

# Art, Science, Economics and Nuthatches

## Gavin Jones

### Introduction

This essay morphed (cool, I'm in with the under fives) out of the research Marc Lambert and I did for the Edinburgh International Science Festival lectures. Rather than cack-handedly present a précis of all ten lectures, I thought it more appropriate to focus on one of the "emergent structures" of the lectures, a sub-text that ran through all: the epistemological divisions within science. On the one hand there were those whose work seemed to me more akin to the artistic (i.e. assimilative, analogical and essentially—as opposed to peripherally—interdisciplinary). On the other, there were those whose work was firmly embedded in the laws of (as Richard Dawkins terms it) 'hierarchical reductionism.'

This dialectic (examined in the first part of this essay) is far more applicable to art and artists than any naive description of science's gizmos and weirdness. Boy's toys may be fun for some, but they are best fiddled with behind closed doors.

The distinction between a rationalist determinism and libertarianism has underpinned economic debate for over 200 years now. One of the most curious aspects of the science/arts debate over the last 20 years is how the most vociferous proponents of scientific, hierarchical determinism have tended towards extreme conservative libertarianism in economic areas (Matt Ridley being one of the best examples of this tendency). Visual arts provision, and in particular in the public arts, would appear to be an exact inversion of this tendency: state sponsored libertarianism. In the second section, I argue that current practice would be improved by a lessening of the current pseudo-competitive environment in which the public arts function.

### 1. Beauty is the Beast

*"Art does no longer serve any institutions; it has become autonomous. I can not describe the new situation, since art can not be described. It proves itself only in its performance. First of all, I can feel that something is expected of art and of me, some sort of hope."*

Gerhard Richter *Interview in Noch Kunst*

*"So what is reflexivity?...Social scientists have long been concerned that their discipline is markedly different from natural science because the very act of observing economic and social life changes what is being observed."*

Will Hutton paraphrasing George Soros  
*The State To Come*

*"...the hierarchical reductionist believes that carburetors are explained in terms of smaller units ...which are explained in terms of smaller units ...which are ultimately explained in terms of the smallest fundamental particles. Reductionism, in this sense is just another name for an honest desire to understand how things work."*

Richard Dawkins *The Blind Watchmaker*

HIERARCHICAL DETERMINISM is merely a procedure. It is not, as Dawkins points out akin (in itself) to baby eating or sin. As a procedure it is morally neutral. When applied appropriately it has proven an invaluable tool for our understanding. It is however not the only intellectual process, nor is it the summation of everything that is intrinsically human. In discussing the interface between art and science one needs to be aware of the pitfalls of such an approach. One needs to be aware that whilst morally neutral in itself, the implications of hierarchical determinism are political in the extreme.

In its end oriented, obsessive and exclusive application of the truth, (the truth in this sense being the method of observation as opposed to the observed) the mechanistic wing of the science sect displays its limits. This approach, whilst providing the logos necessary to cohere seemingly disparate phenomena and observed magnetic phenomena), proves hopelessly inadequate when applied to self-reflexive phenomena (things which "bite back": artists for example). John Barrow's floundering (though *honest*) attempts to *understand* how visual art *works* in terms of our inherited aesthetic preference for certain landscapes is an eloquent testament to this. The determinism is exemplary: art ...artist ...artist's propensity for certain aesthetic judgements ...artist's evolutionary lineage ...genetic basis for artist's production. This approach, of course, explains nothing beyond a tautological elucidation of its own procedures.

As proof for his argument Barrow examples only works showing traits of his argument. This kind of selectivity of evidence would be a mere curio were it not symptomatic of the wider problem in science's approach. By a generalisation of the particulars of artistic production (in any way that is meaningfully scientific according to Dawkin's rules of hierarchical reductionism) one fundamentally misses the importance and veracity of any visual culture, composed as it is of constantly shifting significance, both personally and historically.

It is this peculiarly "general" nature of the determinist process, which both underpins the success of science writing (it is easier to sell a commodity if the spin is generally applicable), but has also proven the *bête noir* of determinism itself. Whilst science is great at building planes, for example, it is singularly incapable of understanding the particularities of the complex vortex mechanics that enable it to fly. Art also relies on the particular: each and every human has their own artistic inclinations and motivations and this is the capitalist realist logic lying behind the quote of Gerhard Richter cited earlier. On this level the form of science in question can be illuminating if only to throw into perspective the deeply moral, political and economic heuristics of the artistic approach. In highlighting the difficulties of a process which has led humanity so wildly astray in so many areas, one can easily fall into the trap of a nihilistic rejectionism. The creative possibilities of recognising a valid pluralistic counter-ideology are great and offer a positive alternative to such nihilism, albeit one far more

difficult to sell to a public weaned on sound bite polemicism, and, whose idea of anti-science stops at such inanities as the X-Files. Just to stay true to my 'hypocritical oath,' here are a couple of polemic sound bites for you.

