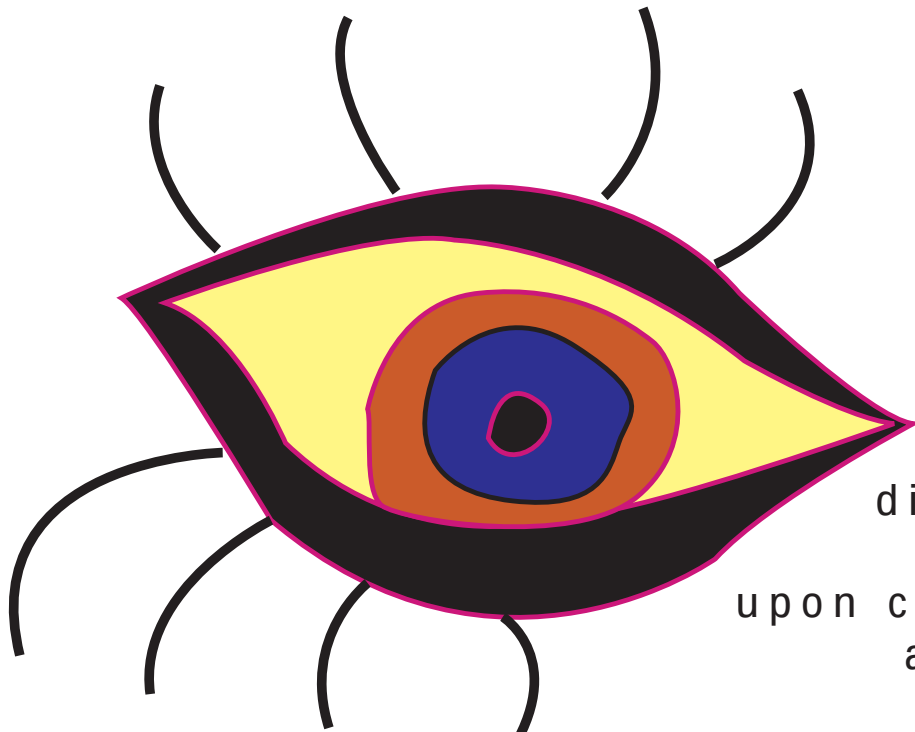




This article
discusses the
influences of nature
upon cultural development
and musical
creativity.

HUMANLY ORGANISED SOUND OR SOUNDLY ORGANISED HUMANITY

By Damien Soskin

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*NB Where man or he is written Man/Woman or he/she is implied etc.

Introduction

In the 1930's the Mexican conductor/composer Carlos Chavez wrote about the impact that music technology and most notably electronic music would have on the creativity of music in the 20th century. His book 'Towards a new music' looked forward to a time when electronic instruments would be the main driving force of music, yet he considered that new technology has always been a crucial factor in propagating artistic development. Looking ahead as he was, (while others around him were in the phase of calling the new electronic technologies "Prosaic, vulgar, matter of fact and seeing only the past as poetic and inspired" ²⁾, he was able to speculate about the future with only the progressions of the past as his reference. He suggested that instrumental, musical and artistic evolution is a 'natural' process that runs in parallel with human technological advances, as a consequence of our own 'natural' desire to express our feelings, emotions and situations.

Reading his work brings to mind many questions relating to the ways in which we view creativity, expression, progress and culture. It also raises various ambiguities 'common' to writing of this kind, most importantly, what is 'nature/natural'? Many writers have ascertained that creativity is a 'natural' process, in that it is driven by nature. John Blacking in his book 'How musical is man' considers the emphasis of music used within South African Venda culture and discusses the relationships between 'nature' and creativity in terms of the drives of individuals within their society.

"We may agree that music is sound that is organised into socially accepted patterns, that music making is to be regarded as a form of learned behaviour, and that musical

styles are based on what man has chosen to select from nature as a part of his cultural expression rather than on what nature has imposed on him. But the nature from which man has selected his musical styles is not only external to him; it includes his own nature-his psychophysical capacities and the ways in which these have been structured by his experience of interaction with people and things, which are a part of the adaptive process of maturation in culture" ³

Much has been written about the relationship between nature and culture and indeed many things are defined as either natural or cultural, for example it has often been argued that singing is natural, as it is for birds, but instruments of music are a product of 'nurture' and thus are unnatural. I shall return to this point later as I believe it to be a common misconception. Blacking suggested that "There is so much music in the world that it is reasonable to suppose that music, like language and possibly religion, is a species specific trait of man." ⁴ Thus, let us presume for the time being, that music is a 'natural' phenomenon. The important question this raises, which so many people have carefully avoided in their writing, is not 'what' but 'why' it is natural? Why do artists seek creativity and what are their personal drives and desires for doing so?

In this essay I aim to pinpoint some of the cultural, biological and personal drives that act as catalysts to creativity. I shall approach the instances of creative advance, the benefits of creativity on culture and the philosophies of their 'progress', specific technologies that give rise to great change and the impact they have on the individuals who seek creativity. Hopefully, with this information, I will be better equipped to answer the question of why man is inherently creative and to

understand the relevance and importance of the media he uses to this end.

