H C : N : C P

Hybrid Culture, Nonlinearity and Creative Practice

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Submitted to Auckland University of Technology in partial fulfilment of the degree of Master of Art (Art and Design).

HC:N:CP

Hybrid Culture, Nonlinearity and Creative Practice

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Attestation of authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by any other person nor material which to a substantial extent has been accepted for the qualification of any other degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements.

Signed _____

Date _____08/08/2109_____

Acknowledgements

Thanks to Dr Elizabeth Grierson for supervising this project, including the close reading and editing of this document; and to KT Ho for feedback concerning all parts of the project; to Mari for her continued support and Rick for sharing his knowledge of the history of Pitcairn-Norfolk. It is important to note that none of the material regarding hybrid cultures, Pitcairn-Norfolk culture or nonlinearity is the author's own work. My role here has been to provide a unique context for accumulating the writings of various authors and assimilating them in a creative project. References are given throughout, and it should be understood that any facet except pulling the diversity together is not my work. In particular I am indebted to Clarke (1986), Sanders (1953), Nicolson (1997) and Langdon (2000) for their research into Pitcairn-Norfolk culture; and the various writers cited in regard to nonlinearity. However, any mistakes or conceptual omissions in regard to the citation of all sources are entirely my responsibility. Thanks are also due to Rob Love of Avcom Technologies for the use of the touch activated plasma screen and Sky City Casinos Auckland for the supply of materials used in the exhibition.

Intellectual property rights

Special permission for use of material

Permission to cite the paragraph from Sanders (1953) on page 41 of this document has been obtained as required.

Images used in the project

A number of the images in the database are also deployed in digital prints, websites and animations.

Database images
Images of earth, the stars and galaxies are from NASA and located at http://antwrp.gsfc.nasa.gov/apod/archivepix.html.

Slide 1. Contemporary breadfruit (ulu) design from www.marystreasures.com/ Cesar/quilting.html

Slide 2. Breadfruit illustration from www.octopusresort.com/photos/ big/breadfruit.jpg

Slide 6. Photo of ulu tree from geoimages.berkeley.edu/GeoImages/ Eley/Kiwai/BREADFRU.HTML

Slide 7. Contemporary ulu pattern from www.paiamercantile.com/products/ quilts/quilt_patterns.html

Slide 14. Gauguin image of women reaching to ulu tree from www.tigtail.org/.../M/ gauguin_women_holding_breadfruit.jpg

Slide 18. Photo of ulu fruit from lizard.home.inr.net/ chbreadfruit.htm

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Slide 27. Photo of tropic bird by Rod Morris published in Crawford (1993, p.164).

Slide 32. Tahitian *va'a motu* (ceremonial canoe) image derived from a photo of the model in the Musee de Marine, Louvre, Paris France.

Slide 35, 40, 50. Plan of *HMAV Bounty* (detail used) from the National Maritime Museum, England, United Kingdom published in Clarke (1986, p. 21).

Slide 42. Contemporary ulu pattern from www.locoberry.com/ pattern/pt01.html

Slide 45, 58. Illustration of ulu branch from www.ekahi.com/ Ekahi_Ohana_Apr00.htm

Slide 56. Photo of ulu tree from www.archaeology.org/9905/ etc/bounty.html

Slide 72. *Landing in Bounty Bay* by F.W. Beechey (detail) published in Clarke (1986, p. 96).

Slide 78. Pitcairn from the sea derived from photo by Michael Pitts, published in Crawford (1993, p. 146).

Slide 90. Background source image of Couette-Taylor flow (experiment in turbulence) published in Gleick (1988 p. 129).

Images used in animations in addition to database images
Bounty Bay, Pitcairn Island photograph from http://www.lareau.org/bntyby.jpg

Black and white breadfruit pattern from
www.thatperfectstitch.com/ tifaifai_right.html

Breadfruit photograph from pages.prodigy.net/guam/ whyguam1.html

Red and yellow breadfruit pattern from poakalani.safeshopper.com/ 4/55.htm?689

Heaven Hill bourbon label by Heaven Hill Distilleries (established the same year as the *Bounty* departed the United Kingdom).

Photograph of Anchovy the cat by Mari Clothier.

Breadfruit illustration by George Tobin published in Clarke (1986, p. 19).

Additional website images
Hibiscus image derived from photograph from
ohric.ucdavis.edu/photos/ fullsize/Hibiscus.jpg

Additional images used in digital prints not listed above
Hannah young nee Adams (detail) from 'Mitchell and Dixson Libraries in Sydney, Australia' (sic) reproduced in Clarke (1986, p. 114).

Definition of terms

Boundaries. Reflecting a point of view based in chaos theory, the sense of boundary used throughout is not the customary sense of enclosing a specific region. Boundary as intended here is more closely related to a notion of zones at a distance from a relative centre, where interaction between diverse energies is enabled (in such a way as to have an impact in either direction). In particular, this sense of boundary is highly elastic and potentially explosive. Bearing this in mind is important when considering the diagram of the media structure of this project.

Chunking. This is Hofstadter's (1979) term and refers to the compression of large quantities of detail into a smaller amount of information. The compression is not geometric but more closely related to the sense in which a fractal encapsulates itself at varying levels of detail (see the pages covering the Koch snowflake in Gleick, 1986). Neither is the compression related to a perception of 'identity' distilled into an essence: nonlinear systems have multiple senses of 'identity.'

Digitality. Use of this term is meant to imply that there is a digital realm that has equal ontological status to the planes (or plateaus or vortex parameters) of reality and virtual reality. For example, scanned leis were twisted in scanner space rather than in the space of digital software.

Distression. Is used to name a process whereby nonlinear layering is exposed by removal; similar but not the same as distressing (which is simply an aesthetic).

Hybrid culture. A hybrid culture establishes itself 'without an assumed or imposed hierarchy,' and is not based on 'the persistence of tradition' but is 'reinscribed through conditions of contingency and contradictoriness that attend upon those who are "in the minority"' (Bhabha 1994, p. 2).

The concept of hybridity also has meanings related to genetics, genetic distortion and impurity, the crossing of plant lines, unique authenticity, and geo-political spatiality. The Pocket Oxford Dictionary (2000, p. 430) gives the meaning of 'hybrid' as '**1** offspring of two plants or animals of different species or varieties. **2** thing composed of diverse elements, e.g. a word with parts taken from different languages.' The root of the term 'hybrid' is the Latin *hybrida*. According to the Wolters' Latin-Dutch dictionary 'hybrida' means: 'bastard, Child of a Roman and a foreigner, or of a free person and a slave,' and the Grote van Dale dictionary adds: 'something that comprises heterogeneous elements' (cited in Europan, 2001).

Unique stratification, heterogeneity and genetic diversity are aspects of hybrid cultures. Solutions are provided as time and experience accumulate rather than by reference to (master culture) traditions. It is suggested that the Pitcairn-Norfolk culture is one such hybrid, and the Pitcairn Laws of 1838 are offered as a significant example.

Nonlinearity. Nonlinearity is used in two senses in this exegesis. The first is the sense of overall system structure (see note following), and the second is in predominantly digital processes such as moving image editing and other software

based media, particularly html. Nonlinear sequencing based around intervening sameness, occurs in lei patterning in the art works.

Nonlinear systems. Nonlinear relations arise in physical processes where diverse elements meet on the physical plane. Cause and effect breaks down in such relationships (Jackson, 1991). When a group of nonlinear relationships attains sufficient diversity, a nonlinear system can be said to be in effect. Having the character of being nonlinear is one aspect of a rhizome according to Deleuze and Guattari (1987). This point is expanded by De Landa (1997), and broadened further here.

Deleuze and Guattari (1987, p. 21) stated that a rhizome 'constitutes linear multiplicities with *n* dimensions having neither subject nor object' and that 'its traits are not necessarily linked to traits of the same nature.' It is contended here that the nonlinearity in the structure of the project is located in linear multiplicities and characteristic diversity enabled by the media structure of the project.

Hybrid culture, *nonlinearity*
and
creative practice

Abstract

The aim of this project is to integrate hybrid culture and nonlinearity into a dynamic artwork that is one multiplicity. This exegesis lays out the foundation of the project and has three sections: one section discusses hybrid culture, a second introduces nonlinear systems and a third examines creative practice.

I am a descendant of the Pitcairn-Norfolk culture established on Pitcairn Island in 1790. This hybrid culture supplies visual and narrative material for the project, stories on which to base individual artworks. There is also a significant discussion currently taking place in the arts with regard to hybrid cultures. That discussion provides important background to this project. The ways hybrid cultures establish themselves is reflected in the selection and realisation of exhibition components.

An understanding of nonlinear systems is provided by writers in the fields of science and the humanities. It is intended that the project reflects nonlinearity in both exhibition structure and process. This requires a considered approach to the interrelationships of exhibition components. It is however, the merge of nonlinearity and hybrid cultural understanding and the

INFLUENCE THIS HAS ON CREATIVE PRACTICE, THAT IS THE MAIN ORIENTATION OF THIS PROJECT.

METHOD

The approach taken to the project is one of reflection and action regarding ways of deliberately investing nonlinearity into the structure and components of the thesis exhibition. An understanding of nonlinear systems is based in philosophy and physical system theories. The philosophical foundations are provided by Deleuze and Guattari (in particular their concept of rhizome in *A Thousand Plateaus,* written between 1980 and 1987), and Manuel De Landa's 1997 definitive study *One Thousand Years of Nonlinear History*. Nonlinear systems theory first emerged in science and is discussed in detail by James Gleick (1988) in *Chaos: making a new science*. Douglas Hofstadter's ground breaking work of 1979, *Godel Escher Bach: an eternal golden braid* provides important background, as does E. A. Jackson's (1991) *Perspectives of nonlinear dynamics (vol 1)*. These texts are the main source for material about nonlinear systems.

It is intended that an understanding of hybrid culture also influences creative decision making. I am a descendent of the hybrid culture that developed on Pitcairn's Island[1] after the mutiny on *HMAV Bounty* in 1789. In 1856, when the population was too large to be supported by Pitcairn, the entire community moved to Norfolk Island. Given this historical background, the culture is called Pitcairn-Norfolk in this document. This heritage supplies individual art works with narrative and visual material that is threaded throughout components of the project.

An understanding of hybrid culture is sourced in this personal background, and also draws on the writing of Homi Bhabha (1994), who

places hybrid cultures at an overlapping intersection of cultures, an in-between place. There is a considerable discussion taking place, particularly in architecture, around hybrid cultures and what cultural hybridity might mean in terms of space. This discussion informs the understanding of hybrid cultures given here and provides important historical background to the use of the concept. Hybrid cultures establish their own set of rules, and their own criteria for making rules. The Pitcairn Laws of 1838 (see appendix 1) reflect this, as does this exhibition, which involves an assemblage of diverse media and imagery.

One way of achieving a nonlinear project would be to simply write hypertext pages, and thereby create a nonlinear narrative of the Pitcairn-Norfolk culture. Nonlinearity would then be deployed in process. However from the beginning of the project there was a determination to utilise nonlinearity in both process and exhibition structure. So while nonlinear digital media are deployed e.g. Dreamweaver (web pages), Photoshop, PowerPoint and Word, the overall structure of the exhibition also reflects an understanding of nonlinear systems. Nonlinearity in the exhibition structure is activated by the multiplicitous relations between parts. Some parts of the show overlap whilst others do not. That is to say some parts of the exhibition have direct linkage and others indirect linkage. Indirect linkages expose the project to manifold connections, which are unending. As Deleuze and Guattari (1987, p. 21) write of a rhizome 'its traits are not necessarily linked to traits of the same nature.'

