence.



obligations involved in the commercial and political domain; the informal,<sup>8</sup> or shadow networks<sup>9</sup>, which involves those less clearly defined and more fluid connections developing without the constraints of formal obligation; the competitive, and the collaborative.

These patterns of relationship operate throughout the system, at all levels, suggesting the need to acknowledge the imbricated nature of connections within and between enterprises. The multiplicity of roles implies that there is not one specific configuration acting as foundation for the patterns of connection, and at different times the patterns of relationship within and between enterprises, and their respective contexts, are not reliant on predictable configurations of elements or on a particular configuration of space-time organisation. The formal, informal, competitive, and collaborative dynamics of this system, become an important arena of focus for intervention. Any enterprise has a fluidity in terms of its formal and informal boundaries, and acts as a complex system engaged in a dynamic interplay between dissipation, with the challenge to its connections, and self-organisation, with its consequent development of new patterns of connection.

One of the most important areas for examination is the informal connections as these offer 'greater adaptability to an organisation' (Goldstein 1999: 65). They are a prime source for change, if the motivation for change is inherent in the informal relations, although they can also act as a strong source for homeostasis, if 'resistance to change is located in the shadow system' (Stacey 1996:169).

The formal networks tend to have greater stability, while the shadow or informal networks are more dynamic, fuelled not by obligation and monetary power relations, but by interest, and commitment, arrayed over networks within an organisation, and between the organisation and others, depending on the external connections volunteers have already established. These informal connections, especially, can be characterised as a liquid architecture<sup>10</sup> of connections that potentially act in creative ways to instigate self-organisation. The figuration of a liquid architecture suggests to me that the components themselves although acting on some levels as independent systems, also act together much as a liquid might when poured from one container to another.

This liquid architecture also offers one solution to the dilemma of fixed boundaries within and between enterprises. These boundaries are not defined in relation to location as though there is some fixed and tangible demarcation, but in terms of the formal, informal, competitive and collaborative alignments that together result in a particular enterprise. The identity of any enterprise then is this matrix of dynamic relationships.

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<sup>8</sup> Goldstein defines an "informal" organisation as 'spontaneously occurring organisational events, structures, processes, groups and leadership that occur outside of officially sanctioned channels' (1999: 65).

<sup>9</sup> Stacey defines a shadow system as 'the set of interactions among members of a legitimate [formal] organisational system that fall outside that legitimate system...It is the arena in which members of an organisation pursue their own gain, but also the arena in which they play, create, and prepare innovations' (1996: 290).

<sup>10</sup> Although this metaphor emerged from my own attempts to characterise these connections, during the course of my reading I also came across the same metaphor in Novak's article 'Liquid Architectures in Cyberspace'. For Novak's a liquid architecture is 'a symphony that never repeats and continues to develop. If architecture is an extension of our bodies, shelter and actor for the fragile self, a liquid architecture is that self in the act of becoming its own changing shelter' (1991: 251). The metaphor of liquid architecture is another approach to the idea of emergence.

These alignments act as currents that together shape the lines of flow and, therefore, help form the architecture.

Establishing levels of relationship, extending from the very local through to the global, becomes a structuring process useful as a mechanism for intervention, rather than an actual concrete reality. These levels are a way of structuring interlinking processes articulating those interconnections constituting the local/global or micro/macro networks. They act together as systems, developing at different rates, situated in different locations, and resulting in the ongoing emergence of media systems.

The punctuations of equilibrium can occur in any domain and are the result of the sensitivities of particular patterns of relationship to either an internal or external disturbance. Possibly this could be seen as an intersection by other patterns that result in a different “interference pattern” of relationships, in turn acting as a catalyst for an ongoing process of change. Equilibrium of a system results when the pattern of relationships can no longer adapt to new intersections and, therefore, new interference patterns cannot be created.