"Communication is fundamental." ⁵ "Each of the ancients put his left foot forward and called out aname. He named the water hole, the reedbeds, the gum trees - calling to the right and left, calling all things into being and weaving their names into verses. The ancients sang their way all over the world. They sang the rivers and ranges, saltpans and sand dunes. they hunted, ate, made love, danced, killed: wherever their tracks led they left a trail of music." ⁶

This is a small section from a folk myth described by Bruce Chatwin in his book "Songlines". "Songlines" describes the complex culture of aboriginal song ownership, in which a man was born with title deeds to particular territories in the form of songs.

Due to the sparse environment in which they lived, the Aboriginals were wanderers, they had to keep moving in order to survive, but their songs gave them ownership of particular, 'useful' areas of land. The songs were full of metaphor, using legends and myth to describe the qualities or whereabouts of resources such as waterholes and food sources in any one particular territory. Aboriginals did not think of land as hemmed-in areas, but as a huge network of interlocking routes or 'songlines'. These routes were essentially trade routes, in which songs were the principle medium of exchange. A man could exchange his songs or possessions for 'acquired ritual knowledge' (ie use of other songs and thus rights on other parts of Songlines). The importance of the songs was that they broke cultural

barriers, a song held meaning thousands of miles from its origin, through many different languages.

This is a very specific and particularly complex example of the importance that music can hold within human culture. Used almost as a language in itself, each verse contains metaphorical reference to specific and meaningful myths set deep into Aboriginal society. These were then 'translated' as descriptions of particular territories and in this way the songs held universal definition throughout Australia.

Within the Aboriginal myth it is said that the songs were created by 'Ancients' essentially at the beginning of time, however it is interesting to consider that they must have evolved over a substantial period during a time when Aboriginals were first travelling such huge distances. They would have needed to develop an effective method of remembering and tracing back to places that they had passed through, which would survive through many generations. It was the inherent human empathy towards music which provided such a system.

Beyond it being an excellent example of the fantastic aptitude that humans have towards music, I started with this example, so as to avoid the obvious use of examples within Western culture. This is because, of all the different music cultures to be found around the world, European culture seems to be one of the most stifling to musical creativity. It can be seen that since the Renaissance period in Western culture, there has been a gradual shift which has made musical creation something specific to individuals in the cultural elite, the commercial markets of this century only increasing this hegemony.

It can be seen in studies such as Bruce Chatwin's or John Blacking's, that music is something that is totally unspecific to any one continent, culture or class, but occurs globally. With this in mind Blacking wrote :

"We must ask why apparently general musical abilities should be restricted to a chosen few in societies supposed to be culturally more advanced. Does cultural development represent a real advance in human sensitivity and technical ability, or is it chiefly a diversion for elites and a weapon of class exploitation?" ⁷

It is for this reason that it is important to take an 'ethnomusical' viewpoint on musical creativity as:

"In the long run, it is the activities of man the music maker that are of more interest and consequence to humanity than the particular musical achievements of western man [alone]."

⁸

If the aim of this essay is to pinpoint the reasons for continual progress and the constant recruitment of new creative minds in the field of arts and music, and to assess the drives of those individuals who choose 'movement, struggle and discovery' ⁹ rather than resting in contemplation of their cultural past (ie why is it 'natural' to be creative), we must first answer the question 'what is natural?', that is 'what are the 'natural' impulses that drive a community of people to develop a complex culture of arts and music?' To do so, it is important to study specific cultures from around the world within which these forms preside and to assess the circumstances within their cultural environment which

promote progression.

At this stage, we must accept that communication is more important to humanity than any other mode of interaction and that all forms of human society are based on our fundamental ability to communicate. As Sean Cubitt points out in his essay *Online sound and virtual Architecture*; "The unit of humanity is the community, anything human is communal". The point being that 'communication is fundamental,' ¹⁰ and it is a human imperative to be able to understand and empathise. Chavez pushes this point closer to its influence on creativity by asserting the need to express, through communication.

"We ought to deduce the necessity of producing music from the fundamental condition of human nature. Thought and feeling are the superior functions of man, but we should also observe that what is thought and felt implies and determines the need to express." ¹¹

This of course presumes that music is synonymous with language, in that the listener is capable of understanding and empathising with the composer through a common understanding of the structures of particular musical genres within any particular culture. It is thus evident that communication through music, as with language, is at least partially limited to particular groups of people who share the same understanding of different forms. Blacking describes this in lieu of his own responses to the music of the Venda culture :

"The motion of music alone seems to awaken in our bodies all kinds of responses. And yet peoples responses to music cannot be fully explained without some reference to their

experiences in the culture of which the notes are signs and symbols. If a piece of music moves a variety of listeners, it is probably not because of its outward form but because of what the form means to each listener in terms of human experience." ¹²

The myriad of different forms and structures apparent in musics from around the world are all products of creation within separate cultures following paths back to ancient times, the same being true of languages, religions, arts and even different cuisines. None of these factors have any specific basis in nature or natural laws, as was demonstrated in part by Alexander Ellis in 1885 when he proved that musical scales are highly artificial and that the laws of acoustics may be irrelevant in human organisations of sound. They are, instead, just a development of shared understanding and empathy between peoples in individual societies, brought about by specific social variations and historical circumstances. Some cultural forms are totally specific to particular areas and others contain crossovers between many cultures.

