The Aotearoa Digital Arts Reader
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The Big Idea

Jacquie Clarke

In July 2002 *the big idea* website was launched as an online space designed to enable connections, exchange and productive affinities between members of New Zealand's creative communities. Like many good ideas *the big idea* began in a series of casual conversations. A graduate student in design completing a temporary contract in Creative New Zealand's Auckland office was dreaming aloud one day. 'What I could do with right now,' she mused, 'would be a website to check out jobs and exhibition spaces, to find a flat and to show my work.' Another day, on a whim, a case worker from Work and Income in inner-city Auckland came to visit Creative New Zealand. He was concerned about increasing levels of unemployment amongst young graduates in the creative sector. He expressed this concern to Elisabeth Vaneveld, then Manager at Creative New Zealand, Auckland, about improving employment opportunities for this group. Vaneveld ensured that these conversations gained momentum, becoming agenda items, and then plans. A team of people grew around these ideas and thus *the big idea* was launched.[1]

The big idea has grown into a significant community. What does this mean for a website? This idea of 'community' is alluring but elusive. The fertility of any given community is measured by its ability to grow and evolve. In a vernacular sense 'growing' a community has much in common with tending crops, fields, orchards or gardens. The desirability of growth is an intricate concept; it implies the movement of a living organism from juvenility through graduated stages of change towards maturity.

From an ecological or systems perspective, a community shares certain behavioural similarities to an ecosystem. An ecosystem supports the growth of interconnected species and organisms; it evolves resilience through its diversity and through the complex network of interdependents within its boundaries. In the paradigm used by social ecologists the complexity and diversity of any human community's pattern of interconnection determines its resilience and therefore its potential for growth.

Today the concept of community is often typefied by the notion of 'networks'. Since the 1960s systems theorists have identified a paradigm shift that "includes a shift in social organisation from hierarchies to networks."[2] For French theorist Félix Guattari the ecological crisis of the 1990s was attended by an accompanying social crisis in which "kinship networks tend to be reduced to a bare minimum."[3] Guattari noted that contemporary social formations emphasised individuality over relationship. His answer to the resulting social malaise required "reconstructing the modalities of 'group-being', not only through 'communicational' interventions but through existential mutations driven by the motor of subjectivity."[4] Guattari argues that social regeneration or growth in an age of isolation and fragmentation is contingent on both individual subjectivity and connectivity. Against this backdrop the digital social network has emerged to support alternative kinship models that in many ways hark back to the 60s commune, the flourishing of large scale music festivals, and the rise of the environmental movement. Networks like *the big idea* present a counter-space to hierarchical social models.

This essay suggests that it is possible to read *the big idea,* New Zealand's largest online creative sector community, as a localised digital social ecology. Since *the big idea* is not a theoretical nor aesthetic experiment but a community project, it follows that like most social organisations its main concern is for its evolution and survival. I use theories drawn from social ecology to speculate about the notion of growing in relation to *the big idea,* presenting a provisional consideration of *the big idea* as an organism.

Dee Hock writes, "Organisms and organisation are not separable. Nor can the physical world be separated from the social."[5] The form of a living organism's growth is determined by its DNA structure which embeds a developmental path within each cell. How though does a website or web network propelled by social needs but locked into the formulas of coded computer language evolve? How does a social network grow?

Applying biological metaphors to a digital network is a speculative task. Every ecological space is unique and evolution is a provisional idea. While biologists may think of evolution in terms of optimum forms, in digital social networks the ability to create connections is the indicator of growth. Interestingly *the big idea*'s user registrations and daily visitor statistics have grown exponentially, despite the website's technological limitations. To understand this paradox of simultaneous growth in social complexity and stasis in technical development, I want to consider it firstly as a prototype in action, secondly as a virtual nodal structure, thirdly as a complex network and lastly as a living evolving social system.

The prototype in action

The big idea's growth has been somewhat atypical. Launched on the open-source platform PostNuke, the site was initially designed as a prototype to demonstrate the potential of the concept of networked community formation to funding bodies. Like many online networks *the big idea* was designed to provide the individual visitor with a hub of potential opportunity. From the simple nodal structure of the various segments of the site it was planned that visiting creative practitioners would build up a matrix of connections and information that nourished their practice and their contribution to the sector. It also sought to help individuals visualise future career pathways and provide key information across developmental nodes as they embarked on that journey. One of the project's core intentions was to arrest a drift by graduates of art, dance, and film academies towards dependence on social welfare agencies. This drift resulted in the gradual loss of creative skills acquired during tertiary training as social welfare policy insisted upon a shift away from creative activity towards 'real' employment options.