This focus on connectivity also needs to emphasise that disconnection are also implicit processes filtering the shape and development of the architecture of the enterprise. For example in 2004 BigTV saw a major bifurcation in relation to the approach it took in broadcasting. One of the compilers of 2003 decided, with my support as team leader, that the over-reliance on existing public service programming was distorting the agendas of local production and that investment was needed to redress this situation. She considered that there had been a challenge to the identity of BigTV as a local broadcaster and a response was needed. Changes were made and a series of independent production groups were formed to focus on local programming options. For example a mock-soap *210 Nixon Street* was established based on the interactions of a group of flat mates who were pretending to be actors in a soap opera; a magazine programme *Found in Translation* was established by a group of Chinese students focusing on their perspectives of Hamilton; a cooking programme was established based on the surprise visits of two presenters who arrived at a flat at an appropriate time for a meal and then proceeded to cook for those in the flat using only ingredients they could find; and finally a studio show was established. This latter was based on a typical chat show format with invited and sometimes uninvited guests attempting to be entertaining. The response then to a dependence on more professional imported programming was to emphasise local productions with their lower quality but stronger networks of production.

The criteria established above emphasising patterns of dispersed relations, informal networks, competition and co-operation were all useful ways of understanding the emergence of this different style of identity. Individuals could participate in different roles at different intensities and across the production groups. Powerful informal groups could assist or hinder production outcomes and these relations overflowed into other arenas. For example the Chinese students found their programme a useful vehicle to meet and socialise outside of the constraints of a university regime, but the situation of working for BigTV offered some of these Chinese students access to connections with non-Chinese students which opened up stronger networks for all concerned.

The response to a demand for local investment was met but at the expense of developing the international programming and it is predictable that in 2005 a further readjustment will be made. These dynamic processes might be seen as an unsettling

factor if a more commercial model was applied to BigTV, but the dynamic model that is being discussed in this essay allows me as team leader to accept these changes and realise that the processes of self-organisation and the possible emergence of new approaches is an important aspect of BigTV's profile as well as being a useful experience in terms of BigTV as media laboratory.

### **Diversity in tomorrow's eco-media system**

My own experience of BigTV, an opportunity to facilitate new practices as well as the necessity for new approaches to theorising this experience, also offers me an opportunity to speculate about future directions for the media as a complex system of interacting systems, or eco-media system. This approach, I believe, tempers the emphasis on a technological-determinism, which so often accompanies global perspectives, and offers another position, exhibiting a diversity of relations at multiple levels of the media environment. These relations, fostered by the metaphors of complex systems, include dissipation, emergence, self-organisation, and co-evolution, all operating through a multiplicity of levels within the eco-media system.

Current technological developments have been an important facet of BigTV's ability to become established, to maintain its presence and to explore hybrid combinations of technological possibilities. Again, the global vision has also played a part in the alignments BigTV is developing. These possibilities have been nurtured by the changing perception of the world brought about by the global views fostered through the possibilities of the media technologies. It is also important to note that BigTV and local access television is generally not determined solely by technology but is shaped more by the ability to adapt technology to local circumstances. Ironically, the ability to download and broadcast high quality programmes from Deutsche Welle and the French Channel Five has given a higher audience profile to BigTV as a local broadcaster. In this case the global gives credibility to the local.

The approach taken in this paper focuses on the micro/macro relationship in terms of a sensitivity to adaptation and, specifically; the potential of creative strategies, deriving from local television enterprises, which escape the immunising effects, insulating established systems. The emphasis is on the multiplicity of micro/macro connective networks operating, in an imbricated manner, throughout many levels. It introduces a liquid architecture of levels and relations, suggesting both the complexities of the multiple levels of micro/macro relations, as well as the dynamic possibilities resulting from small inputs at a micro level resonating through the macro.

Further, these levels do not presume a totalising conception of either time or space, but challenge the notion of the global as a synchronous temporality and, similarly, of the local as a particular site of characteristic cultural dispositions. The local and global levels operate in a multitude of different space-time configurations, only sometimes with the potential of synchrony and, sometimes, delineated in relation to a tendency to particular cultural dispositions of place.