".....Any assessment of human musicality must account for processes that are extramusical, and that these should be included in analysis of music. The answers to many important questions about musical structure may not be strictly musical. Why are certain scales, modes and intervals preferred? The explanation may be historical, political, philosophical, or rational in terms of acoustic laws." ¹³

Music is not natural in any immediate sense, it is a product of our exigency to express through signs and symbols that which is around us and effects our lives. Spoken languages

are an incredibly effective means of communicating on a rational, immediate and 'more ordinary' level, however they are less effective at describing more esoteric and personal subjects such as emotions and feelings which are more easily evoked in music.

'Music has been man's natural response both to the most elemental and the most complex necessities of expression. The most elemental - let us say the primary ones, produced by fear, horror, satisfaction, discontent, aggression and sex- find a more direct and convincing medium than words in musical modulations of the voice. Words....are too limited by their precision of meaning.' ¹⁴

Sound has a unique potential for communication as somehow it evokes a response in humans like no other sensory stimulus. If you watch a silent film of a man standing laughing, your response is generally curiosity as to why he is laughing and very often he just looks silly. If instead, you listen to the soundtrack of hysterical laughter, your response is to laugh, regardless of missing the punchline. It is this capacity of man to receive expressions of feeling through sound that gives music its power and importance within society.

I think this is a suitable point in the essay to return to the misconstrued boundaries between nature and culture that were discussed briefly in the introduction. As I pointed out, it is often considered that vocal music, especially bird or whale song, is 'natural'. This implies that animals (including humans) formulate oral 'expressions' from genetically preconceived vocabulary. It is true that a cat will only ever utter variances on the mew and likewise a bird is limited to a

variety of tweets depending on the biology of its vocal tract, however it has been proven in many animals that their 'language' or 'songs' are learned in the same way as a human child: by hearing, association and imitation. Although this essay is about expression within human culture, I shall digress to explain one particularly relevant occurrence of learned, meaningful song within the bird world:

The New Zealand Saddleback have a repertoire of contemporary songs of which separate groups of birds will use only one or two. It was proven, by comparisons between the songs of parent birds and offspring, that the songs were not inherited genetically. It was also observed that, over a period of time, new songs were 'invented', probably by mistakes made whilst imitating older versions. The point of this is to show that, whether it be by using animal physiology such as vocal expression, clapping or tapping or by using instruments created (for the same purpose) via human technical progress, communication and expression using sound is a function of the acquired cultural knowledge of aural signs and symbols relevant to specific cultures of a specific time.

This learning facility or 'language instinct' of animals which enables them, in the early stages of growing, to develop the communication skills that are required by the culture into which they were born is easily apparent in the babbling speech processes of babies. It indicates that rather than having a preconceived set of biological rules and guides which would very soon fall out of the context of contemporary society, evolution has provided the ability for humans to learn the variable parts of language as a way of coordinating their grammars with that of the culture around them. Sean Cubitt

suggests that :

'We are born not only prematurely, but incompletely: our presumably genetic disposition to language and mentation (reason, emotion and so on) is a disposition to commune.' ¹⁵

This evolutionary strategy serves various purposes; it ensures that the progeny of each generation is equipped to live, survive and communicate using only 'relevant' signs and symbols; it also ensures that each offspring matures to become an individual within its society. To have a genetic preconception to culture would be for that culture only a means of stagnation and an inability to adapt to the circumstances manifest at any given time. Steven Pinker explains:

'Rather than selecting for a completely innate grammar, which would fall out of register with everyone else's, evolution may have given children an ability to learn the variable parts of language as a way of synchronising their grammars with that of the community.' ¹⁶

This cultural understanding, in the form of language and music, whilst not being a product of genetic evolution, does appear, however, to follow an evolution of its own. Changes in culture often evolve to suit any given environment many times faster than would be possible through genetic variations. It must be observed that when we idly talk about communication we fail to consider that when one person expresses something to someone else, he, in whatever form it takes, be it language, music, science or wisdom, has given something 'almost physical' which will potentially remain with the receiver for the duration of his life. After that

encounter the receiver has literally gained something that he didn't have before. That 'unit of culture' has replicated and if it is passed on further by our initial listener to a new listener it will have replicated again and perhaps, as in the case of 'Chinese whispers', it will have mutated or evolved slightly. This is exactly how culture works, in a form of replication and evolution synonymous with the Neo Darwinian theory of genetic evolution, employing a system that readily allows progress and change to cope with changes in local environment.

In 1976 Richard Dawkins wrote 'The Selfish Gene', a thesis that would refashion our understanding of culture and cultural evolution completely. Dawkins was the first person to associate a theory of cultural development with Darwin's understanding of biological evolution and he described this 'unit of culture' as "a new form of replicator still in its infancy." The name he gave to this unit of cultural transmission, or unit of imitation, is "meme", similar (in effect) to 'gene', deriving from the Greek 'mimeme' meaning duplication and shortened to reflect the English 'memory' and the French 'même', meaning 'same'.