The exhibition is modelled on merging an understanding of nonlinear systems with an understanding of hybrid cultures. This merged understanding led to deploying multiple media and utilising changing relationships between components. Localised rules are applied to all parts of the project but are not applied in the same way throughout. In the exhibition there are digital prints, a digital image-text print (i.e. a poem), leis in a picture frame, leis upholstering an armchair, leis in a cross of bottles, a projected image database and a touch activated web site. Plant energy in my hybrid cultural background (ulu or breadfruit in particular, seen in the database only) is manifested mainly as artificial leis in this project. This energy is then manipulated in 'actuality,' digitality, and virtuality; they enclose

some objects, reside within others and are restratified (in the sense of Deleuze and Guattari, 1987)[2] by the alcohol bottles.

Nonlinear systems as described by De Landa (1997), Deleuze and Guattari (1987) and Jackson (1991) provide the rationale for multiple media and a changing relationship between components (in particular the breakdown of cause and effect, discussed later). Some aspects of nonlinear systems and hybrid cultures are shared. Heterogeneity for example, is a quality of both. In nonlinear systems, this is read as diversity (see Jackson's diagram in the Nonlinearity section) and given as one aspect of the rhizome by Deleuze and Guattari (1987). Hybrid cultures are a 'mix of elements which are different' in the words of Europan 6 (2001) architecture award organisers.

Hybrid cultures also establish themselves 'without an assumed or imposed hierarchy' as Bhabha writes (1994 p. 4). This critique of hierarchies is also relevant to nonlinear systems, where De Landa (1997, citing Deleuze and Guattari) writes of meshwork and hierarchy as dynamic oppositional elements roughly equivalent to nonlinear systems and linear hierarchies. A significant aspect of the exhibition resulting from a critique of hierarchies was the use of artificial leis, rather than actual ones: a hybrid solution.

The leis are unofficial expressions of culture. Their presence in the exhibition arises from a merge of demand and supply where Chinese and Polynesians speak to each other across commercial borders in Southwest Auckland. The leis are made in China and sold to Samoans, Tongans, Cook Islanders, Fijians, Rarotongans, Tahitians, Hawaiians, Tabuains, Pitcairners, Norfolk Islanders and Europeans in Auckland, New Zealand Aotearoa.

A further consideration of interplay between hierarchy and nonlinearity also influenced the background/foreground relationship of the prints that do not have text on them. Here the elements in the foreground gradually become more and more sophisticated in structure. They begin in the earliest bio-historical referent *Mauatua and Fletcher* in darkness, in a row above each other. The foreground aspects are stratifying in the *Hannah Young nee Adams* piece, and form a plus with corner

accents in *Christine Rose Young nee Quintal*. The basis for aesthetic decision-making is discussed in detail in the following sections.

Introduction and thesis question

Central to this project is to structure the complete exhibition in a nonlinear way. Nonlinearity is endemic to digital media and utilised in components of the exhibition. Therefore, there are two senses of nonlinearity that are used in the exhibition: the first is in overall structure, and the second is in component parts. In order to reflect nonlinearity in the exhibition structure, an important first step was to define how the exhibition would *not* be structured. Clearly a linear structure was to be avoided. To understand a linearly structured exhibition, one need only consider one of the exhibition paradigms of post 1950s modernist practice: in the case of paintings, a group of same sized canvases, hung in a horizontal row. Diagrammatically this is represented in figure 1.

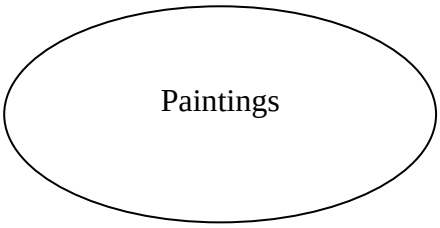


Figure A. Diagram of the media structure of a modernist exhibition of paintings where the pictures are the same size and hung in a row.

Note the boundary in figure 1 is distinct. It is always easy to tell where ‘the art’ finishes in this kind of exhibition. This strategy is very orderly, even tight. However, it has already been stated that a linear structure is to be avoided in the

specific case of this exhibition. Figure 2 below is a representation of the project exhibition structure.

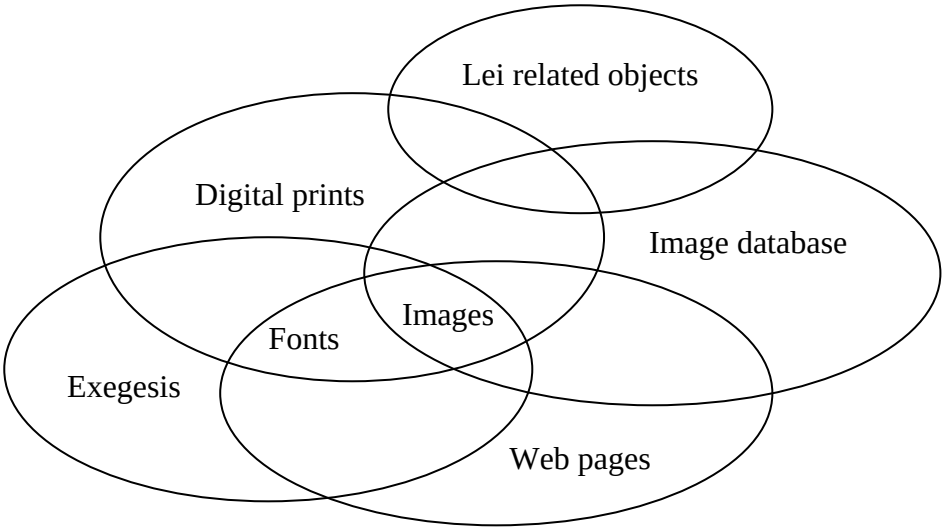


Figure B. Diagram of the media structure of this project.

The boundaries are more complex than in the modernist paradigm of figure 1. The media are clustered, with overlapping occurring between some components but not with others. For example, the font rule is continuous (but not the same) between exegesis, digital print and web pages, but has no relationship to the image database. Images reside at the overlap of digital prints, exegesis, web pages, image database but do not intersect lei related objects. Lei related objects overlap the digital prints and image database.

The approach taken to exhibition component relationships can be usefully contrasted to an alternative treatment whereby following on from the armchair upholstered in leis, an entire lounge setting is created. Such a treatment would

conceptually resemble that of figure 1 above, and so was avoided given the aims of this project.

Rather than having a single central orientation, Deleuze and Guattari deploy many ‘variable, local rules in order to construct a bewildering array of concepts such as assemblage, deterritorialization, order-word, faciality, ritornello, nomadism, and different kinds of becoming’ (Patton cited in Wray 1998, p. 2). This is reflected in this exegesis by the font rule[3] which is applied variously but not completely the same in all sections. In the exhibition, local variable rules are used and multiple formats deployed, with crossovers of imagery and unique stand-alone accents. The exhibition is not a show consisting of same media variations on a theme. One of the digital prints has words on it, but not the others. Where fonts are used in the print, there is similarity to the exegesis, but not sameness. This is an example of what Deleuze and Guattari were referring to, when cited earlier, regarding the traits of a rhizome being ‘not necessarily linked to traits of the same nature’ (1987, p. 21).

Consider for a moment the relationship between the title of the exegesis and the exegesis itself. A straightforward tactic would be to have the sections of the exegesis follow the title. However, the order of sections in relation to the title of this exegesis is to be disrupted. That is to say, Creative Practice is to be presented as section A, Hybrid Culture presented as section B, and Nonlinearity as section C. This is a subtle distortion of order, a perturbation of the title-contents relationship.

The distortion of title-contents order places Creative Practice at the beginning of the exegesis. Concepts and treatment in the exegesis spin out of creative output. That is not to say practice always precedes concept, the relationship is dynamic. The section on creative practice exposes the motivation behind the exhibition structure and components, and relates the ways in which an understanding of cultural hybridity and nonlinearity has influenced the project.

The physicist E. A. Jackson (1991, p. 6) wrote that in nonlinear systems, ‘the ratio (action/reaction) is not constant.’ That is to say, cause and effect has broken down and the linear relationship between parts of the system is disturbed.

In new media arts and nonlinear scientific writing, distorting narrative or chapter order is often used as a strategy to reflect non-linearity.[4] In this project a variety of strategies are used to disrupt standard, linear relationships: sameness is intervened at many points. The historical order of references to my culture is disrupted by interplay in lei patterning, the exhibition utilises many media rather than one, and pieces come in a range of sizes including projected as light.

Although lei related objects are discussed here, there is no practice based linear linkage between the exegesis and lei related objects. One way to create a linear linkage would be to use leis on the cover of this exegesis. However this is not done; in terms of practice, there is no linear relationship between lei related objects and exegesis.

Deleuze and Guattari write that a rhizome 'constitutes linear multiplicities with *n* dimensions having neither subject nor object, which can always be laid out on a plane of consistency' (1987, p. 21). Clustering media and overlapping some media but not others in the thesis exhibition structure, allows for the activation of nonlinear associations between components. Linear associative multiplicities afforded by the media structure of the exhibition include Hawaiian ulu (or breadfruit) cultural product patterning, post Impressionist Paul Gauguin (via an image of a Tahitian holding breadfruit), stars in the sense of cosmology, poetry, birds, websites, canoes, alcohol, gardening, cats, structure and anti-structure, animation, digital performance (lei twisting in scanner space), chaos theory and leaves falling to name a few, along with the more direct associations of Pitcairn-Norfolk hybrid culture, nonlinear systems and creative activity.

As has been remarked previously, I am a descendant (maternally) of the Tahitians and mutineers of *HMAV Bounty*, who established a hybrid culture on Pitcairn Island and later on Norfolk Island. The section on cultural hybridity reviews historical usages and meanings, and the tangle of concepts around hybridity – the 'bastard Children of Romans and foreigners' (Europan 6, 2001) along with genetic mixing and distortion, blurred border relations, stand alone authenticity and heterogeneity. This is followed by an examination of the Pitcairn-Norfolk culture. The unique history and qualities of the culture, and novel solutions generated are

given expression in the Pitcairn Laws of 1838. These laws established a Magistrate with accountability to the populace, votes and education for both sexes, the conservation of wood supply, protecting of cats and white birds along with procedures for resolving disputes.

Importantly, the strategy of assembling concepts and techniques according to my own determination (rather than by appeal to standing authorities in Western culture, given the academic context of the project) is authorised by reference to my hybrid culture. The exhibition is not a dull illustration of De Landa's (1997) writing for example, but rather aspects of his writing are merged with the writings of others. This reflects what hybrid cultures do in establishing themselves – they do not replicate master culture strategies (seen in early colonial histories and structures), but create their own dynamic mix. My cultural hybridity has a source in both Polynesian and European cultures rather than one or the other, so the structures of both are cited.

The section on nonlinearity commences with an historical view of the development of nonlinear systems understanding in science, well summarised by Jackson (1991). Beginning in the 1880's French scientist and mathematician Henri Poincare developed what has become known as modern nonlinear dynamics. One of Poincare's most significant contentions was the proof that the three-body problem was fundamentally unsolvable. Isaac Newton had proposed a clockwork universe based on equations governing the two-body problem. The ratio of action to reaction is not constant in nonlinear systems, so a clockwork mechanism will never fully describe nature. Nonlinear systems perturb cause and effect relationships.