This model recognises the pressures towards stability, resistance to change, and attempts at immunity from the environment, but, because of the opposing pressures of survival in a competitive multi-layered environment, stability cannot be a successful strategy. The model opts for the possibility of a creative punctuation of this tendency to homeostasis, and focuses attention on the possibilities of self-organisation and emergence through processes of disequilibrium. This places a demand on creativity and diversity as necessary

energies for the eco-media systems. The debate about the future should be focused on these arenas rather than maintaining the currency of determinacy shaped by technology and a context constrained by an illusory concept of globalism. If it doesn't, then the conception of the future could tend to a sterility that ignores the need to avoid equilibrium.

The degree of rigidity of an enterprise is a marker for its level of reaction to its environment. 'Systems with higher internal sensitivity to the opportunities created by perturbations will be more creative and adaptable. If the system does not have the potential to create internal variety, innovation will not take place' (Teubner 1997:9). This thrusts the processes of innovation, adaptability and creativity, into a central role for an analysis of any media enterprise including local television, both in relationship to itself and its cultural dispositions of place, as well as in relation to the contributions it might play within emerging macro systems.

### Conclusion

Connections between systems and the spaces of their borders are a much more promising area for theoretical interests. An encouragement of diversity in relation to hybrid media systems that can offer different and even contradictory approaches is an essential strategy to sustain vitality. Given this emphasis on connectionism that the complex system model elaborates the transborder connections are key sites for an examination of these energising processes, particularly in relation to the informal shadow networks.

An example of this is BigTV and its potential as one of the myriad media forms emerging within the eco-media system. It is at this level that shadow networks offer new solutions to the constrictions of established systems and points to a source of research for the future implications of media democracy. The self-organising systems of shadow networks can become a strong force for re-examining the potential of the television medium and the embedded globalising structures of production, management and distribution. They can punctuate the current naturalised and immunising approach to television. This bottom-up challenge can result in unpredictable effects at higher macro levels and can offer the small difference that will make large-scale changes to the ways television broadcasting will be shaped in the future.

The future will be shaped by technological development and conceptions of the global will play an important role in our attempts to grasp the slippery tail of tomorrow. The future of the media also needs to be considered in terms of the capacity of the connections that occur at all levels of the eco-media system and this paper has suggested some of the ways a recognition of these connections can be developed.

### References

- Ang, I. (1996) 'In the realm of uncertainty: the global village and capitalist postmodernity' in H. Mackay, and T. O'Sullivan (Eds.) (1999) *The Media Reader: continuity and transformation*, London, Thousand Oaks and New Delhi: Sage Publications in association with The Open University, 366-384.
- Barrow, J. (1996) 'Outlook moderate to fair; winds changeable', in J. Barrow (1999) *Between Inner Space and Outer Space: essays on science, art, and philosophy*, Oxford and New York: Oxford University Press, 126-127.