'Examples of memes are tunes, ideas, catch-phrases, clothes, fashions, ways of making pots or of building arches. Just as genes propagate themselves in the gene pool by leaping from body to body via sperm or eggs, so memes propagate themselves in the meme pool [culture] by leaping from brain to brain via a process which, in the broad sense, can be called imitation. If a scientist hears, or reads about, a good idea he passes it onto his colleagues and students.....If the idea catches on, it can be said to propagate itself.....When you plant a fertile meme in my mind you literally parasitise

my brain, turning it into a vehicle for the memes propagation in just the same way that a virus may parasitise the genetic mechanism of a host cell.' ¹⁷

I shall not dwell now on the subject of memes, however having an understanding of this theory is very helpful when analysing the processes that take place within culture. Without the disposition towards understanding and shared experience there would be no culture, and without memory and learning it could not advance. The meme, it would seem, is the medium with which cultural transmission is made possible and the unit of memory that is stored (whether it be within books, songs or brains).

'.....if we take a world view of music, and if we consider social situations in musical traditions that have no notation, it is clear that the creation and performance of most music is generated first and foremost by the human capacity to discover patterns of sound and to identify them on subsequent occasions. Without biological processes of aural perception, and without cultural agreement among at least some human beings on what is perceived, there can be no music nor musical communication.' ¹⁸

It is the memory and association of songs that have been heard in particular social contexts, that give music its special power within culture. A good example of music with specific meanings held by the culture in which it was created, is that of the South African Venda culture. Within Venda society, every person is considered musical and in that respect music plays a big role within public situations of importance. The Venda do not believe that all are equally 'talented' (I use that word although they would not), however if one man can play a

drum or vocal rhythm more fluidly than another, then it is seen purely as a product of the former putting in more practice. Venda music is highly political both in the context of social situation and in its use for 'specific political purposes'¹⁹ but it is also:

'political in the sense that it may involve people in a powerful shared experience within the framework of their cultural experience and thereby make them more aware of themselves and of their responsibilities towards each other'²⁰

Music is played, and thus used on a day to day basis and as a result of its 'occasional' context and relation, its performance symbolises the specific activities within social groups. For this reason most adult Venda know what is going on around them by listening to sounds. The use of musical metaphor (and, I might add, musical memes) in Venda culture is particularly high, perhaps because of the high esteem placed on musical performance and thus the high percentage of people who have the vocabulary to communicate in this way. I would argue however that whilst less obvious, many other cultures that appear less musical on an immediate level, contain musical signs in some often obscure places. I personally need only think of the tune 'Yankee doodle dandy' to remind me of the 'plinky plink' sound of the ice cream van that drove down my road when I was younger, consequently making my mouth water for an ice lolly. This kind of association is, of course, the basis of most commercial advertising .

Beyond immediate associations and communication, the second most important factor that memes allow within society is progress and advance. Without the facility for

change, culture would be unable to adapt to the ever changing environment within which it exists. However, culture is more complex than this as it contains within it many different aspects which all advance at seemingly independent rates. Though it is the singular advances in the separate fields of art, music, fashion, technology, language, literature, theatre, architecture and science that go into the plural advances of society as a whole, on top of that it can be seen that any and all of these singular fields can reflect off each other, thus boosting even further the advances of the plural culture.

Progress in music and other arts is a response to the human desire to express the simultaneous changes and circumstances within the various other fields of the artist's contemporary culture. As I have explained, the arts are a suitably effective and adaptive medium with which to convey, by direct transmission to an audience or, more importantly from that audience onto subsequent generations of audiences, a suitable reflection of society as it stands. Consequently it can be said (and has been said by philosophers) that art itself does not progress, only the circumstances within which it was created. I find this to be an arbitrary play on terms that can be resolved with the consideration that the means of creating the art are ever progressing :

'When philosophers assure us that there is no progress in art, and that "the work of art is equal to the work of art," we should take refuge in the fact that art depends on physics, and that the physico-mechanical sciences are advancing in the sense of attaining constantly greater extension, freedom, and intensity in the domination of natural elements.' ²¹

I have reached a suitable point to leave the discussion of communication within culture behind and broach the subject of media and circumstance within which this communication is made both necessary and possible. 'Communication is fundamental', but are the developments in tools of expression as natural as our desire to use them?

Toward a new music ²² It is self-evident that all the arts rely on physical/technological media. Painting is impossible without brushes and ink, even at its most primitive a stick is required to 'chisel' images into stone and the same is clearly true of music. When instruments of music first appeared;

'man.....must have felt the instrument more as an obstacle to inspiration than as a new resource of expression. This discomfort lasted until he developed the new instrumental aptitude..... It's characteristics conditioned by that aptitude and by the physical possibilities of the instrument.' ²³

It is beyond the scope of this essay to discuss the early origins of instrumental music, however I would ascertain that the voice was the first instrument to be explored, followed, perhaps, by percussional sounds and then reed-type flutes. The details are arbitrary in this context, though it is safe to say that as soon as the first song was sung the technological curve of invention had started. Not content with the pitch of his grass whistle the early musician found a longer, more resonant piece, then a stronger, more versatile reed was chosen and so on. These advances in technology increased the expressive possibilities available to man, yet without reducing those that were previously available. As I discussed

in the previous chapter, man has a seemingly infinite desire to express himself and his changing environment. Through this he is often inspired to utilise new technologies as a means of constantly generating new signs and symbols to express the changes around him.