Douglas Hofstadter (1979) provided a key text in chaos theory understanding. Whilst he does not use the word 'nonlinear' explicitly, it is clear to those working in the field that this is what he was referring to. The relationship between chaos theory and nonlinear dynamics is made explicit by James Gleick (1988), author of the best selling *Chaos: making a new science*, where the expressions 'chaos' and 'nonlinear dynamics' are used interchangeably (e.g. in the index reference for nonlinear dynamics). Hofstadter's (1979) concept of 'strange

loops and tangled hierarchies' (the title of one of his chapters) adequately describes the perturbation of cause and effect in nonlinear systems, adding a sense of poetry to the dry science of physical systems relationships. 'Strange loops and tangled hierarchies' was a key meditation reflected upon in creating the thesis exhibition.

As well as in mathematics research, nonlinear systems have been examined in the humanities. Manuel De Landa (1997) writes of meshworks and hierarchies, relating these to Deleuze and Guattari's (1987) concepts of rhizome and self-consistent aggregates respectively. Linear multiplicities activate nonlinear relations in the dynamic interplay between rhizome and hierarchy. The concept of rhizome and its relation to hierarchy is discussed in the section on nonlinearity.

The crucial factor for this project is how does this information about nonlinear systems map into an art work, given an orientation in hybrid culture? It is the merge of nonlinearity and hybrid cultural understanding, and the influence this has on creative practice, that is most important to this project. This is the question the project seeks to answer, without being literal, illustrative or mimetic.

Notes

[1]. Pitcairn's Island is the proper historical name for what has become known as Pitcairn Island (latitude 25º04' south, longitude 130º06' west, roughly equidistant between Tahiti and Easter Island).

[2]. The stratified 4 x 4 patterning of a lei is destroyed by being placed inside a bottle, in other words is restratified. It is also important to note that here the aim is not to illustrate or re-create a rhizome. Some aspects of the rhizome influence the project, particularly where the aspect is shared with those of hybrid cultures.

The similarities are partial. Readers of this document may or may not notice repetitions of content. It is contended that there are loops in the exegesis subject matter threads. As Brian Massumi stated in the translator's forward of *A Thousand Plateaus:* 'They [i.e. concepts in the text] tend to cycle back. Some might call that repetitious. Deleuze and Guattari call it a refrain' (Deleuze and Guattari 1987, p. xv).

[3]. Precedence for variability in font treatment where nonlinearity is a subject is found in De Landa (1997) where each section begins with an oversized font that gradually diminishes to standard 12 point font after several pages. Font variability is extended in this project, and the departure from AUT format requirement is intended to be read as an indicator that nonlinear forces are in effect.

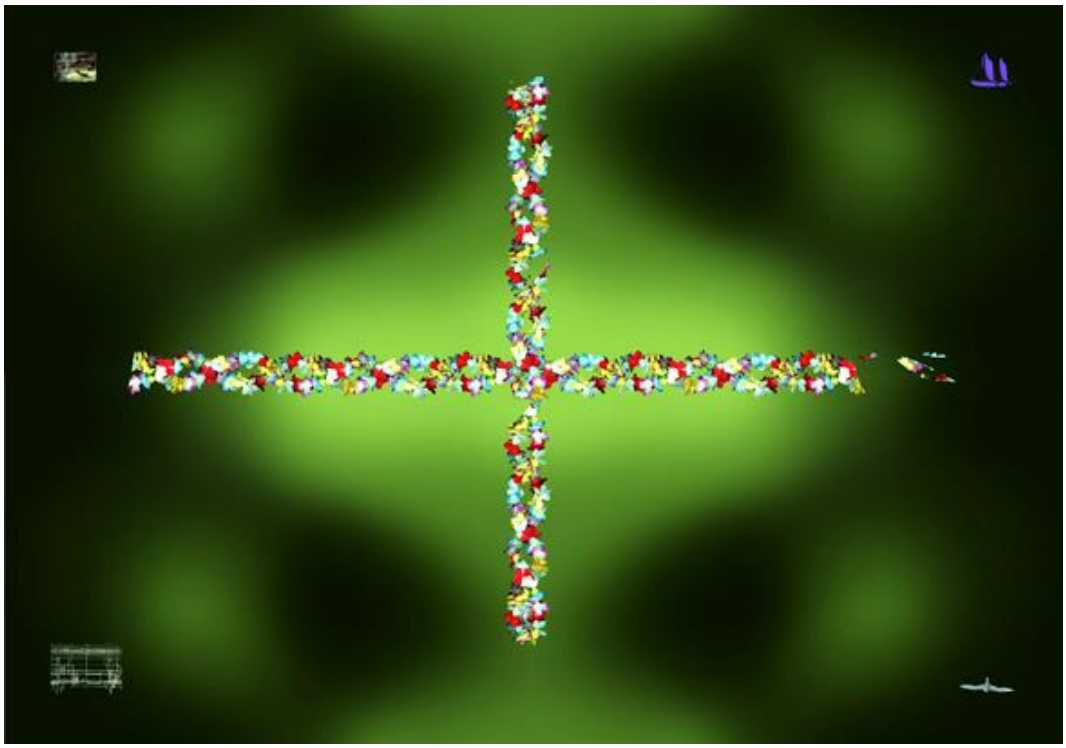
[4]. Examples of narrative distortion include repetitive shots (looping) in film – *Trainspotting* for example; and narrative shuffling in *Pulp Fiction* (the Travolta character dies mid-way through the movie yet appears after his death scene). In the visual arts Jonathan Horowitz shuffles genres and narrative in exhibitions that include a video on Julia Robert's acting career based on her

position in film credits; a crude shot of a golf ball in flight on one monitor and a still shot of a kitsch trophy on another. These were part of a show called *Name my cat*, and people could nominate names for the cat via email (see Rose 2001a). Michael Mandiberg flattened narrative and distorted hierarchies by selling all his possessions online – from his socks to the computer on which the net.art project was written and uploaded to the web (see Rose, 2001b). Mark Amerika has written several nonlinear narrative works for the internet (Amerika, n.d.) where readers select the order they read the narrative, and linkages can be randomly generated so that the author cannot know which part of the story is linked to any other part.

In literature, Saporta's *Composition no. 1* required readers to shuffle around 150 unnumbered, loose printed cards, and then read the shuffled order to determine the fate of the protagonist. Cortazar's *Hopscotch* established two orders for reading his text, so readers had work out for themselves which locations, chronology and causes were related to which story (see Douglas, 1992). These strategies are non-linear.

Benoit Mandelbrot, who created the Mandelbrot set, asked his readers not to read his scientific text from front to back, but instead to flip through the book, jump forward to sections and read the sections in the order they chose. James Gleick in *Chaos* looped stories, never completely finishing off one subject in any one chapter, but overlapping one story with another. Douglas Hofstadter played with order and reorder in the title of his book *Godel Escher Bach: an eternal golden braid*, where GEB becomes egb.

Creative practice



1. *Christine Rose Young nee Quintal* digital print 2002

Introducing the art work

Given the foundation of the project was to combine an understanding of nonlinear systems and hybrid culture, it was important that the exhibition reflect these aspects in clear ways. An understanding of nonlinearity influenced the project by reference to Deleuze and Guattari's (1987) concept of rhizome, De Landa's (1997) writing on boundary relationships in nonlinear systems, and Jackson's (1991) physics text where

the interrelationship of components is discussed.

This led to the decision to cluster media. In a clustered group, linear and nonlinear relations are enabled; the cluster is one of diverse parts. Heterogeneity is an aspect shared by both nonlinear systems and hybrid cultures (see appropriate sections of this exegesis). Expressing my own hybrid culture in clear ways led directly to the use of artificial leis. Artificial leis *imply* Polynesia. They do not reference Polynesian culture directly, in the sense that certain iconography does (leis are widely used in Indian culture, for example). The relevance here is that I am not making a claim to Tahitian cultural heritage, but rather to hybrid Pitcairn-Norfolk cultural heritage.

The aim of this section is not to extrapolate on, and give the basis for, these influences. That is the aim of the sections on nonlinear systems and hybrid culture. The aim of this section is to give background to the creative decision making process. To do that, I need to describe my creative process. The kind of creative practice I engage with is subjective. I do not claim it as any one person's property. It is not 'objective' and can only be recommended in so far as it is a recommendation for all creators to resolve their own way of making. It is simply the way my work gets done, and is wholly tailored to my subjectivity.

In my creative process, there are three distinct phases. The first phase revolves around receiving partial images. The partial images are captured by vision and sometimes drawn. They become lines of development, roots from which the project grows. Some of these seedlings prove to be valuable, others are dead-end tangents, and are weeded from the project. It seems impossible at the start to see

which is a valuable branch and what is a weed. The first phase feels like seeding (in the sense of shoots branching out, as in plants going to seed).

The second phase is a revealing, (in the Heideggerian sense[1]) as the seedlings take root and burst out of creative darkness. The project takes shape via constant exploration, filtering and weeding out of the revealed shoots. Out of this constant reworking, slowly there arises a situation preparatory for the third phase. The third phase is the point after which, reduction actually gives the art works more layers. The third phase, to borrow Hofstadter's (1979) term is 'chunking.' Chunking according to Hofstadter (1979) is the compression of a larger quantity of information into a smaller quantity,[2] and is discussed in detail in the nonlinearity section. In short, here is how I feel my creative process proceeds: seeding, revealing, chunking.

Hybrid culture and the art work

Both Clarke (1986) and Nicolson (1997) write extensively of Pitcairn-Norfolk cultural history. In 1838, Pitcairners made their own laws which codified having an elected Magistrate 'who is not to assume any authority of their own,' that women voted, and that education was compulsory for both sexes. White birds, public monuments and cats were protected; wood conservation measures agreed to, there were sections on resolving disputes, and an attempt to leave past issues out of present ones. In 1820, the *Surry* visited the island and reported the 'unusual practice' of both sexes having pierced ears, with small flowers placed in the holes (Nicolson, 1997). Other visitors noted the muscularity of the women, and both sexes anointed themselves with Polynesian oils (scarcely an English habit), but they were by declaration English (see footnote 10 in the Hybrid Culture section).

Via direct impact,[3] word of mouth and 20th century movies, the legend of the taking of the naval vessel *Bounty* by Fletcher Christian and a small band of followers, just after leaving Tahiti in April 1789, is known throughout Polynesia, and by many Westerners over forty years of age. Shortly after settlement on Pitcairn Island, basically there was a race war. As a result, the hybrid culture that formed

was significantly influenced by women. These historical facts are personalised as I am descendant via my mother of the people who settled on Pitcairn.

Mauatua and Fletcher (Christian), John Adams, Hannah Young nee Adams, Christine Rose Young nee Quintal, and Irene Verle Clothier nee Young in reverse order are my mother, grandmother, great great grandmother, and 3rd and 4th great grandparents. These are not just historical and family names, the names of people I know intimately and hardly at all, but also names of the art works in the thesis exhibition. Not that the art works are portraits; rather they express aspects of my relationship to my family. This personalised history supplies narrative to the project, and is a reference point (visually) to Polynesian cultural output.

Arising from within the seeds of the current project, there were stems of an armchair, and considerations of an ancestor converting to Christianity in a fit of drunkenness. Among the branching shoots was the vision of a cross of bottles. In the revealing, this relationship of alcohol, Polynesia and Church resonated with an energy emanating from my culture. John Adams had a vision in a state of blind drunkenness, that the archangel Michael threw a dart at him. This converted Adams to Christianity and subsequently the entire island. At the time, around 1800, Adams was the last surviving adult male on Pitcairn, racial war, madness and ill health taking the lives of the others as Nicolson (1997) pointed out. The cross was entirely relevant to Pitcairn history (which was reconverted to Seventh Day Adventism in 1897), that is to say the use of a cross chunked an aspect of the culture.