The community embraced the site, undeterred by limited technology and a lack of high-end design values. In its first year *the big idea* attracted five hundred subscribers and around two hundred visitors daily. Six years later, in early 2008, the site has over 15,000 subscribers and is visited by nearly five thousand people daily. Within any twenty-four hour period visitors from over fifty-five cities around the world check in. The site attracts ever-increasing uploads from

1. http://www.thebigidea.co.nz
2. Fritjof Capra, *The Web of Life: A New Scientific Understanding of Living Systems* (New York: Double Day, 1996), 35.
3. Félix Guattari, *The Three Ecologies* (London and New Brunswick, NJ: The Athlone Press, 2000), 27.
4. Guattari, *The Three Ecologies,* 69.
5. Dee Hock, *Birth of the Chaordic Age* (San Francisco: Berrett-Koehler, 1999), 99.

thousands of individual practitioners as well as educational institutions, not-for-profit and community groups, technology companies, government departments and many other individuals and organisations in the creative industries.

While social engagement with the site has extended its network, the architecture of the site remains in its prototypical form. A prototype actualises an idea before that concept is complete or perfect. If it does not become fully formed, the growth of the project is inhibited in many ways, being realised through iterations of the prototype. In *the big idea*'s case this arrested technological development means the community cannot use functions standard to many information networks, for example podcasting, sharing sound and document files, online chatting or conferencing. Some of the basic online information systems now expected from a semantic web environment are not available. In addition there are structural issues that can potentially inhibit access, such as problems with navigational flow and a lack of integration of modules and data.

Despite these technological limitations the community of users continues to embrace the site, creating exponential growth in both subscriber numbers and daily user statistics. Like physical pathways, web pathways become habitual; it's a bit like buying vegetables—you go where you know the source, or the price, or the range. Online network membership is driven by habit and loyalty and there is evidence to suggest that people don't move towards technology as much as they move towards other people, and thus begin to emulate other peoples' habits. Garcia writes that members of networked communities:

> *…may postpone the adoption of new technologies—even when new components are far superior to old ones—until their entire network can be written off. On the one hand—and for the same reasons—if a number of users come to constitute a critical mass moving to a new technology, others will likely jump on the bandwagon, fearing that they will be left behind.*[6]

Nodal structures in web technology

The exponential growth of *the big idea* in terms of social engagement has been matched also by the increase in the density of information it now distributes. On *the big idea* constant sharing and profiling of information drives the impetus for interaction and for building the network. However, as more and more information flows into *the big idea* grid it has difficulty finding its way to a surface—this results in a kind of digital gridlock and distribution problems.

Ecological discourse often employs metaphors of nodal structures based on botanical forms to describe network distribution. In the biological growth of plants, the organised splitting and shooting that happens at a plant's nodal points enables it to receive sunlight and minerals for photosynthesis and growth. The internode is the point in the plant where bifurcation or branching happens and is activated at a point of tension. In websites the equivalent distribution channels are the network pathways which users move through habitually. Information must be distributed optimally across the network to allow for its easy uptake. Unlike the three-dimensional branching structure of a plant, a website has an initially linear structure. If bifurcations do not occur at points of stress to create new nodes, then web pages can become long trails of information that are difficult to access. There is growth, but it is linear, and in the case of *the big idea,* undifferentiated and at times inaccessible.

6. D. Linda Garcia, "The Architecture of Global Networking Technologies" in *Global Networks, Linked Cities,* ed. S. Sassen (New York and London: Routledge, 2002), 42.