There are two ways in which new technologies are brought into the creative field; the 'standard' usage and, what Agostino Di Scipio calls, the 'heretical' ²⁴ notion of technology. The 'standard' view of developments in technology is that man is constantly solving problems around him by developing tools to do specific jobs which make his life a little easier or more efficient. That is to presume that every piece of new technology is used for the specific purposes that originated in the beholder's mind. This view fits in with a deterministic ²⁵ attitude towards technology and culture.

The 'heretical' notion views the uses of technology, less as the solution to problems in any immediate sense, but as the experimentation of alternative uses which in turn may lead to new solutions to altogether different problems. This situation of heretical usage of technology is something that occurs constantly in modern science and is often intrinsic to further developments in particular or related fields. Larry Wendt in his essay 'Sound Sense in an Era of Hypertext' considers that any new technology, going back as far as writing has a finite number of uses which can be 'conceived of as a whole in the form of a topological manifold of possibilities' ²⁶. He regards the uses of any technology at any one time as a 'plane that cuts through this manifold of expressivity' ²⁷. At first the impulses towards any new media are to present 'old wine in new bottles' ²⁸, then gradually more heretical uses evolve.

Thus, in reality it is a mixture of both standard and heretical usage that occurs, but it is important to consider them independently as it is the heretical usage that most concerns the musicologist. The heretical notion is one that is familiar to semioticians; let us say that the technology used by a poet is the language he uses to write, it can be seen that any poet of merit (creator), uses his language (materials) to his own disposal. Thus the purpose and meaning of language to the poet serves a heretic purpose.

"The poet qualifies language by putting it into question - s/he shows its limitations and eventually enriches it by transforming it. That who is not a poet utilises language within already existing boundaries, being spoken by language rather than speaking it." ²⁹

It can clearly be seen that in the course of artistic creativity it is essential for the artist to use his tools to his own ends rather than being limited by them. In this way the further developments of those tools will incorporate the requirements of their users. A contemporary example of a technology within music which has gone through the cycle of heretic development is the Sampler. I need not reel off a history to you on its various uses, that would need an essay unto itself. Suffice to say that it was born as a facility within analogue keyboards such as the Melotron to record onto tape short excerpts of sound, which could be looped and played back roughly in time to the music, but through a majestic spiral of developments it is now used as a separate instrument and is having a profound effect on many forms of modern music. Musicians (especially those using modern music technology) are notorious for warping and twisting the

standard uses of their instruments to achieve interesting new timbres.

The point of discussing the methods of technological development as regards to progress and creativity within culture is to show that it is not the singular advances within any one field that give rise to changes, but the combined effects of developments in all fields that are essential to the progress of any individual aspect of culture. The invention of the Pianoforte, which has had a profound effect on all music since, was not possible without the development of the various mechanical technologies that were essential to its making. Likewise the 'modern' digital sampler would not have come about but for the developments in digital computer technology that were designed for altogether different purposes. It is in this way that the art forms of any period reflect immediately on the situations, whether social, political or technological, within the plural culture around it. Agostino Di Scipio in his essay 'Questions concerning music technology' states that :

'The work of art is always created by creating the techniques of its making. This suggests,that there are hermeneutic [sic] dimensions of technology that we cannot neglect when discussing the aesthetic and cultural potential of any form of art.'³⁰

As a consequence of the ever progressing role of technology in art, the task of the artist is to constantly keep up with the times. Edward R. Kealy's essay 'From Craft to Art' describes how there is a constant transformation in roles whereby artists become interested in the possibilities of craft materials previously used by technicians as a new medium

for artistic expression and make attempts to take it over. He cites H. S. Becker who states that this kind of transition is a sequence typical of art history and has occurred in 'such diverse crafts as weaving, pottery, glass blowing, furniture making, and clothing design'.³¹ With a little thought it can be seen that this is true of all art forms, especially music, where any frequent technological changes occur. Becker later observes that with these changes comes a struggle for the technicians to maintain stature within his field. "All the participants in the old world who cannot make a place in the new one lose out".³²

Perhaps with this view of technological development in mind it is possible to see why in western culture musical performance and creativity is seen as something for the musical elite and that the successful musician is often raised to the status of genius. From the middle ages through to present day, a clear progression is visible from artisan to artist and then to genius, each step decreasing the number of musician 'vacancies' available. In the showbiz world of Pop music today the musician must ascend the ladder from Star to Superstar and ultimately to Megastar.