On Norfolk Island however, most Pitcairn-Norfolk Islanders no longer go to church. Yet when the community congregates for a picnic, psalms are played through loud speakers. Psalms and parties is a theme that runs through my culture. In the piece *Christine Rose Young nee Quintal* named for my relationship to my grandmother (known as Aunt Lil and also by our family as Nana Young), there is a plus of leis. She was a good soul, in the old vernacular. In the current vernacular, a positive influence. Not a cross, but similar. Again it was the chunked solution – a

plus as opposed to a cross, or a format that implies both - that became the final solution.

By way of play the twisting of leis in digital space became a reference to DNA. In the 21st century, is hard to imagine a more direct reference to genealogy than implying DNA strands. In the *Hannah Young nee Adams* piece, I'm also trying to invoke the stratification of the culture in creating the Laws of 1838. The Laws became the filters through which the society aggregated itself. The Pitcairn Laws, along with the history of the concept and various uses of the term "hybrid culture," are covered in the section appropriately titled.

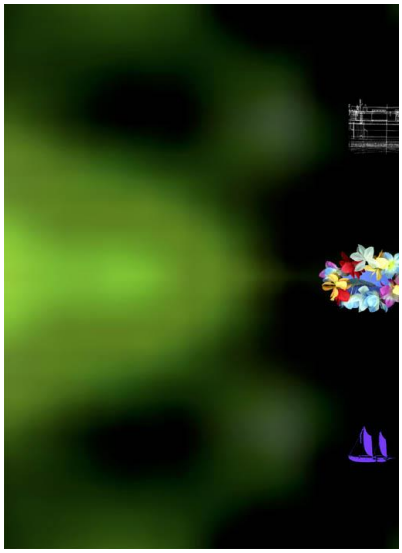
Artificial leis play a significant role in the thesis exhibition. There are leis in digital space and leis in picture space. Leis upholster an armchair, are encased in bottles and projected as light. Along with the two hundred plus leis are a website that is touched, and an image database endlessly rolling. Every print has a lei, but not every image in the database.

Leis in the prints are positioned in contrast to the background. The green background of one of the large prints provided the key to several of the works. That background (at the time absent of leis) was found late one night, when it was uncovered from blackness. Instantaneously I could see it would be useful and saved it as 'lovely.' It had an organic feel that was really suited to the *Christine Rose Young nee Quintal* piece. Nana Young (or Aunt Lil) was a gardener, and here was an organic background. To me this organic quality resonated with Deleuze and Guattari's (1987) concept of rhizome. Therein lay a contrast suitable to the entire project: rhizome and hierarchy. Hierarchies were a part of a discussion Deleuze and Guattari (1987) and others were having, as well as cultural theorists such as Bhabha (1994). The forms above the background became indicators of the self-organisation of Pitcairn-Norfolk culture.

Properties of the boundary of the rhizome allows for the flux in systems according to De Landa (1997). In a large scale view, boundaries are breached as if there was no barrier. How does plant energy migrate to the human cultural plateau? This question is relevant to this project as a plant – breadfruit - was the reason for

the voyage of the Bounty. Gardening was a self sufficient necessity for early and current Pitcairners. In 2002 in this thesis project, plant energy circulates in the leis.

The first leis purchased were scanned, and put in digital image space. Subsequently 200 were ordered. These arrived from the same supplier, but arrived as single colour leis; there was no blue. Several ways and means and patterns of making leis, and testing to see what the effect of no blue meant, were trialled. In the end, blue was partly necessary for a level of continuity. But the continuity would not be as total as having identical leis. I decided to do something with the patterning of leis.



2. *Mauatua and Fletcher* (detail) digital print 2002

The petals of the artificial leis in the picture frame and digital prints follow a pattern: 1 x 1 x 1 x 1 x 1 of each colour, then repeat. The leis on the armchair are 2 x 2 x 2 x 2 x 2 x 2 of each colour, repeated. The lies in the bottles started as 4 x 4 x 4 x 4 colours repeated. The 1 x 1 pattern is part of the 'oldest' referent: Mauatua and Fletcher Christian. The 4 x 4 pattern refers to Hannah Young nee Adams, and the entire piece references Pitcairn's 1838 laws. The 2 x 2 pattern speaks to my relationship to my grandmother, Christine Rose Quintal. So in terms of time, the lei

pattern goes 1, 4, 2. This is instead of a direct linear ascent such as 1, 2, 4. This is one instance of a strange loop, or a hierarchy of time being tangled.

In realizing the cross of leis in alcohol bottles, it was discovered that putting the leis inside a bottle restratified the pattern. That is, after inserting the lei, it was no longer possible to easily determine its pattern. I decided to run with the potential revealed. So the intention to create leis conforming to a 4 x 4 x 4 x 4 pattern became the pursuance of every possible variation such that no two were the same. The pattern order would be a nonlinear sequence. This chunks a piece of my own memory of Norfolk Island. When as a child my family (except my father) visited Nana Young (Christine Rose Young nee Quintal) I became interested in a bush I've never forgotten. It is called *Match me if you can.* The leaves are deceptively similar in pattern, but as any twelve year old could find out, it is impossible to find two the same.

There is also a sense of rotational symmetry in the prints, an often used device in Polynesian cultural output, and seen in the ulu (breadfruit) patterns projected in the database. Rotation, folding, pattern making (repetition and variation) and space filling are all elements of Polynesian visual works seen in the database, and these inform or are visually cited in the arrangement of form in the digital prints (except the poem piece). Rotational symmetry is also a feature of the physical universe according to Einstein [(ref)]. There are both Polynesian and Western aspects to the prints and other works. Western facets also extend to a consideration of the meaning of the concept 'nonlinear.'

Nonlinearity and the art work

Nonlinearity is found in the relational diversities of the art work, in the multimedia multi-genre approach, and in the process of making. One boundary of the art work is every incompleteness. There are digital prints, but the show is not made up entirely of them. Most of the prints are the same, except for one which has a poem on it. There are multiple fonts in the website and here in this exegesis. Font

decisions have been made, but the same fonts are not used in the same way everywhere.

One of the most important things about putting the thesis show together was finding a place for nonlinearity. I found out early on that unfettered nonlinearity is not feasible. Whilst 'nonlinear oscillators' (Gleick 1988, p. 287) maintain important body cycles, continuous nonlinearity in the heart beat for example, means death (1988, p. 288). If creating artworks is given over entirely to a natural process such as freezing acrylic paint and letting the block melt and run over paper, simply in the selection of the bit framed, or even in the decision to frame the whole piece, a hierarchy has been imposed. This is what I understood from Deleuze and Guattari (1987) writing of both rhizome and aggregated structures - that nonlinearity goes hand in hand with structure (in an equal opposite, appositionally complementary, oil and water kind of way). Can a storm composed only of nonlinear elements be imagined? The destruction would be total, and without beginning or end. Nonlinearity needs structure for persistence, the rhizome needs hierarchy in order to develop stable structures, the meshwork must have self-consistent aggregates (see the section on nonlinearity for further detail) in order to attach and detach from themselves and each other, in the endless creation of novel situations.

A further nonlinearity in creative process was to not correct mistakes in lei patterning. Not correcting a mistake is really, really difficult when you realize you have made one. Erasing mistakes removes chunked layers of meaning, and nonlinear layers of meaning at that. In one of the lei streams on the armchair, there is a section which goes white white yellow yellow white white. It 'should' go white white yellow yellow blue blue. The cause of this was being distracted by looking up to the TV. So buried (admittedly) in the production of the leis for the armchair is a layer of meaning related to news of the political state of New Zealand Aotearoa in 2002. If I corrected that mistake, the layer would vanish from that lei. It would still exist as a minor detail of personal history, but the consequence for the lei and

the armchair would be smoothed out to oblivion. The armchair would be less 'noisy'[4] in terms of information.

It is important however, that nonlinearity does not run amuck in the project, as it has already been noted that unfettered nonlinearity is not the aim. In the thesis exhibition, finding a place for noise is what is called for. The noise needed to be seen (after all, it would take a keen eye to spot it on the armchair). So in the text-image poem work, on the right hand side underneath the birds, is a layer of turbulence where the provenance of the image is retained. It came from a dot printing process, used in printing a book. The image is directly related to chaos theory: it illustrates Couette-Taylor flow, a well known study of turbulence in fluid (Gleick 1987, p. 128). There is a problem here though, in that a certain amount of noise looks good. In other words, one hierarchy of quality has been replaced by another.

In order to get closer to the noise, a further 'distression' was required. In the photograph of Pitcairn which makes up the second left portion of the text-image panel, some of the pixels are apparent, and a slight moiré is created in the arrangement of the dots that are part of the source imagery. Pixels are usually either expunged from digital images, or made wholly apparent and obvious. In this situation, the presence of pixels serves as a reminder of the pixel basis of digital images. Moiré patterns cannot be linearly pre-determined in digital prints; the moiré is a nonlinear bonus. To underline the relationship of these aspects to nonlinearity and chaos theory, the sea in the digitally revised image has been patterned to create a link with the Couette-Taylor image. Oceans and the sea are of course, turbulent.

The left most panel of the text-image piece is partly composed of a section of a painting reproduced in Clarke's (1986) book on Pitcairn-Norfolk. It is clear the original of that original is a painting, not by a 'master' and probably small. It is not just any painting, however. It was painted by Captain Beechey of *HMS Blossom*, who became a firm friend of the Pitcairn Islanders. Clarke's book is also part of my family folklore - we have a good record of finding Pitcairn-Norfolk material in second hand shops. My sister at various times has found 5 copies of *National Geographic October 1983*, which has a long Pitcairn-Norfolk article, including

photos of Pitcairn. Three copies of Clarke's book exist in the family, two found in second hand shops (it's been long out of print, and one of the second hand copies was signed by the author).

The roughness of Beechey's painted sea is another kind of turbulence, and the turbulence of slavery and freedom are indicated by the digitally repeated shackles. The shackles chunk another element of both Pitcairn and Norfolk islands. On Pitcairn, the treatment of former friends as slaves disgruntled Polynesian men just after arrival, and led to the race war. Norfolk Island prior to the Pitcairners arriving, was used as a penal colony, reportedly one of the worst of the British Empire (Clarke, 1986). So the multiplicity of references to turbulence in the project allows for relationships to and between chaos theory, the sea near Pitcairn Island, an 18th century Captain of a naval ship who painted pictures, 20th century publishing, my sister, *National Geographic*, race wars, and British colonial settlement policy where these included penal colonies.

It is suggested that in the multiplicity of potential relationships, nonlinear connections in the project are allowed. The section on nonlinearity introduces more of the concept of rhizome, and reviews in greater detail what scientists, mathematicians and writers from the humanities have to say of nonlinear systems.

Many ideas and concepts were sown in the ground of the project and a similar number of ideas weeded from it. Several key themes were revealed in the process of creating pieces – these are discussed in the Hybrid Culture and Nonlinearity sections. The title of the exhibition is *HC:N:CP* which is a comprehension, the simplest of chunks, of the title of the exegesis: Hybrid Culture, Nonlinearity and Creative Practice.