Linearity is like the digital version of urban sprawl—when people on the outskirts of a town can no longer walk to the centre then a city begins to lack human scale. Websites too can emulate the grid-like patterns of habitation of physical landscapes. On *the big idea* the lack of bifurcation and distribution of information means that the network is not evolving to allow nodes to connect to other nodes and subsequently create networks within networks.[7]

Living Systems

How then, can *the big idea* move beyond linearity and keep evolving as a complex network? In Wolfgang Goethe's eighteenth century studies of biology, he notes that a nodal point activates four stages of organic activity. In his syntax, a nodal point can be described as a new form that develops initially by shooting and then by articulating, spreading and stemming.[8] This model can be applied to the information ecology of *the big idea*. An article appears (shooting), it takes shape in a new environment (articulating), it is received by readers (spreading), and finally it links to other networks (stemming).

Perhaps networked digital technologies are an appropriate new space for these biological morphologies. Recent experimentations into node behaviour by levitated.net, a New Mexico-based design team, have explored a range of free-associating nodal activity. Levitated.net provides open source Flash modules that allow users to explore nodal growth within an object-orientated graphic environment. A node in the node gardens of levitated.net can ideally be capable of:

> *…self-locomotion, message passing, information storage, and some degree of arbitrary free will. Additionally it should have the ability to bond, breakaway, regroup, transform, etc. Each node is capable of searching for and making connections, and negotiating forces received through connections.*[9]

Connectivity drives this nodal process. The 'evolution' of a digital community could be seen as a trajectory towards increased connectivity and mobility. In Felix Guattari's terms, a successful digital community should enable both connectivity and individual subjectivity. In the past five years there have been significant technological evolutions within social networking technologies. These mostly relate to the subjective possibilities for participants in social networks such as MySpace and Bebo, and with the 3D, avatar-driven moving, talking, acting, experiential digital bodies found in Second Life; described by one commentator as "the penultimate lonely romantic empty city."[10]

The question for any digital community is: which way forward? Thus far *the big idea* has managed to avoid some of the downsides of digital social networks such as the distributed celebrity culture models that exist in MySpace and Bebo. Additionally it has avoided the aggressive acquisitive friendship systems that have emerged in those spaces. It begs the question again: can a social network actually evolve or does it become redundant as new forms emerge?

The paradox of growth

Like an ecological phenomenon, the Internet emulates Goethe's description of nature: unsystematic and "an ever-changing proteus."[11] Often the Internet generates new social patterning from what could be perceived as transgressive behaviour. However, what may appear to be transgressive within the culturally

7. See Capra, *The Web of Life,* 35.
8. Johann Wolfgang von Goethe, "The Metamorphosis of Plants," (1893) *Journal of Botony,* December 1863 – 1871, trans. Emily Cox (London: Robert Hardwicke, 1863), 47 – 58.
9. Jared Tarbell, *Levitated.net,* 2007. http://www.levitated.net/daily/levIterativeIK.html
10. G. H. Hovagimyan, "Empyre: Prototyping on Second Life" *Empyre* [discussion list], August 2007. https://mail.cofa.unsw.edu.au/pipermail/empyre/2007-August/
11. Goethe, *The Metamorphosis of Plants.*

encoded constraints of a traditional social politic may actually constitute as progressive or adaptive within an ecological process.

The connectivity and complexity of *the big idea* community is difficult to perceive from the outside. *The big idea* maintains an intimate scale and has a kind of suspended sense of homeliness. The facility for uploading member-content provides a key niche media opportunity for local practitioners. The site does not distinguish between the process and outcomes of creative output, nor does it rank contributions. This open door policy addresses naturalised hierarchies within New Zealand's various creative sector communities. Members have engaged with the project from across a wide demographic and geographic range. Market research indicates that users of *the big idea*: find collaborators, feel more informed, discover old friends, find a job, a grant, a leg up, a sub-network, and have mapped-out future career pathways.

There are however other types of encounter occurring, encounters existing in what Guatarri calls the "microsocial."[12] These interactions are not able to be mapped or gridded, largely because they exist in experiential psychic space. In real space, the microsocial is made up of glances and looks. On a website, the microsocial potentially exists as a counter to isolation, in the form of a moment of synchronicity or co-incidence, as a favour or an insult; the type of connection that is subjective and connective at the same time. Marshall McLuhan put this succinctly when he wrote: "The meaning of meaning is relationship."[13] Networks are radical (in the literal sense of springing from the root) because they are so significant to wellbeing and, in a biological sense connectivity is the signature of health.