'....technological development brings about a degree of social exclusion: being a passive audience is the price that some must pay for membership in a superior society whose superiority is sustained by the exceptional ability of a chosen few. The technical level of what is defined as musicality is therefore raised, and some people must be branded as unmusical'.³³

It is possible to further assert this point by examining cultures who put little or no emphasis on technological

advance, and observing the musical systems that they practice. A particularly unique but valuable example is that of the Dong culture in southern China. The Dong people fled to the mountains after losing a battle in the seventh century and they have flourished in isolation from the outside world ever since. The importance of the Dong culture is that they communicate mainly through song. Every aspect of their daily lives has songs that accompany it, songs to indicate politeness, love, all states of health, through to spinning, weaving and even alcohol binges; thousands of different songs are used. No couple can marry until elders assess that they can sing in 'perfect harmony', which may take years. Most importantly is that their culture has hardly changed in hundreds of years and that (I would ascertain) is because the environment in which they live technologically and politically has remained similarly isolated and unchanged. ³⁴

In the first chapter I asserted the importance of communication between humans within their separate cultures. I have now shown how progress and creativity are possible by 'feeding off' changes and developments in other fields within culture, most notably through technological advance. The use of new technology is a means of ensuring that the medium of communication reflects upon, and is relevant to, contemporary society, thus providing a sense of order and understanding of what is around us.

'The sound may be the object, but man is the subject; and the key to understanding music is in the relationships existing between subject and object, the activating principle of organisation. Stravinsky expressed this with ...insight when he said of his own ...music : "music is given to us with the sole purpose of establishing an order in things, including,

and particularly, the coordination between man and time.' ³⁵

Soundly Organised Humanity ³⁶ It is the drive of society as a whole that brings about the need for cultural expression, and likewise, the populous that consumes, as I suggested in the first chapter, but what are the impulses that make individuals within society seek creativity? As I have pointed out, the creation of music is a means of expressing given situations within society and/or the personal experiences of the creator within that society. The concern of this chapter is to look more closely at why some members of society desire and are able to stand up and speak for the rest.

The incidence of creativity is a very complex subject which spans well beyond the scope of this essay, but it is important to pay some attention to the circumstances and catalysts of its occurrence. There is no official definition of creativity, and it can mean many different things in different contexts. I have outlined some of the key considerations towards creativity in the appendix, however it will be useful to have a working definition for the purposes of this chapter. I have chosen the following as a simple but relevant assessment :

'The ability to take existing objects and combine them in different ways for new purposes. For example, Gutemberg took the wine press and the die/punch and produced a printing press. Thus, a simple definition of creativity is the action of combining previously uncombined elements. From art, music and invention to household chores, this is part of the nature of being creative.' ³⁷

Although simple, I like this definition as it echoes the

importance of the heretic uses of technology and existing objects, which I discussed in the last chapter.

Mihaly Csikszentmihalyi's essay 'A systems view of creativity', divides all aspects of creativity into separate categories within the social framework. He suggests that the process of creativity is part of a cycle that exists between three interrelated systems : The 'field' which is the area of culture that is being worked within (music, art or science, for example), the 'domain' which is the cultural background upon which developments in the field will be effective, and finally the 'person(s)' , that is the musicians, artists or scientists involved. ³⁸ This system is a very efficient way of explaining the process of cultural evolution. 'The arrows pointing from person to field to domain actually describe an ascending spiral, because every new bit of information added to the domain will become the input for the next generation of persons.' If considered in the light of Dawkins' meme theory from the first chapter, it can be seen that the domain is a complex infrastructure of cultural understanding that evolves through time, in other words, the meme pool.

Viewing the cultural system in this way may seem to detract from the person-centred view of creativity that I am approaching in this chapter, but it is important to consider that any individual, genius or not, working within any field, cannot do so without the complex of pre-existing understanding (domain) from which he must feed. As Blacking puts it :

'Although human creativity may appear to be the result of individual effort, it is in fact a collective effort that is expressed in the behaviour of individuals. Originality may be

an expression of innate exploratory behaviour with the accumulated materials of a cultural tradition; and the ability to synthesise, which is often said to distinguish genius from talent, may express the comprehensive cognitive organisation that is generated by experience of the relationships that exist between the social groups who use and develop the techniques of the tradition.' ³⁹

With an understanding of this complex structure within which the individual operates, a greater understanding is possible of what his motivations are to work within it. Much of the western pop music in the early 70's was directly influenced by the music of the Beatles and others in the 60's. Reference to their inspiration does not lessen the stature of 70's musicians, rather it enriches our understanding of their means and interests, and places them within an observable system of influences and information.

When studying the motivations of an individual, within any one field, towards the progression and extension of that field, it is of utmost importance to consider their prior experiences within, and the joy that the individual has had in consuming that culture in the first place. Therefore, in studying musical creativity, it is as necessary to look at the listening process as it is to view the process of creation. As I established in the first chapter, diverse cultures and the different people within them make sense of the varying signs and symbols within music in very different ways. It is the people (audiences) within culture, not the creator, that make meaning from music. In this sense, the listener (consumer) is as important in the cycle of creativity as the writer. In some areas of study this 'anthropological' viewpoint causes problems. It relies on viewing music as 'social fact and [consequently] that

analysis of music compositions and performances must therefore take into account the work of the critics and "readers of the text" as performers and recreators of "music".' ⁴⁰ This contradicts many musicological views that would prescribe a specific analysis to any given text.