*Two outcomes of determinism:  
mass slaughter and great writing.*

Mary Midgley recently told me of a thing she witnessed at a science and theology conference in Oxford. An eminent biologist delivered a speech in which he decried the teaching of subjects which, as he saw, offered non-scientific "falsehoods". A kind of scientific correctness. Certainly, whilst this is an extreme example, there is a pervasive fundamentalism at the heart of the world's most influential ideology: scientism. (If you want to get irrationally worried about this inexplicable and seemingly amoral new sect, the Gulf War did happen, the erasing of Basra and its people did happen, and it was an "achievement" of science.

Compared to the scientific fundamentalists, the various nationalists and religionists are but pups in arms).

Since the mid-late 1970s science has had more than its fair share of eloquent spokespeople. From Carl Sagan, through Richard Feynmann, Richard Dawkins, Stephen Hawking, Steven Jay Gould, E.O. Wilson, etc. These were not the eccentric boffins of yore plying their wares on the OU at 3 in the morning with Kipper ties. These were multimillion copy selling authors, lean marketing dreams, on the cutting edge both of science's ever advancing new dawn and of popular culture.

Such a marketing phenomenon has not happened in art writing. Indeed, for reasons quoted previously, it may prove impossible. The political fall-out from this however is that art, such a potentially and essentially *hopeful* endeavour, may be forever marginalised somewhere between pop-videoism and client led fascism.

Not wishing to play the role of excuser for bad writers, there are real problems for anyone wishing to "sell" art. Paradoxically, chief among the problems is art's great strength: namely its *particular* nature. Whilst science writers can appear coherent by applying general principles across the board, art writers have no such luxury. The tendency, therefore, is to concoct general principles (to play the science game. My own possible hypocrisy), or to get bogged down in terminological semantic/pedantic arguments, pat historicising, or vain attempts at neutral description. All these approaches may be (but rarely are) interesting in themselves, but they miss the point. Art is analogical and assimilative, concepts and arguments are drawn together (as opposed to analysed or dissected). Art exists in dialogue only. This communicative (discursive) principle has been largely ignored by art writers (scientists and economists have however long been fascinated by it: David Bohm, Noam Chomsky, Danah Zohar, Will Hutton to name but a few). Considering the central role it plays at all levels of artistic production/dissemination such an omission is surprising.

In the second section of this essay, I wish to focus on the system within which, in Scotland at least, most contemporary art is shown, namely the public gallery. The implications I draw could equally be applied to science's equivalent to these spaces, i.e. the research department.

## 2. Towards a Stakeholding Arts Community

*"Mechanism stresses hierarchy. It structures existence according to ever-descending units of analysis. Molecules are more basic than neurones, atoms more basic than molecules. We structure power and organisation in the same ladder of ascending and descending authority."*

Danah Zohar & Ian Marshall *The Quantum Society*

*"Mechanical methods and models of simple causal explanations are increasingly inapplicable as we advance to such complex phenomena. In particular, the crucial phenomena determining the formation of many highly complex structures of human interaction,*

*i.e. economic values or prices, cannot be interpreted by simple causal or 'homothetic' theories, but require explanation in terms of the joint effects of a larger number of distinct elements than we can ever hope individually to observe or manipulate."*

Friedrich Hayek *The Fatal Conceit*

PUBLIC GALLERIES are in a curious position at the moment. Ostensibly they are publicly funded bodies whose income is allocated by a quasi-governmental organisation, and who have to unofficially compete for funding whilst officially keeping up the pretence of autonomy. This means that all competition takes place well out of the official channels: a cosy but none too dynamic situation. To further understand the problems and implications of this a general overview from a neo-Keynsian perspective proves illuminating. Firstly however, a word about nuthatches.

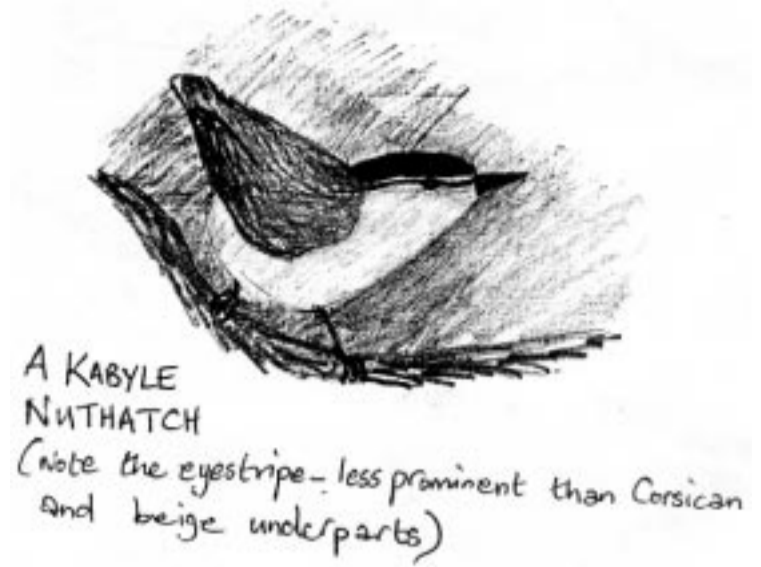
High in the Petite Kabyle Mountains of northern Algeria, in pine forests that form the upper limit of the tree zone, there lives a small and incredibly scarce bird: the Kabyle Nuthatch. It was discovered in 1975 and is one of the rarer birds of the world.