Notes

[1]. The Heideggerian (1977) sense of calling forth out of unconcealment (though in this case, not necessarily calling forth to order), or poiesis.

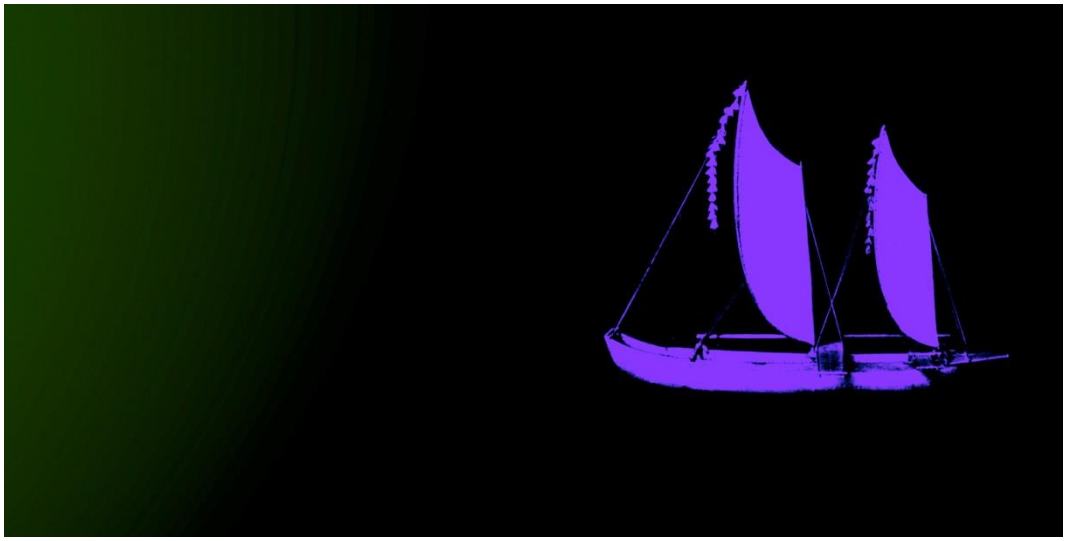
[2]. Chunking in the sense of Hofstadter (1979) occurs for example in poetry (famously in the Japanese form of haiku), and when the complete writings of Shakespeare are compressed into a twelve week series of lectures. Chunking also occurs when people on a beach move so far away that details of their face are blurred. A map is also a chunked view of territory. At a certain distance from earth, cars can be seen, at other distances they cannot. If the question is asked,

where did the cars go, one answer is that the information concerning the cars has been chunked into detail too small to see.

[3]. After the mutiny, the Bounty stopped by Rarotonga and introduced the orange tree there, and also stopped at Va'vau in the Tongan Islands (Langdon, 2000); an attempt was made to settle on Tabuai, with the building of "Fort George" (Nicolson, 1997).

[4]. Noise is a vernacular term used by scientists, referring to data on such small scales that traditionally it was dismissed from experiments (for a discussion of noise in data, and it's relation to Mandelbrot's work including fractals, see Gleick, 1988 pp. 91 – 96).

Images



3. Detail from *Mauatua and Fletcher*

4. Detail from *Hannah Young nee Adams*

5. Detail from *Christine Rose Young nee Quintal*

6. Detail from *Irene Verle Clothier nee Young*.

7. Slide 2 of the image database *(*detail from *John Adams)*

8. Slide 9 of the database, NASA image of interstellar dust (detail from *John Adams).*

9. Slide 41 of the database, photograph of Pitcairn Island associated with leis (detail from *John Adams).*

Hybrid culture

Hybrida: bastard child of Romans and foreigners

The Pocket Oxford Dictionary (2000, p. 430) gives the meaning of 'hybrid' as '**1** offspring of two plants or animals of different species or varieties. **2** thing composed of diverse elements, e.g. a word with parts taken from different languages.' The root of the term 'hybrid' is the Latin *hybrida*.

According to the Wolters' Latin-Dutch dictionary 'hybrida' means: 'bastard, Child of a Roman and a foreigner, or of a free person and a slave.' The Grote van Dale dictionary also first cites this original meaning, and then adds: 'something that comprises heterogenous elements.' 'Hybridisation' according to the same van Dale is a common notion in biochemistry (relating to the merging of different types of DNA). And in the social sciences and philosophy the concepts of 'hybrid' and 'hybridity' crop up. In '*Krisis – tijdschrift voor filosophe*' hybridity is described as 'the mixture of elements which are different and which are generally separate from each other.' It is interesting that the concept hybridity is here introduced alongside authenticity, within the framework of a study into the relationship between these two concepts. On the basis of a study carried out into the development of Mexican culture it is stated that this culture, as a melting together of different 'authentic' cultures, is a typical example of a

> hybrid culture – but that at the same time it is highly authentic. Authenticity and hybridity are not opposites but are natural extensions of each other. Hybridity produces new forms of authenticity and is inherent in processes of social and cultural dynamics in which various cultures confront each other (Europan 6, 2001).

Within the concept of hybridity then are the multifarious properties of genetics, genetic distortion and impurity, the crossing of plant lines and heterogeneity. There is an element of unique authenticity, and geo-political spatiality is also relevant. The geo-political tone is enhanced under a consideration of the 'city' as the authors of the above go on to say:

> **The development of the city by definition involves the development of hybrid ideas, i.e. where once border zones formed between two more or less distinct spatial systems… The border zones are sometimes a 'problem,' but they are often precisely the areas in which the greatest urban vitality develops. They are no longer merely a melting together of two different systems; they have become a new system with a logic and dynamism.**

Elaborating on the critique of authenticity, they write

> **…hybrids commonly allude to an intrinsic quality which can no longer be traced back to a specific function… but have a chameleon-like quality… that can accommodate all kinds of different functions…**

Heterogeneity, again, in another sense of the word.

Authority and colonising power consistently repudiated hybrid culture:

> What distinguished twentieth century French colonialism and its hybrids from earlier precedents were the pseudo-scientific, social Darwinian discourse that accompanied the interdiction against cross-

> breeding, and the violence and fear with which hybridity was resisted (O'Connell n.d. p. 1, citing Morton).

Hybrid culture was a bastard in the colonial view. The way to suppress hybridity was to deny, to hush, to keep from sight and to insist on hybrids adopting the vision of the master culture.

Cultural hybridity could not be seen in the mirrors of the colonisers, who

> …refused to see how the houses they resided in were hybrid concoctions, a hybridity that went well beyond stylistic ambivalence….hybridity did not simply reside in the foreign body and the native town: rather hybridity was a troubling presence in the form of their own identity, an ambivalent space that they occupied and whose impact they deeply felt (O'Connell n.d. p. 2, citing Chattopadhay).

The hybrida appeared as a Frankenstein of cultures, an image too dangerous to behold, a challenging of identity. The boundaries of culture and the dwelling places of the identity were blurred:

> There were no locks or bolts on the doors, indicating too plainly that Indian doors were not supposed to be shut. Without the possibility of closing off rooms, the boundary between the house and the outside world became ineffective. This blurring of boundaries, and the consequent lack of interiority, became one of the more disturbing aspects of colonial life, reminding the colonizers that the locus of a hybrid culture was in their midst…The service areas were inextricably linked to the served spaces… (O'Connell n.d. p. 2, citing Chattopadhay).

Hybridity disturbs traditions, and replaces tradition with novel solutions. The solution is one that fits the locale. The speaker's chair of the Papua New Guinea parliament, for example, is a cross between the one in the British House of Commons and a traditional orator stool, 'analogous to the kind of hybrid political system being molded' (O'Connell n.d. p. 1, citing Vale).

In what house though, does the personality of the realised cultural hybrid reside? Homi Bhabha (1994, p. 2) writes of 'an ongoing negotiation that seeks to authorize cultural hybridities that emerge in moments of historical transformation.' Whilst this passage of historical transformation is perhaps a reference to the

transformation of cultures at shared boundaries in cities, it is applicable to Pitcairn-Norfolk cultural heritage, where the transformation was simply explosive in the first instance.

Bhabha (1994, p. 2) writes that authorized power is not based on 'the persistence of tradition' but is 'reinscribed through conditions of contingency and contradictoriness that attend upon those who are "in the minority".' This gives the sense in which hybrid cultures stratify in unique ways, based on contingency rather than tradition. As Sanders (1953, p. 274) remarked of Pitcairn after visiting between 1951 and 1953:

> Pitcairn culture then provides a complex and often paradoxical standard of status measurement… Social cohesion lies only in kinship bonds and economic goods. The sea determines the extent of cooperative behaviour. In order to gain access to food supplies aboard ships, the islanders, to use their own term 'pull together.'

What distinguishes hybrid cultures from colonial ones is that the hybrid creates unique solutions whereas colonisers attempt to implant master culture structures and stratification in far off places.

In discussing the work of Renee Green, Bhabha (1994, p. 4) relates her description of architecture to hybridity: 'This interstitial passage [i.e. of the stairwell] between fixed identifications opens up the possibility of a cultural hybridity that entertains difference without an assumed or imposed hierarchy.' In not adopting either an assumed or imposed hierarchy, but instead establish their own laws, Pitcairners established their hybrid culture. This sense of self established hierarchy, rather than adopting a culturally external hierarchy, is important to this project. It authorises my determination to have the art work reflect both Polynesian and Western cultures, and to accept that these sometimes contradictory elements could be dovetailed. It is an acceptance that symbols and strategies might not always mean what they do in Western culture.

The strongest example of this in the exhibition is the use of lei related objects. That is to say, a picture frame, armchair and cross of bottles all have forced associations with artificial leis. For me, this is what the experience of coming from

a hybrid culture is like. It is as if I partake in the same reality as everyone around me, except that my view is altered. When I see an armchair, I see it overlaid by my cultural background. My relationship to alcohol is different from that of a Westerner[1]. Inside a picture frame, a cliché of Western art, I see leis. I am not attempting to reference framing devices. The frame is one means of framing, and several are used in the exhibition (there is the picture frame, a frame of light seen in the image projection, an armchair is coated in leis, leis are contained by the bottles, and finally no frames are used - structure is support in the digital prints). The forced relationship of leis with objects is a reference to both Polynesian and Western cultures.

Both Polynesian and Western cultures influence the project. The discussion of hybrid cultures has largely been taking place in Western society. The Pitcairn-Norfolk culture is a hybrid, and many of the characteristics discerned by Western commentators, are revealed. Given this project, *HC:N:CP,* is based in Pitcairn-Norfolk culture, aspects of cultural hybridity found by Western authors can be located in the works that make up *HC:N:CP*.

THE OAK AND THE HIBISCUS

Would it be possible to graft on to the trunk of an oak the hibiscus, flower of the Pacific? Who would want such a Hybrid? In human terms it might be said that this has already been done. It happened on one of the furthest outreaches of Polynesia, on an island settled by disruptors of standing order: the Tahitians and Mutineers of *HMS Bounty* who settled on Pitcairn Island and later on Norfolk Island. This is the heritage referenced in the art work. It supplies the narrative and visual impetus.

Rather than a simple graft, there was a dynamic interchange, a border crossing exchange of cultural energies. The culture was not founded on traditions either English or Tahitian, but was a novel solution to fit a place and a people. It was a culture where Tahitian and English are blurred; a culture where the mark of

women's influence is strong. An authentic culture composed of heterogenic parts as Langdon (2000) found in researching his theories.