'The 'art object' by itself is neither art nor non-art: it becomes one or the other only because of the attitudes and feelings of other human beings towards it. Art lives in men and women, to be brought out in the open by special processes of interaction. Thus the signs have no meaning until that meaning is shared....' ⁴¹

In this respect, those that listen to music are more likely to understand and want to write music, and equally perhaps, they will be better at it. If all culture is a medium for communication, music can be seen as a form of conversation and those that listen feel compelled to answer. Of course there are a far wider range of factors involved in the desire to create than just the amount that a composer listens to music, but this view does emphasise further how the signs and symbols within culture hold meaning only in the light of their environment and thus cultures must (and do) evolve constantly so as to maintain their relevance to contemporary society.

Most research into creativity and creative performance has shown that specific abilities and personal attributes are of significantly less importance than social and environmental factors. Possibly the most important factor is a person's motivational state and it is often the person's social environment that determines this orientation. In Hennessey and Amabile's essay 'The conditions of creativity', they describe this as the intrinsic motivational principle of

creativity.

'People will be most creative when they feel motivated primarily by the interest, enjoyment, satisfaction, and challenge of the work itself - not by external pressures.....In essence, we are saying that the love people feel for their work has a great deal to do with the creativity of their performances. ⁴²

The enjoyment of creating can, in this sense, be seen as a reflection of the joy of consuming, though they are not inextricably linked and many other factors are involved in processes of creativity. Hennessey and Amabiles' research shows that the process of creativity is often associated with a specific 'flow state' which is experienced by many individuals at the peak of creative insight, something like 'a bicycle going down hill'. ⁴³ It has been shown, however, that the joy and love felt for one's craft can be delicate and easily influenced by external pressures within the environment. Time and time again research into creativity shows how important the influence of the people around the individual is upon the quality of work produced. Carl Rogers' essay, 'Towards a theory of creativity', describes the : 'delicate balance needed between the desire for attention, praise, and support from friends, supervisors, editors and colleagues, on the one hand, and, on the other hand, the necessity to maintain a protective distance from the opinions of these very same people.' ⁴⁴

It can be seen that the process of setting up an environment which is conducive to the stable ability of an individual to be creative is both very hard, yet very important. The individual must appreciate yet disregard the desire for outside

recognition and likewise be able to withstand the difficulty of harsh criticism. He must focus on his own ambitions regardless of external influence, at the same time as appreciating and communicating thoughts and feelings, relevant to his surroundings.

'The creative individual, often with great difficulty must work to construct the personal environment that will offer the fullest opportunity for maintaining that love, that intrinsic motivational orientation so necessary for creative expression.' ⁴⁵

The notion of love as motivation for creative work is far from new as a concept. In his text 'Symposium', written 2400 years ago, Plato discussed the many and varied guises of love. 'Symposium' is a fictional piece that describes some of his contemporary intellects conversing whilst having a dinner party. Within Socrates' speech especially he writes about love in terms of gaining immortality, thus, sexual love is the desire to immortalise yourself through your children and creative love is the desire to eternalise yourself through your work.

'Now, when men are physically pregnant.....they're more likely to be attracted to women; their love manifests in trying to gain immortality, renown, and what they take to be happiness by producing children. Those that are mentally pregnant, however..... I mean, there are people whose minds are far more pregnant than their bodies; they're filled with the offspring you might expect a mind to bear and produce. What offspring? virtue, and especially wisdom. For instance, there are the creations brought into the world by the poets and any craftsmen who count as having done original

This concept of eternalising yourself through your work, your 'mental offspring', your memes, is of huge significance. An immediate parallel can be made between eternalising yourself through your genes via sexual love and eternalising yourself through your memes via creative love. It is interesting to note that Plato went through a period of disapproving of the desire to be creative, yet in his lifetime he created some of the most long lived memes ever. If you were to trace Plato's family up to the present day via a complex family tree, the present generation would genetically bear little resemblance to him, yet through his memes he is still able to communicate his thoughts to us now, two and a half thousand years later. Such is the power of culture.

It is important to note, however, that in order for these memes to last through time, there must be a cultural medium for them to 'live' within, and in order for that culture to last through time it must have a significant, lasting effect on society. Plato's writings have only survived because they have maintained relevance to people consistently for all that time, the same can be said of Shakespeare's work, the Bible, Beethovens symphonies, Sgt Peppers Lonely Heart's Club Band or any other work of cultural thought which has lasted through time. Many many things do not last, they fade away as they run out of meaning, lost and forgotten. The most successful pieces of creativity are both immediate, yet enduring. Memes can also be destroyed, like the Incan and Aztec scripts that remained buried and hidden for hundreds of years and then were burned by the Spanish in the 16th century. If these had not been destroyed, a form of one way communication would be possible with a culture that is lost

to us now.

It can be seen that much of the creativity around us can be associated with the culture within which it was born and that social situations are powerful factors controlling the drives of individuals. In the first chapter, I quoted Chavez in relation to a fundamental human need to communicate. He suggested that creativity was a necessity born from the 'fundamental condition of human nature' .⁴⁷ We can now further this point by associating this primary desire with the development of complex cultures which are capable of accurately expressing the contemporary social surroundings of its members. Furthermore we can see how its members, through a hierarchy of membership brought about by degrees of consumption, can be drawn to continue, progress and push that field through time.