Taxonomically it is very similar to the Corsican Nuthatch, varying only in the markings of its cap. Both are examples of divergent evolution in closed gene systems. Isolation is the key to their species status, it could also be the key to their extinction in years hence. Isolates are constantly under threat of extermination from environmental change. If gene pools are small, they are also highly susceptible to genetic ossification, i.e. the entropic propensity of any closed system: in this case a heterogeneous species. Such a situation makes the "sufferer" far more likely to succumb to an inherited disorder. Mutations of this sort multiply rapidly through a small population. The effects can be devastating. In human group dynamics, whether on a personal or economic level, factionalism can have just as destructively an ossifying effect.

Economically, of course, factionalism cuts two ways. In a competitive environment it can be beneficially motivational. However, in sectors reliant on the nurturing of creative endeavour, the effect will be similar to that of isolation for a species: potentially catastrophic. And herein lies the problem with the current quango led pseudo-community public art system. The problem is one of emphasis at the funding level. Instead of engendering a "malicious/competitive" climate, the funders should be no less than *demanding* the creation and maintenance of an open community policy in the arts, where stress is laid firmly on the interdisciplinary and the inter-organisational. Only by doing so will the arts move away from the 1980s, in which they have remained, along with much of British "industry". The key to such an approach is that of social sanction and motivation, a principle which can only succeed if built upon bonds of trust within a community. A digression is important here to set this in a wider context.

In the past, and in certain cutting edge industries today, similar interests have built up around each other. London is a working embodiment of this principle. The City, Fleet Street, Soho, Westminster, all are areas designated (by the invisible hand of the old market) to a particular "industry". This does not happen by magic. Business is conducted by people. People talk, that's how business works at its best: mouth to mouth. Businesses are built on related businesses. Such networks prove more efficient if they are proximate. In the 1980s this simple logic, under pressure for fast dividend return, was rejected. However, what was gained in short term "competitiveness" has been more than matched by what has been lost, namely the communication infrastructures, the social and commercial accessibility of related industries and businesses, and possibly more importantly, the workforce security.

Of course proximate industries are not the only ones where the vitality of interaction is an essential prerequisite to success. Within any given sector, the



possibilities are there for communities (i.e. groupings of companies sharing information for the common good of all) to arise. The public arts and the research sciences are two such "communities".

In loosely affiliated interest groups there are two forms of motivating and regulating principles: competition and social sanction. The first as explained earlier, is reliant on division, distinction, leading to a disintegration of services (or an increase in choice depending on your personal inclinations in spin-phrasing). More importantly, it is reliant on a separatist view: us and them. For the second to work, separatism is anathema, bonds of trust must be created and built on. Both organisational principles have their place. Competition motivates industry and retail in ways that the old collectivist principles simply couldn't. In publicly funded organisations and in research, however, social sanction is more appropriate: competition is far too brutal in "its" treatment of failures. People must be provided the space to fail in: this is the key to innovation. "Fail again, fail better" as Beckett would say.

Where there is no share pressure (e.g. in the publicly funded cultural industries), the creation and maintenance of the underpinning of bonds of trust should be a priority. Once instigated, those in their communities of production should explicitly utilise the benefits offered, by talking and working together. Without such crossover, communities are rent asunder as surely as if they had been bulldozed. And that brings us neatly back to the cultural debate and to nuthatches, a long digression but necessary.

The arts "community" in Scotland, and this applies to Britain as a whole, because of the peculiar "fictive free-market" within which it operates, seems to exhibit many of the features of the nuthatches: namely, small isolated groups of mutually antagonistic factions. Interesting in themselves, but with so little contact between them that any innovation in one is seen as a threat by the others. There is no cross-pollination of ideas, no serious "joint initiatives". Pride and puerility keep the factions apart. If the potential of all is to be realised, a little humility must be exercised by all. No single faction or individual has in its grasp the panacea, the way towards a cultural utopia. We learn from each other or we cease to learn. The factionalism in cultural quarters is, to an extent, inevitable if left unchecked. The public funding bodies have in the past been far too lax at regulating their market. The result is, as an outsider, obvious: far too many individuals seem to be crassly following the narrow dictates of their own career paths, heedless to the needs of artists and public alike. They appear not to care whether they hold a stake in Scotland's future cultural development. If, as Pavel Buchler intimated in *Variant 2*, (Vol. 2) such development does look bleak, the primary reason will be because it is in the hands of people unwilling to talk without bitching, or to act without backstabbing. It would indeed be an unnecessary shame; what a waste of a valuable asset.

High in the Kabyle Mountains of northern Algeria is a dwindling population of reasons why the individuals who live by factionalism should have a rethink.