- Berland, J. (2000) 'Cultural Technologies and the "Evolution" of Technological Cultures', in A. Herman and T. Swiss (eds.) *The World Wide Web and Contemporary Cultural Theory*, New York and London: Routledge, 235-258.
- Black, M. (1962) *Models and Metaphors*, Ithaca, New York: Cornell University Press.
- Byrne, B. (1998) *Complexity Theory and the Social Sciences: An introduction*, London and New York: Routledge.
- Castells, M. (1983) 'Crisis planning, and the quality of life: managing the new historical relationships between space and society', *Environment and Planning D: Society and Space*, 1 (1), 3-21.
- Cilliers, P. (1998) *Complexity and Postmodernism: understanding complex systems* London and New York: Routledge.
- Deleuze, G. and Parnet, C. (1987) *Dialogues*, H. Tomlinson and B. Habberjam (trans.), New York: Columbia University Press.
- Goldstein, J. (1999) 'Emergence as a Construct: History and Issues', in M. Lissack, (ed.) *Emergence: A journal of complexity issues in organisations and management*, 1(1), 49-72.
- Grossberg, L. (1986) 'History, politics and postmodernism: Stuart Hall and cultural studies', in D. Morley, and K. H. Chen, (eds.) (1996) *Stuart Hall: Critical Dialogues in Cultural Studies*, London and New York: Routledge, 151-173.
- Hawkins, H. (1996) *Strange Attractors: literature, culture and chaos theory*, New Jersey: Prentice Hall.
- Hayles, N.K. (1991) *Chaos and Order*, Chicago: University of Chicago Press.
- Holland (1998) *Emergence: from chaos to order*, Oxford: Oxford University Press.
- Kelsey, J. (1999) *Reclaiming the Future: New Zealand and the Global Economy*, Wellington: Bridget Williams Books Ltd.
- Lee, M. (1997) 'Relocating Location: Cultural Geography, the specificity of Place and the City Habitus', in J. McGuigan (1997) *Cultural Methodologies*, London, Thousand Oaks and New Delhi: Sage Publications, 126-141.
- Maxfield, R. (1996) 'Complexity and Organisation Management', in D. Alberts and T Czerwinski (eds.) (1996) *Complexity, Global Politics, and National Security* [Online]. Available: <http://www.ndu.edu/ndu/inss/books/complexity/ch08.html>.
- Morley, D and Robins, K. (1995) 'Reimagined communities? New media, new possibilities.' in H. Mackay, and T. O'Sullivan (eds.) (1999) *The Media Reader: continuity and transformation*, London, Thousand Oaks and New Delhi: Sage Publications in association with The Open University, 336-352.
- Novak, M. (1991) in M. Benedikt (ed.) (1993) *Cyberspace: First Steps*, Cambridge, Massachusetts and London, England: The MIT Press, 225-254.
- Plant (1996) 'The virtual complexity of culture', in G Robertson, M. Mash, L. Tickner, J. Bird, B. Curtis, and T. Putnam, (eds.) (1996) *FutureNatural: nature, science, culture*, London and New York: Routledge, 203-217.
- Prigogine, I. and Stengers, I. (1985) *Order out of Chaos: Man's new dialogue with nature*, London: Flamingo.
- Riggs, F. (1998) *Globalisation: Key Concepts*, <http://www2.hawaii.edu/~fredr/glocon.htm>, 1-33.
- Slack, J.D. (1996) 'The theory and method of articulation in cultural studies', in D. Morley, and K. H. Chen, (eds.) (1996) *Stuart Hall: Critical Dialogues in Cultural Studies*, London and New York: Routledge, 112-130.
- Stacey, R.D. (1996) *Complexity and Creativity in Organisations*, San Francisco: Berrett-Koehler.
- Stevenson, N. (1999) *Transformation of the media: globalisation, morality and ethics*, London and New York: Longman.

- Tasaka, H. (1999) 'Twenty-first-century Management and the Complexity Paradigm', in M. Lissack, (ed.) *Emergence: A journal of complexity issues in organisations and management*, 1(4), 115-123.
- Teubner, G. (1997) 'Law as an Autopoietic System', in *Can Social Systems be Viewed as Autopoietic*, London: London School of Economics Study Group Meeting No. 3. [Online]. Available: <http://www.bprc.warwick.ac.uk/lse3g3.html>
- Tomlinson, J. (1996) 'Cultural globalisation: placing and displacing the west', in H. Mackay, and T. O'Sullivan (eds.) (1999) *The Media Reader: continuity and transformation*, London, Thousand Oaks and New Delhi: Sage Publications in association with The Open University, 178-210.
- Waldrop, M. (1994) *Complexity: The emerging science at the edge of order and chaos*, London, New York, Ringwood, Toronto and Auckland: Penguin.
- Wheatley (1992) *Leadership and the New Science: learning about organisation from an orderly universe*, San Francisco: Berret-Koehler Publishers, Inc.
- Wimsatt, W. (1976) 'Reductionism, Levels of Organisation and the Mind-Body Problem', in G. Globus, G. Maxwell, and I. Sabodnik (eds.), *Consciousness and the Brain*, New York: Plenum Press.
- Wood, M. (1999) 'Cyborg: a design for life in the borderlands', in M. Lissack, (ed.) *Emergence: A journal of complexity issues in organisations and management*, 1(3), 92-104.