It is not hard to imagine the radical transition in the lives of the sailors that took place on arrival at Tahiti as (Clarke, 1986) writes. The voyage had been long and arduous: after attempting three times to round Cape Horn (i.e. storm conditions were endured for a month), Bligh turned around and sailed via the Cape of Good Hope (and incidentally called by Tasmania and passed by New Zealand Aotearoa). HMS armed vessel (also HMAV) *Bounty*, was a merchant ship purchased by the Navy and refitted for the journey. It had a substantial hold, able to accommodate a thousand plants, and the price in space was paid for in crew quarters, which were restricted even by standards of the day.

Out of these cramped conditions exploded the crew, to be greeted by feasting and sensuality in dramatic contrast to anything most would have known. According to Clarke (1986, p. 34) rations on board ship were meagre but good by standards of the day. Ship fare could not compare to umu (or hangi) cooked suckling pig, or fish plucked straight from the sea and cooked. Tahitian feasting was on a scale unmatched by anything the sailors had previously experienced, with the possible exception of Bligh, Christian and Young who came from upper class families (Christian in particular[2]).

Famously, feasting on Tahiti included liberal sexual practices, a kind of free love, where exclusive relationships were not the expected outcome of all relationships. This was accepted by the crew post-mutiny, as on Pitcairn three sailors each had children with two women (Nicolson, 1997). The cause of this was not that the first woman died and another relationship began. Edward Young for example had children by both Toofaiti and Mauatua (Christian's widow) whilst being 'married' to Teraura.[3] Mauatua lived with Young and Teraura in the same house after Christian's death.

Liberal sexuality was not due to looseness of character or nondescript lineage. Toofaiti comes from the Tahitian *to'ofa* 'a chief next in rank to *ari'i*, principle chief,' and *iti* 'small' (Langdon, 2000 p. 4). The meaning of Mauatua is

not certain, but contains *atua*, a Tahitian word for god. Nicolson (1997, p. 122) reports that liberal sexual practices by Tahitian royalty continued until at least 1831.

Undoubtedly the first marker on the path to cultural hybridity was the denial of maritime authority in the act of the mutiny. Dramatically, a sexual bifurcation soon[4] took place on board the Bounty. The former naval vessel now had women living on board. This is an utter transformation of the gender specific atmosphere of 18th century navies, an atmosphere largely unchanged until the second and third quarters of the 20th century.

Two distinct genealogical lines, one Tahitian, the other English, would constitute the gene pool.[5] Langdon (2000, p. 3-4) documents six maternal and six paternal predecessors: Mauatua, Teio, Teraura, Tevarua, Toofaiti and Vahineautua; Fletcher Christian, Edward Young, John Adams, John Mills, William McCoy, and Matthew Quintal. Genealogical records can be stated with relative accuracy as a continuous record was kept, beginning in 1823, when survivors of the race war were still alive, and spanning 1790 to 1853. The *Pitcairn Island Register* (Lucas, 1929) records births, deaths, marriages, ships passing (the first being the American whaler *Topaz* captained by Mayhew Folger, in 1808), notable events and other details of life on the island.

So Tahitian and English DNA made up the totality of the stock, made the 'bastard Children of Romans and foreigners' (see Europan 6, 2001 and the section on hybrid culture). Parental heterogeneity saved the ensuing generations from the horrors of inbreeding. In genetic terms, the resultant offspring had hybrid vigour. Family trees however are tangled. By the time Folger arrived, 23 children were the offspring of nine pairings of parents, rather than six pairs, due to the practices alluded to above (Nicolson, 1997). In my family tree, four of my lines go back to Mauatua and Christian, and I am related to my great great grandparents twice. Leis twisted in scanner space reflect the structure of DNA and the genealogical origin of the project. Twisted digital leis are seen in the prints *Mauatua and Fletcher Christian, Hannah Young nee Adams, Christine Rose Young nee Quintal* and *Irene*

Verle Clothier nee Young, in the image database section of *John Adams* and in *index.html,* the touch activated website.

Sexual practices blurred the boundaries of English and Tahitian. The culture was neither Tahitian nor English. It was a hybrid; it had an authenticity of its own. By 1800 only one adult male, one mutineer remained. It was left to the women to run the place. And what did this culture do, in making itself up? It replaced tradition with novel solutions suited to the locale. In the same way, the various media used in *HC:N:CP*, and the treatment of components reflects not one solution to be repeated elsewhere, but a novel solution suitable to this project only. At another time, similar, but not the same grouping of media may be deployed. The exhibition therefore, is antithetical to the common practice of finding one aesthetic solution and repeating it in variation thereafter.

Returning to early Pitcairn history, that sole mutineer John Adams, in a drunken fit had a vision of the Archangel Michael throwing a dart at him. This converted Adams to Christianity, and the community became peace loving, with a male figurehead as leader. The work *John Adams,* which consists of a cross of bottles with leis in them and an image database, refers directly to Adam's story. On the wall behind Polynesian and Western images are projected – reflecting cosmology and the human urge to find meaningful connections in diverse experiences.

Clearly, with one adult male, women's influence on the culture was significant. Perhaps the most significant of these is the absence of aggressive traditions. There is no haka; there has never been a murder on Pitcairn; and on Norfolk Island, where all of Pitcairn settled in 1856, [6] there has been one murder in the last 154 years (recently). Captain Beechey of *HMS Blossom*, who visited in 1825, noted the muscularity of the women (Nicolson, 1997 p. 95) presumably due to working hard; and in 1972, *The Miscellany* of Pitcairn Island (Ford, 1980 p. 75) reported that the men, contrary to tradition, had for the first time won the annual tug of war. Women dominate *HC:N:CP*, with three of six works named for my relationship to female ancestors (*Hannah Young nee Adams, Christine Rose Young nee Quintal* and *Irene Verle Clothier nee Young),* one work related to ancestors of

both genders (*Mauatua and Fletcher Christian)*, one called after a male *(John Adams)* and one title being non-gender related (*index.html).*

Again returning to Pitcairn heritage, in 1838 (following a period of manipulation by colonial impostor Joshua Hill) the Pitcairners recorded their own Laws. These Laws are reproduced completely as Appendix 1. In the regulations pertaining to these laws, all adults over the age of eighteen are eligible to vote, and in 1840, the *Register* recorded the number eligible to vote as "33 – 17 males, 16 females." It appears women were given the vote by assumption; that is to say, there was no regulation stating that only men had the vote, or that women did not.

The first law states that a magistrate shall be elected who 'is not to assume any power or authority on his own responsibility, or without the consent of the majority of the people.' The second covers bad behaviour by dogs; the third protects cats; the fourth concerns damage by pigs. Attendance at school is compulsory for both sexes under the fifth law; whilst the sixth law concerns declaring intent to cultivate land, conserving wood for houses, the forbidding of bringing up past disputes at meetings, the appointment of church wardens and the prevention of killing white birds. The seventh law goes into great detail regarding the conservation of wood; protecting landmarks is the aim of the eighth law and regulations for trading with ships the ninth law. Lastly, use of the public anvil (from *HMS Bounty*) is covered in the tenth law.

The Pitcairn Laws of 1838 established votes for women, a Magistrate with accountability to the populace, a legal requirement for the education of both sexes, and were expressive of a concern for the preservation of trees or wood supply, white birds and cats. These laws are sometimes radical, sometimes understandable, but novel as a combination, and unique among laws the world over. What is absent is also interesting: there are no laws against criminal acts except where these are enacted upon birds and animals. The usual crimes such as stealing and assault were of no interest to this community. The organisation and stratification of culture that

occurred with the institution of the Laws, is attempted to be reflected in the non-background components of *Hannah Young nee Adams.*

As Nicolson (1997) and Clarke (1986) report, early generations of this culture wore tapa, cooked in hangi, lived in English styled wooden houses with thatched Tahitian style rooves and no latches on the doors, transported themselves in Tahitian canoes, spoke both English and Tahitian and scented their bodies with the oil of sweet smelling plants. Both sexes had pierced ears and adorned themselves with flowers (Nicolson, 1997 p. 82). Weaving in Polynesian style continued until the turn of the 20th century, and until at least the 70's grass skirts were made for the tourist trade (Ford, 1980 p. 87).

Yet this was not a simply an offshoot of Tahitian culture. Names were English, and Tahitian myth and legend were not preserved; they declared themselves English to passing captains.[7] Payments for education and fines for those who transgressed the 1838 Laws are given in dollars, shillings and pence, with the education payments set according to an agreed schedule of barter (see Appendix 1).

A dance was performed for Beechey, but the movements altered from the traditional Tahitian (Nicolson 1997, p. 97). In 1831, an attempt was made to resettle on Tahiti, as it was apparent Pitcairn could not support the community for too much longer. This attempt failed, partially due to culture shock (56% of Pitcairners were under the age of 15 and not prepared for the excesses of Tahitian morality) and also due to an horrendous toll caused by illnesses (ten Pitcairners died in a few weeks). Pitcairn-Norfolk talk has roots in both Tahitian and old English. The language is flexible, and is adjusted dependent on how much the speaker wishes the English listener to hear. In *HC:N:CP*, both clearly Polynesian related imagery (leis and ulu patterns, for example) and Western media (digital prints and websites for example) are cited or deployed, reflecting the originating influences in Pitcairn-Norfolk culture.

Following settlement on Norfolk in 1856, a fundamental split occurred: those who returned to Pitcairn followed Christianity, and in 1897 were converted to Seventh Day Adventism. On Norfolk, religion gradually became less important.

When a group of Norfolk Islanders travelled to Pitcairn for the 200 year commemoration of the mutiny on the *Bounty*, Pitcairners were surprised to find that on landing, Norfolk islanders brought out alcohol and danced the *tamare*, a traditional Tahitian dance celebrating women's hips. Psalms and parties on Pitcairn relate to celebrating the community and Christianity; on Norfolk, psalms form the (audio) backdrop to social gatherings which often include consuming (tax free) alcohol. On both islands, happiness abounds at social gatherings. This theme of psalms and parties is seen in both J*ohn Adams* and *Christine Rose Quintal nee Young* works (in the latter work a cross is substituted by a plus).

Whatawieh yorlye? Cushu. Yorlye sullen gwen nawi dis dieh? Ca beat et. The uniqueness of a culture is perhaps the hardest thing to describe, when the tools to describe it belong so clearly to another culture, albeit in this case a root-culture shared. So perhaps a few words of Pitcairn-Norfolk talk can indicate how radically different a culture can be, even if it does readily adapt itself to Western culture, when it wants to. The words at the start of this paragraph say: How's it going? Good thanks. Are you and the family going swimming today? Sure are, there's nothing better.

Notes

[1]. See the references to psalms and parties on the page preceding this note.

[2]. Christian's birthplace was said to have 'dog kennels better than most people's houses' (Clarke, 1986).

[3]. See Nicolson (1997, appendix 1 p. 218-221) for a list of births, deaths and marriages of Pitcairn people. Whilst Teraura had no children with Edward Young, after Young's death she would have six children with Thursday October Christian.

[4]. Following the mutiny, the Bounty was sailed to Tabuai (also spelt Tooboaui and Tupuai); after deciding to try and settle there, Christian returned to Tahiti to pick up wives and friends. Traces of 'Fort George' can still be seen on Tabuai; after misaligning themselves politically (i.e. with the wrong tribe) and ensuing trouble, the Bounty sailed back to Tahiti. A number of crew and Tahitians wanted to stay, until finally 12 Englishmen, 15 Tahitian women and 6 Polynesian men (two were Tabuain and one from Raiatea) left Tahiti a second time. They would become the founders of the culture that developed on Pitcairn Island. This multicultural collection criss-crossed the Pacific, making the European discovery of Rarotonga and introducing the orange tree there, before heading toward Pitcairn's Island (the proper name of the island) and discovering it to be incorrectly charted. North and south of the latitude 22 degrees south they zigzagged until the beach-less, cliff lined Pitcairn was found (Clarke, 1986 p. 59) and (Nicolson, 1997 p. xii & p. 23).