A network does not evolve into a predictable end product, but instead exists as a responsive environment. As a digital network and a generative social space, *the big idea* provides its visitors, its community, with information, new experiences, interactivity and a sense of connection. A digital social network however cannot evolve through design processes alone. Networks must always prioritise connectivity and the relational. The struggle for a network like *the big idea* to grow, evolve, adapt and survive is bound by overlapping forces: technical, political, social and economic. Today's network users may be able to think of themselves as authors rather than consumers. However authorship and participation are limited by the boundaries of the system. In spite of this, the economics of networks still offer a counter space to hierarchies. The challenge now is for digital social networks to not only create productive social environments but also stimulate alternative economies which become both self-supporting and self-organising.

12. Guatarri, *The Three Ecologies*, 35.
13. Marshall McLuhan and Barrington Nevitt, *Take Today: The Executive as Dropout* (Ontario: Don Mills and Longman, 1972), 3.

A System of Drawing

Kurt Adams

The spontaneity of drawing allows a tactile passage into three-dimensional modelling software, contradicting the precision of its intended use. I am fascinated by the fingerprint on the screen, the varied density of the hand-drawn line, the crumb of graphite, the paper's folded edges. I began from landscape drawings, rough sketches of leaves and branches, diagrams of cloud patterns and tree silhouettes. The pages were scanned and the white of the paper removed, leaving a layer of fragmentary marks nested within the screen's array of clean shiny buttons and drop shadow menus. This library of digital drawing was utilised in 3D software as blueprints, textures or to deform flat architectural planes. The dark graphite lines created ranges of angular hills while smudges carved crevasses over the Cartesian grid.

Despite the alluring mutability offered by the computer, this method at first alienated me from my practice, changing the fluidity of mark making into a block puzzle where I clicked and slid wafers of drawings throughout the 3D grid. I tended to the scene each day and as I fed my virtual environment more and more images, the saturation of information provoked errors and software crashes. Traditional 3D graphics construct an environment in advance of plotting a virtual camera path through it, rendering this point of view as a sequence of moving images. This positioning of a camera and framing scenes within it is like setting a stage and positioning props. My method was more improvisational, mixing together drawing and audio, which I used to generate erratic movement. The 3D software converts the amplitude of a sound wave into a value that can be used to animate any parameter within the virtual environment. At a basic level the audio can work like a switch, turning something on or off at a certain threshold, but it can also be used to control an incremental change, a texture fading in or out for example. If the sound's waveform is very jagged and angular then it causes unpredictable stress in an object or texture, the landscape spasms and falls apart, tree silhouettes flicker and distort.

My video output of the 3D space was like working over a canvas and periodically photographing the building-up of the surface, akin to William Kentridge's process of drawing for the camera, his animated charcoal reworkings and erasures creating a narrative. My environment at times was so fragile due to file size, limited computing power, and software instability, that getting a camera to pass over the 3D landscape without crashing was difficult. But the space was so chaotic, it wasn't until inserting a camera that I gained a sense of a horizon and framing. The result was more like witnessing a space unfolding, rather than examining a modelled object.

As fragments crunched and flickered into new compositions I witnessed elements of drawings crumple and compost into the folds of geometry. Certain areas produced vast crops of glitches and surface anomalies, fingerprints grew odd polygon artefacts and the subtle translucence of smudges generated seductive glitches. As I pulled the camera backward through the sprawl of this shimmering garden, the viewpoint was like looking out the back window of a car as the receding landscape is slowly revealed. There is a tension and unease created with this constant falling backwards into an unknown environment.

Eventually geometric debris flooded the viewpoint. With each camera path providing endless baroque arrangements I became absorbed in the scenes' complexity. Some imperfections and irregularities seemed familiar, with their pockets of recognisable drawings and flecks of handwritten notes, yet I felt dizzy, immersed in overgrown fields of information. Finally, travelling through this world, I got lost. Unable to find my way back to my previous day's work I sat and sketched from the screen as if I were a *plein air* painter sitting in a field, gazing at a landscape for the first time. In those new drawings I lost all contact with the original composition. Each subsequent sketch was another fold, another iteration. After a while I began to see Bezier points and vertices in my marks. The language of my digital tools was emerging through my drawings. The lure of the polygons was overwhelming. The crowded screen couldn't disguise my circuitous betrayal.