Conclusions Looking back to the beginning of this essay, it is easy to understand how Chavez could view music as both 'natural' and 'fundamental'. Except now, in the light of this research, it can be seen that music cannot exist without culture, it could never be a product of nature in any immediate sense. Music is a product of culture, it is a product of nurture, it is unnatural. It is true that music appears in nature, performed by humans and many other creatures, but each of those creatures in its own way is communicating, via a complex of cultural understanding. We can see now that the medium which is absolutely natural is the culture within which music is created.

Culture within humans is an imperative because, as I assessed, we need to communicate, yet through this need we create complex languages within cultural boundaries, which

are unnatural. This may seem confusing as culture and nature are seen as the antithesis of each other, yet I am saying that culture is natural. However it is important to remember that when referring to culture it is usual to have a particular aspect of it in mind which is 'of that culture', thus unnatural. Recall for a moment the Aboriginal songlines, the songs that were created to provide the people with an understanding of the environment that they lived in. They were created within boundaries of culture that were relevant only at that time. It was natural for the Aboriginals to want to communicate, but what made them create songs was some kind of previous musical understanding crossed with man's seemingly inherent affinity with music. It is important to realise though, that it is only circumstance that created these Aboriginal songs. It would have been just as natural for them to communicate these same subjects via a complex of different touches to the face and hands, but it just so happens that man has a convenient coordination between mouth and ears.

Thus, contrary to Chavez, I would assert that creativity is not born from the Human need to express directly, but culture is. Creativity is a product of the desire to communicate, using the potential within current boundaries within particular cultures.

Whether it is a madrigal by Gesualdo or a Bach passion, a sitar melody from India or a song from Africa, Berg's Wozzeck or Britten's War Requiem, a Balinese Gamelan, a Cantonese opera or a symphony by Mozart, Beethoven or Mahler, we can now consider each of these pieces as a paragraph, a distinct part of a chapter of human history that will hold meaning only as a metaphor for the age and society

whence it came. Yet some things never change, so for the meantime they still stir within us an understanding of the world that is around us now.

If the resources of nature have no limitations, the intelligence, imagination, and sensibility of man is also infinite. Each work of art is a particular case of solving the always complex problems of human expression and with the constant technological advances occurring both now and going into the future, we can expect parallel advances in music that will lead to as yet nonexistent art forms.

Notes

- 1 John Blacking: How Musical Is Man)
- 2 Chavez: Towards A New Music, p.15
- 3 Blacking: How Musical is Man: p.25
- 4 Blacking: How Musical is Man: p.7
- 5 Sean Cubbit: Online Sound & Virtual Architecture: Chap 1
- 6 Bruce Chatwin: Songlines: p.73
- 7 Blacking: How Musical is Man: p.4
- 8 Blacking: How Musical is Man: p.4
- 9 Chavez: Towards a New Music: p.15
- 10 Cubitt - Online sound and virtual architecture - Chap 1.1
- 11 Chavez - Towards a new music p.26
- 12 Blacking - How Musical is man p.52
- 13 Blacking - How Musical is man p.89
- 14 Chavez - Towards anew music - p.28
- 15 Cubitt - Online sound and virtual architecture - Chap 1.1
- 16 Cubitt - Online sound and virtual architecture - Chap 1.1
- 17 Dawkins - The Selfish Gene - p.192
- 18 Blacking - How musical is man - p.9
- 19 Blacking - How musical is man - p.28
- 20 Blacking - How musical is man - p.28

- 21 Chavez: Towards a New Music: p.18
- 22 Chavez
- 23 Chavez - Towards a new music - p.30
- 24 Agostino Di Scipio: Questions Concerning Music Technology: Chap 2
- 25 See appendix under Determinism.
- 26 Larry Wendt - Narrative as Genealogy: Sound Sense in an Era of Hypertext - P.2
- 27 Larry Wendt: Narrative as Genealogy: Sound Sense in an Era of Hypertext - P.2
- 28 Larry Wendt: Narrative as Genealogy: Sound Sense in an Era of Hypertext - P.2
- 29 Di Scipio: Questions Concerning Music Technology: p.8
- 30 Questions concerning music tech p.2
- 31 Edward.R.Kealy (H.S.Becker) - From Craft to Art - On Record - P.207
- 32 Edward.R.Kealy (H.S.Becker) - From Craft to Art - On Record - P.216
- 33 Blacking: How Musical is Man: P.34
- 34 Based on research by Simon Pradinas: Marie Claire Magazine: Feb 98 - P.14
- 35 Blacking: How Musical is Man: p.26
- 36 Blacking - How musical is man.
- 37 internet stuff under creativity.
- 38 M. Csikszentmihalyi - Society, culture, and person: a systems view of creativity. - Sternberg - p325 see appendix for diagram
- 39 Blacking - How Musical Is Man - p.106
- 40 music, culture and experience, Blacking p.225
- 41 music, culture and experience, Blacking p.225
- 42 Conditions of creativity p.11
- 43 Conditions of creativity p.11
- 44 Nature of creativity p.12

- 45 Wallace, p.371, Nature of creativity p.12
46 Symposium p.52 lines 208 E to 209 A
47 Chavez - Towards a new music - p.26

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