[5]. Only one child is thought to have been possibly fathered by a Polynesian, who were all killed in the race war that broke out (eventually only two of the mutineers would survive). In the early days after the mutiny, the Polynesian men were treated as friends, however when land on Pitcairn was divided the English men were allotted land and not the Polynesian men, and women sharing the men was enforced on the Polynesian men but a decision in regard to the women and the English men.

[6]. The Pitcairners moved because the population had outgrown the island. 18 months after arrival on Norfolk Island, two families returned, and two years after, several more. They became the ancestors of those who live on Pitcairn today. Most Pitcairners however, live on Norfolk Island and the culture should perhaps be known as Pitcairn-Norfolk culture.

[7]. On being asked by Folger what his race was, Thursday October Christian (Fletcher's son) replied 'We are Englishmen!' (Clarke, 1986 p. 92).

Nonlinearity

Some of the specific ways that an understanding of nonlinear systems influences this project, are discussed in the Creative Practice section. The background to this understanding is provided here, although it should be said this understanding soaks through many aspects of the project, some of which are not demonstrable in a direct way, but instead influence the project in indirect ways. As well as in specificities, an understanding of nonlinear systems has unspecified connections to *HC:N:CP.*

The development of modern nonlinear dynamics is generally acknowledged to have commenced with Frenchman Henri Poincare, in particular work completed between 1880 and 1910. Scientists largely ignored this work for half a century, although during this time mathematicians extended Poincare's work, proving a range of his conjectures (Jackson, 1991).

POINCARE'S MOST SIGNIFICANT WORK RELATED TO THE STUDY OF THE 'THREE BODY PROBLEM.' ISAAC NEWTON HAD WORKED OUT THE EQUATIONS FOR THE TWO-BODY PROBLEM – FOR EXAMPLE, THE MOVEMENT OF THE EARTH AND MOON. IT WAS CONSIDERED THAT THE

UNIVERSE WAS A CLOCKWORK MECHANISM; ALL THAT WAS REQUIRED WAS SUFFICIENT KNOWLEDGE OF THE WORKINGS OF THE MECHANISM. NEWTON'S MECHANICS COULD SOLVE ALL PROBLEMS AND THE UNIVERSE WOULD BE KNOWABLE AND PREDICTABLE TO THOSE WITH THE APPROPRIATE UNDERSTANDING. POINCARE SHOWED THAT THE THREE-BODY PROBLEM IS FUNDAMENTALLY UNSOLVABLE: THAT WHEN THREE BODIES OR PLANETS ARE CONSIDERED, THE INSTABILITIES ARE SUCH THAT ACCURATE PREDICTION IS NO LONGER POSSIBLE.

The notion that the predictability of natural systems was simply a data-gathering problem was finally put to rest in the 1960s. In that decade, Edward Lorenz showed that there was a fundamental unpredictability to the weather. Specifically, Lorenz found that if he rounded his starting parameter – 0.526127, to 0.526, his computer model produced a different weather pattern.

Alterations of the order of 0.000127 are what gave rise to the concept of the weather having a 'sensitive dependence on initial conditions' (Gleick 1988, p. 8) or the widely reported 'butterfly effect' (1988). Put simply, if last week's weather statistics is put into an accurate model of the weather, this week's weather is not obtained as a result. Small changes occur, which gain in significance as days go by.

The weather also has a strange attractor. A strange attractor encloses all the possible states of any given system. The attractor boundary does not alter – any change of state in the system is already contained within the attractor. Strange attractors, rather than being 'points of comfort' (Whillock 2000, p. 234) are better described as zones of 'bounded instability' (Palmer & Parker 2000, p. 985). A zone of bounded instability more accurately captures the sense of flux out of which change occurs as time passes. The strange attractor of the weather has an infinite number of surfaces, in the words of Edward Lorenz. In current terminology, the infinite number of surfaces is called fractal structure (Gleick, 1988).

The strange attractor of the weather is a basin of attraction: it leads to a tendency for the weather to fall into certain patterns, and defines the range of possible weather. Coursing through the attractor are nonlinear relations between

parts, constantly on guard against repetitive, cause-and-effect type clusters of weather. At the same time the nonlinear relations guarantee novel clusters of weather, unlike that which has occurred before, and cancelling predictability. This is how novel states are generated in physical processes such as the weather. The tension between nonlinearity and strange attractor gives rise to Palmer and Parker's (2001) 'zone of bounded instability.'

In describing the character of nonlinear equations, Jackson (1991, p. 6) wrote, 'the ratio (action/reaction) is not constant.' This is the same as saying cause and effect has broken down. One cause could at another time produce a different effect. In nonlinear systems, the effect can feedback into the cause, generating not just a fresh result, but also a new context for interaction.

Forces within nonlinear systems cross energy/matter/natural/human boundaries. Thus De Landa (1997, p. 26-27) writes of the mineralisation of elements in the sea forming basic skeletal structures, eventually leading to the development of the human endoskeleton, and later the mineralisation of the human exoskeleton in the form of modern dwellings, enabled by clay and bricks. This is a matter of both philosophy and science, and can be seen in Jackson's diagram reproduced below.

Viewing all aspects of all systems – from cosmology to objects, acts and personality – as energies that propagate actualities greatly assists understanding nonlinear processes. De Landa, (1997 p. 64, citing Deleuze and Guattari) writes of 'an articulation of superpositions… an interconnection of diverse but overlapping elements.' Chemical elements and processes migrate into the human biological landscape; the same energy migrates onto the human cultural plateau.

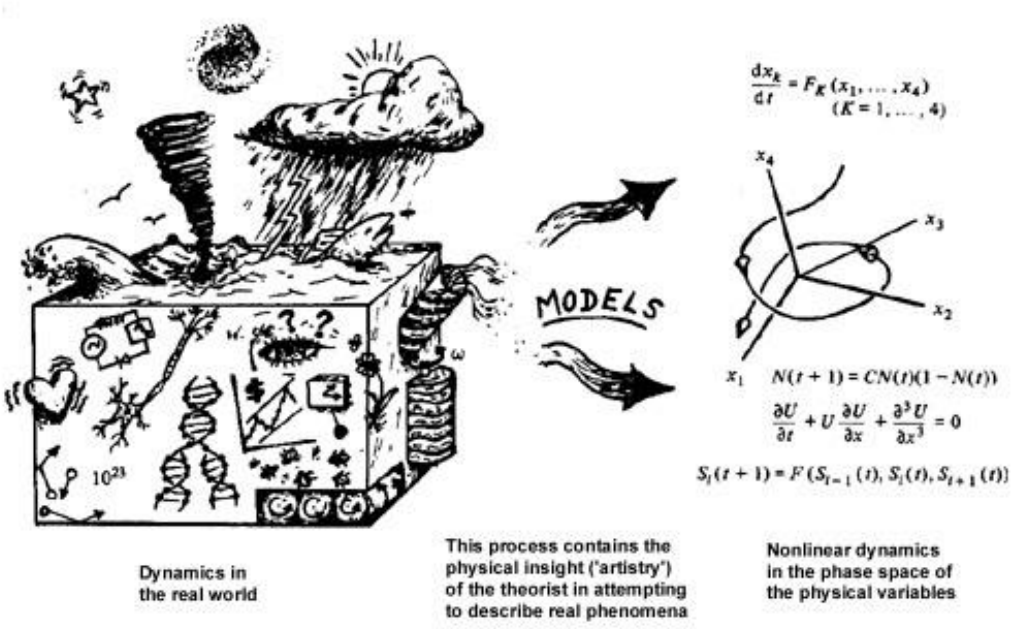


Figure C. Jackson (1991, p.6) gives the above diagram as a means of explaining how a scientist, theoretical physicist, mathematician or engineer might obtain a view of nonlinear systems.

Rhizome and arbolic understanding

At the boundary of overlapping parts of such 'meshworks,' are 'intercalary elements' which effect interconnections. Intercalary elements involve 'densifications, intensifications, reinforcements, injections, showerings,' enabling congealment, expansion, diversification and compression (De Landa 1997 p. 64, citing Deleuze and Guattari).

It is perhaps easy to see why the ratio between action and reaction might not be constant in complex, self-organising, adaptive systems. The articulation of superpositions across scales from the microcosmic to the macrocosmic – from chemical elements all the way to large-scale cultural systems, and the dynamics of interaction between these forces, creates both recurring and novel system states.

Just as the weather has characteristics of both unpredictability and being contained by a strange attractor, so too do Deleuze and Guattari write of both strata and self consistent aggregates, or in De Landa's terms, hierarchy and meshwork. Hierarchy is stratified, characterized by linear thinking, sedentary and striated concepts, and are territorialized and homogenous; meshworks, or rhizomes, involve

nonlinearity, anarchy, nomadism[1], deterritorialization and heterogeneity (Wray, 1998 p. 3). The opposite of rhizomic thinking for Deleuze and Guattari is 'arbolic' thinking (Wray 1998).

The concept of rhizome is given importance by Deleuze and Guattari, who devote the introductory chapter of the English translation of *A Thousand Plateaus* to it. A rhizome is taken to have the qualities of connection 'any point… can be connected to anything other' (Deleuze and Guattari 1998, p. 7), heterogeneity (composed of unrelated or diverse parts), multiplicity (plurality), rupture (any point can be disconnected but the rhizome lives in it's other parts and may grow along new lines), cartography and decalcomania. The latter two are taken to refer to open and connective 'maps' rather than 'tracing' – a tracing is genetic, evolving and reproduces from earlier form. A map is 'open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by any individual, group or social formation' (1988 p. 12). Connection, heterogeneity and multiplicity are most important to this project.

A rhizome has the qualities of 'linear multiplicities with *n* dimensions… [its] traits are not necessarily linked to traits of the same kind' (Deleuze and Guattari 1987 p. 21). Nonlinearity however, is not mutually exclusive to linearity. Complex systems such as the weather are composed of linear steps. At many points in a storm, there is an increase in moisture content in the air. But to discuss a storm in terms of linear steps misses grasping the overall sense of it. It is necessary to have both linear and nonlinear, hierarchy and meshwork, rhizome and arbolic thinking, to properly understand the universe.

The coherence enabled by a nonlinear view of processes captures the overall view. The process of collapsing large quantities of detail (such as the linear

components of a storm) into a comprehensible view, is described by Douglas Hofstadter as ‘chunking.’

Chunking, determinism and unpredictability

Consider for a moment, the hierarchical levels of science occurring within the human body. To understand a human being, as Hofstadter (1979 p. 305) writes, we do not need to understand:

> … the quark model, the structure of nuclei, the nature of electron orbits, the chemical bond, the structure of proteins, the organelles in a cell, the methods of intercellular communication, the physiology of the various organs of the human body, or the complex interactions among organs… Although there is some ‘leakage’ between… levels of science… there is almost no leakage from one level to a distant level. All that a person needs is a chunked model of how the highest level acts; and as we all know such models are realistic and successful.

Each level described contains a huge amount of information, and it is worth noting that these levels are active all the time, in every one of us. Whilst Hofstadter notes that there is not much leakage between distant hierarchical levels, it could be inferred that what does leak to distant levels is important information.

Chunking collapses data into compressed packets, but the relation between data and compression is not linear. As Hofstadter writes (1979, p. 306), in a chunked view a sacrifice is made (the space he writes of would be equivalent to the attractor of the system):

> There is however one significant negative feature of a chunked model: it usually does not have exact predictive power… Despite not being sure how people will react to a joke, we tell it with the expectation that they will do something such as laugh, or not laugh – rather than, say, climb the nearest flagpole… A chunked model defines a ‘space’ within which behaviour is

> expected to fall, and specifies probabilities of it's falling in different parts of that space.

Jackson describes a similar process in obtaining a nonlinear understanding of systems and processes. In a description accompanying a diagram, he writes of insight[2] and artistry in the process of enquiry, stating in the text (Jackson 1991, p. 6):

> Nonlinear phenomena concern processes involving 'physical' variables, which are governed by nonlinear equations. These models have been obtained by some approximate 'projection' rationale from presumably more fundamental microscopic dynamics of the system.

This projection from fundamental dynamics is close to the chunking of details Hofstadter refers to. Energy crosses boundaries in diverse systems, where an aspect of a system can be maintained in the general sense while in specificity the quality has a different actuality. This is the nonlinearity of physical systems. Between a strange attractor and unpredictability lies the dynamism of physical and cultural systems: rhizome and hierarchy in constant flux.

This section of the exegesis has sought to summarise the work of many researchers, writers and philosophers in such a way that the relationship of the project to nonlinear systems is revealed: a sense of nonlinearity infuses the project. There are aspects that are explicit in the art work – heterogeneity and multiplicity for example – but it is more in the attitude to boundary relationships and systems 'identity' that knowledge of nonlinear systems influences this thesis project. Identity is not seen here as related to essences but rather to overlapping parts, and where parts overlap nonlinear relations are enabled. This project resides at the juncture of nonlinear systems and cultural hybridity, in a manner that cannot be repeated elsewhere. Parts will be seen in other locations to be sure, but the whole will never be seen as it is here.

A memory of Pitcairn Laws creeps over the art work in the still of the night. Overlapping imagery across genre and media activate in-between spaces, a home for diversity and cultural hybridity. Strange loops and tangled hierarchies unfurl inside islands of a meshwork. A chunked view of Pitcairn-Norfolk reality, my

heritage as I see it is, given up for examination. In the end and the beginning, lei lines Mum. Bring on the stars.

Notes

[1]. Deleuze and Guattari write extensively of nomadic thought, and interestingly Mandelbrot (cited in Gleick 1988, p. 90) wrote of himself as among scholars who are 'nomads by choice.'

[2]. Kant writes of intuition, but this is not the same concept as that intended. Intuition for Kant was a passive form of representation, by which sensibility has sensations. Intuitions allow us to perceive particular relations between representations, and are directly related to objects (Palmquist n.d.). While perceiving relations between representations is related to the type of intuition I mean, Kant places a strong accent on the empirical, but the sense of intuitions intended here extends beyond such boundaries.

Appendix 1

The Pitcairn Island Laws of 1838[1]

No. 1 – Laws and Regulations of Pitcairn's Island

The Magistrate is to convene the public on occasions of complaints being made to him; and on hearing both sides of the question, commit it to a jury.

He is to see all fines levied, and all public works executed; and everyone must treat him with respect.

He is not to assume any power or authority on his own responsibility, or without the consent of the majority of the people.

A public journal shall be kept by the Magistrate, and shall from time to time be read; so that no one shall plead ignorance of the law for any crime he may commit. The journal shall be submitted to the inspection of those Captains of British men-o-war, which occasionally touch the island.

No. 2 – Laws for Dogs

If anyone's dog is found chasing a goat, the owner of that dog shall pay a fine of one dollar and a half; one dollar to the owner of the goat or goats, and the other half to the informer.

If any dog kills or otherwise injures a goat, the owner of the dog so offending must pay the damages; but should suspicion rest on no particular dog, the owners of dogs generally must pay the damage. The foregoing law is of no effect when the goat or goats are upon cultivated land.

Persons who have fowls or hogs in the bush may take dogs to hunt them, but should the dogs commit damage during the hunt, the person taking the dogs to hunt must pay the damage.

No. 3 – Laws for Cats

If any person under the age of ten years shall kill a cat, he or she shall receive corporal punishment. If any one, between the ages of ten and fifteen, kill a cat, he or she shall pay a fine of twenty five dollars; half the fine to be given to the informer, the other half to the public. All masters of families convicted of killing a cat shall be fined fifty dollars; half the fine to be given to the informer, the other half to the public.

N.B. Every person, from the age of fifteen upwards, shall pay a fine similar to masters.

No.4 – Laws for Hogs

If a pig does any damage, the person who sustains the damage may take the pig so trespassing, no matter whether he sees the pig committing damage, or another person see the pig committing damage.

If any person or persons, see a pig, or pigs, committing damage, and neglect to inform the person sustaining the damage, the person guilty of such neglect must pay the damage.

No.5 – Law Regarding the School

There must be a school kept, to which all parents shall be obliged to send their children, who must previously be able to repeat the alphabet, and be of the age from six to sixteen.

Mr Nobbs shall be placed at the head of the school, assisted by such persons as shall be named by the Chief Magistrate.

The school hours shall be from seven o'clock in the morning until noon, on all days except Saturdays and Sundays, casualties and sickness excepted.

One shilling, or an equivalent as marked below, shall be paid for each child per month, by the parents, whether the child attended school or not.

In case Mr Nobbs does not attend, the Assistant appointed by the Chief Magistrate shall receive the salary in proportion top the time Mr Nobbs is away.

Equivalent for money[2]		*s*	*d*
One Barrel of Yams	valued at	8	0
One Barrel of Sweet Potatoes	”	8	0
One Barrel of Irish Potatoes	”	12	0
Three good Bunches of Plantains	”	4	0
One Day's Labour	”	2	0

The Chief Magistrate is to see the labour is well performed; and goods which may be given for money, shall be delivered, either at the market place, or at the house of Mr Nobbs, as he may direct.

No. 6 – Miscellaneous

If any person wants to cultivate any lands, he is to give notice of it to the public; and any person wanting any wood is to go on the aforesaid land and get it. If any person cuts more wood than is sufficient to build his house, the wood that remains after his house is finished is to be given to the next person who may want to build a house. This extends only to the *mero* and *borou* timber.

Any person who may want any trees to break off the wind from his plantations or houses, is to make it known; and no one is allowed to cut them down, even if they be upon his own land.

At any meeting which may take place, there shall be no bringing up things that are past to incriminate others, with a view to prevent justice with a case before the Magistrate. Any one doing so shall be punished by such a fine as a jury may think proper to award.

The Magistrate is to appoint churchwardens, four in number, beginning on the first of every month.

Any person detected in shooting, or in any way killing white birds (unless for the sick) shall, for each bird that is killed, pay a dollar.

No. 7 – Laws for Wood

If any person goes to cut logs, to enclose a piece of ground, or any other purpose, he is not to cut any fit for building a dwelling house. The Magistrate is to appoint four men to inspect the logs after they are brought home; and should

any be found serviceable for building dwelling houses, they are to be taken from him and given to the next person who builds a house.

The third year from a time a person commences cutting wood he is to pick a share of thatch for covering dwelling-houses.

If the wood is left longer than the time specified, it is to be taken from him and given to the next person who builds a house.

Any person cutting logs, must not cut green ones until no more dry ones can be found. Any person without a pig-sty and wanting one, is allowed to cut green logs to make it with if dry logs are not to be found.

No person is allowed to cut down any trees for logs on which there are young ones growing, which may be serviceable for building in the future.

Any person having a large enclosure round his pig-sty, cutting down any tree on which there is any good logs [sic], is not allowed to take the logs, but he is to leave it for the benefit of those who have no enclosure. He is also bound to inform those who have no enclosure where the logs are to be found; but if they do not cut them at the end of two weeks, any one may be allowed to cut them, and keep them for such service as they please. No one may cut green logs to repair his large enclosure, save what he may find on trees which have been cut and left above two weeks.

No. 8 – Laws Respecting Landmarks

On the first day of January, after the Magistrate is elected, he shall assemble all those who should be deemed necessary; and with them he is to visit all landmarks that are upon the island, and replace those that are lost. Should anything occur to prevent it's accomplishment in the time specified (the 1st of January), the Magistrate is bound to see it done the first opportunity.

No. 9 – Laws for Trading with Ships

No person or persons shall be allowed to get spirits of any sort from any vessel, or sell it to strangers or any person upon the island. Any one found guilty of so doing shall be punished by fine, or such other punishment as a jury shall determine on. No intoxicating liquor whatever shall be allowed to be taken on shore, unless it be for medical purposes. Any person found guilty of transgressing this law, shall be severely punished by a jury.

No females are allowed to go on board a foreign vessel, of any size or description, without the permission of the Magistrate; and in case the Magistrate does not go on board himself, he is to appoint four men to look after the females.

No. 10 – law for the Public Anvil &c.

Any person taking the public anvil and public sledge hammer from the blacksmith's shop is to take it back after he has done with it; and in case the anvil and the sledge hammer should get lost by his neglecting to take it back, he is to get another anvil and sledge hammer, and pay a fine of four shillings.

Notes

[1]. The Laws here are those given in Nicolson (1997, p. 162-167).

[2]. Nicolson (1997, p. 164) reports that the value of yams and potatoes was also recorded as two dollars, the plantains as one dollar, and a day's labour at half a dollar.

Appendix 2

List of exhibited works

Number/title	Media
1. *John Adams*	Projected image database, leis and alcohol bottles
2. *Mauatua and Fletcher*	Digital print, leis in old gilt frame
3. *Hannah Young nee Adams*	Digital print
4. *Christine Rose Quintal nee Young*	Digital print, armchair upholstered in leis
5. *Irene Verle Clothier nee Young*	Digital print, poem
6. *Index.html*	Touch activated website

Documentation of the exhibition

Photographs of the installed exhibition will follow in the final submitted exegesis.

Appendix 3

Artists statement

The work *Index.html* is meant to be just that – an index, or compressed view of the entire exhibition/project; much of what follows can be found in that work, and all can be found in the exegesis.

The aim of this project is to integrate hybrid culture and nonlinearity into a dynamic artwork that is one multiplicity.

Hybrid cultures establish themselves 'without an assumed or imposed hierarchy' as Homi Bhabha writes. Hybrid cultures stratify in unique ways, providing solutions as time and experience accumulate; they are based on 'contingency' rather than 'tradition.'

The physicist E.A. Jackson wrote of nonlinear systems that 'the ratio action/reaction is not constant.' Hofstadter talked about 'strange loops and tangled hierarchies.' Deleuze and Guattari wrote of a rhizome that it 'constitutes linear multiplicities with *n* dimensions having neither subject nor object,' and it's 'traits are not necessarily linked to traits of the same kind.'

It is my contention that the nonlinearity in this project is located in linear multiplicities enabled by the media structure of the project. The multiple stratifications and anti-stratifications that occurred across media reflects the way hybrid cultures particularise themselves as time progresses.

A memory of Pitcairn Laws creeps over the art work in the still of the night. Overlapping imagery across genre and media activate in-between spaces, a home for diversity and cultural hybridity. Strange loops and tangled hierarchies unfurl inside islands of a meshwork. A chunked view of Pitcairn-Norfolk reality, my heritage as I see it is, is offered for contemplation.

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