Composition,

Creativity

&

Consciousness

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Heard melodies are sweet, but those unheard
Are sweeter; therefore, ye soft pipes, play on;
Not to the sensual ear, but, more endear'd
Pipe to the spirit ditties of no tone…

- Keats

Composition, Music and Consciousness

- *There is no such thing as a cliché, only a clichéd mind*[1]

In 1994, the physicist Brian Josephson, inventor of the Josephson junction which is used in ultrasensitive measuring devices and for which he won the Nobel prize, delivered a paper at a conference in Tucson, Arizona. The theme of the conference was *Toward a Scientific Basis for Consciousness*. Josephson believed that 'music stemmed, to some extent, not from superficial cultural influences but from timeless, universal "structures" of the mind' [Horgan: 257]. In a text based on his paper [*What Can Music Tell Us about the Nature of the Mind? A Platonic Model*] he states that 'music should be seen as a phenomenon of transcendental character, involving aspects of mind as yet unstudied by conventional science.'

According to its entry in the *Oxford Companion to Philosophy* [Honderich: 152], 'consciousness exists but resists definition'. The possibility therefore that there can be a 'scientific basis' for something that 'resists definition' is questionable. Josephson talks in terms of *mind* rather than consciousness but even so, he seems to be indicating that there is a transcendental aspect to it and, if so, then it is questionable to what extent that it can be studied by any kind of science, conventional or otherwise, and to what extent the transcendental can be 'structured'. Although it makes little sense to talk of the structures of consciousness, structures are evident in the *consequences* of consciousness, for example in music. Instead of looking at how music can tell us anything about consciousness, this essay will explore how our understanding of, and our relationship with, consciousness is a factor in determining the quality of our creative output. An assumption will be made that because something resists definition then it is not necessarily vague. What is communicated in a piece of music for example cannot be translated into concepts and yet it would not be correct to describe music as 'vague'. On the contrary, there is something very 'definite' about a work of music.

The main vehicle for this exploration will be the process of non-contextual composition. This is composition for the sake of it, not written for any specific purpose. Traditionally, this would have been referred to as *instrumental music* in

contrast to choral music, for example. The designation *instrumental* is somewhat limiting nowadays as it does not adequately indicate the resources available to the modern composer which encompass, for example, sound design techniques and the use of recorded samples. By analogy with the contrast between *pure* mathematics and *applied* mathematics the term *pure music* will be used in this essay to refer to the situation whereby the composer has complete control over the choice of musical material and also over its arrangement and is composing for no other reason than that is his inclination.

The traditional composition task - the *composition problem* - is to put the twelve pitch classes, along with whatever repetitions of these pitch classes are required, into some combination. The resulting combination will provide some satisfaction to the composer and possibly also to an audience and perhaps even to a performer or ensemble. Nowadays, the composer is not restricted to using the twelve pitch classes and can choose his sonic building blocks. The essence of the composition problem is however the same: to create something that is musically meaningful. This is a deliberately bald statement of the problem. To approach the problem with this understanding of the task is to court writer's block. An understanding, on some level, of the existential context of the creative process is necessary.

Traditional books about composition do not usually consider the creative process; they are usually books of *analytic description*. They demonstrate the building blocks and elements of the structure of a musical composition but they do not explore where this structure comes from. In his book, *Musical Composition*, Brindle comes clean:

> In the music profession (including students) there are two strongly held opinions: one is that composition cannot be taught; the other that composition should not be taught.[Brindle:1]

On the same page he states his belief that composers are born and not made. Why should this be the case?

This essay intends to explore a little more deeply into what it is exactly that the would-be composer is trying to achieve through the creative process of composition, why they would want to do it and possibly how they might go about it. It will also be

necessary to look at the context within which they are operating which is nothing less than the world of music. The question of why modern western art music has so little popular appeal will be examined. This question itself lies in the broader context of western art, philosophy, science, academia and psychology over the last few centuries. A conjecture will be made that scientific and artistic creativity makes certain confused assumptions about the nature and relevance of consciousness. Finally, taking my cue from the Hindu-Buddhist approach to consciousness, an empirical approach to the problem of consciousness will be suggested. This will be applied to the creative process and music in particular.

Perhaps the composer is a 'natural' as Brindle suggests. Perhaps the composer is somebody who can sit down, perhaps even as a matter of routine and get on with it. Perhaps they have a creative flow and for them composition is not a 'problem' at all. It is simply a matter of sitting down, in all likelihood at a computer nowadays, and getting on with it. If so, then there are a variety of decisions that they must have addressed. For example, one of the first considerations of the composer would be *genre*. This immediately sets up an initial tension. To what extent should the composer aspire to originality and to what extent should they conform to stereotyped expectation? Originality in the western art traditions is generally regarded as desirable and indeed the main guiding criterion. In music this is even at the expense of a pleasant listening experience:

> Today, concert audiences obediently sit through music by Schoenberg and his followers, but few enjoy it. Although there's much that is interesting in this music, people simply do not find it harmonious. It hurts their ears. Yet harmony has always been about *not* hurting ears. [Jourdain: 100]

Brindle concurs:

> [Contemporary music] deliberately aimed at beginning anew, ignoring the conventions of the past; the only universal ideal was that the new music should be completely unlike whatever was heard before. Within that every composer tried to be different, mistaking novelty for originality and quality. Naturally enough, a confused situation arose, during which old conventions such as melody and harmony were jettisoned. [Brindle: 7]

Why should audiences put up with this? Is it because of its supposed originality or supposed intellectual respectability? These two notions are the enemies of both creativity and true artistic appreciation. The intellectualisation of music will be

considered in some detail later on but for now, can we really consider that there is much that is original in art or music? Most of us think we know what cliché is and are ready to label something as such but much that passes for originality is nothing more than cliché that is fashionable or academically or intellectually respectable. In fact, what passes for originality, as Brindle says, is usually nothing more than novelty, the sole criterion being whether the work evokes a response – indignation and outrage being the not undesirable norm - and actually rises to the level of a conversation piece. Art has become the expression of a 'clever idea'. It is not for nothing that number two of Brian Eno's *Oblique Strategies*, which deal with precipitating creative flow, is:

Don't be afraid of clichés

The 'serious' composer is hidebound by the inbred urge to be original. This situation is not conducive to good music.

The underground cartoonist, Robert Crumb has something to say on the matter. He is writing in reference to drawing but what he says applies to art generally:

> In the media dominated world we live in, the artist is under constant pressure to do something new, something innovative. If an artist derives his style from older sources, his work runs the risk of being considered old fashioned, or anachronistic. Any use of a drawing style that looks as if it comes from the 1920s may seem archaic to some people. Still, in earlier times artisans invariably worked in traditional styles that had been established over generations through a system of apprenticeships and guilds. Artistic change for its own sake, or for the sake of selling new product, was simply not part of common culture.
> Fashion was an exclusively aristocratic concern until the industrial era. But these days we're locked into a process of compulsory innovation where every artist must rebel to get any sort of recognition. To be merely at the top of your craft is not enough. [Crumb: 239]

Craft is not simple technical mastery. It is technical mastery allied with artistic intuition. In fact, is this not the traditional expectation of the artist? That the artist is someone who can express something in a masterly way? Such an understanding is too elitist for our quasi-egalitarian times. Let us accept that to some extent we are all

artists but fluency (perhaps a more acceptable word nowadays than 'mastery') in the use of the tools of expression is surely of the essence.

For the composer's craft, technical mastery entails fluency with the tools of composition allied with musical intuition. What is musical intuition? One would think that such a thing would be important in the process of composition but how many books on composition make any comment on musical intuition? Perhaps there is an assumption that the would-be composer already has this. So what is it? The key is in the understanding of *fluency*. It is possible to have a thorough *knowledge* of the tools but little fluency just as it is possible to have a thorough knowledge of a language's grammar but without the skill or talent of being particularly articulate in it. Musical intuition is about having a feeling for what works, it is knowing the effect that a particular technique in a particular context will have. Weber, as exalted by Debussy [Lockspeiser: 17] and others, obviously had highly developed musical intuition. Lockspeiser cites several examples. For example, 'His terrifying tremolo on the strings in *Freischütz* marks the introduction in music of the romantic sense of horror.' [Lockspeiser: 16] Tremolo strings are a common effect used in film scores to emphasise moments of heightened dread. Why should tremolo strings have this effect on us and more importantly *how did Weber know it would?* This is a simple example of musical intuition at work. The twentieth century provides us with an abundance of illustrations demonstrating the *lack* of musical intuition. Before considering why this should be so let us accept that intuition is about being able to use the tools of one's craft *creatively* and *expressively*. What this means precisely was explored in a previous essay, *Impressionism and the Limits of Art in the Twentieth Century*. It will be summarised here in terms of the basic models of information processing and behaviour.

Creativity involves an *output* which is the result of a *process* and all processes require some form of *input*. Because music could be regarded as information it is viable to begin with this. The basic information processing model is usually represented as:

Input → Process → Output

In terms of the mechanics of composition this can be initially applied as follows:

Pitches → Composing → Composition (score)

In the case of electroacoustic music this can be adapted as follows:

Sonic Material → Audio Manipulation and Arranging → Composition (CD)

Note that in the first case the result is typically a score and in the case of electroacoustic music, a CD. This has implications which will be considered later. For the moment, the IPO model has to be non-trivially applied again in the first case before we actually have music:

Score → Interpretation → Performance

Considering composition as a mode of behaviour we have:

Stimulus → Black Box → Response

The 'Black Box' in this case is the human psyche. In *Impressionism and the Limits of Art in the Twentieth Century* the stimulus was an *impression* and the response an *expression* so we have:

Impression → Black Box → Expression

The human psyche will remain a black box for the time being. The usefulness of this model is that it bypasses the question of what is being expressed. It is usually, perhaps naively, assumed that what the composer is trying to express is an emotion of some sort but there is far more to it than that. In her book, *Feeling and Form*, Langer states, knowingly one presumes, the naïve position: 'A work of art is often a spontaneous expression of feeling, ie, a symptom of the artist's state of mind.' [Langer: 15]. It has to be argued that very little art is spontaneous and any art which could be described as such is lacking in craft and would more correctly be described as doodling. It is difficult, also, to agree that a work of art is a symptom of the artist's state of mind unless it is simply a doodle. Works of art are usually executed over

protracted periods of time. States of mind vary from moment to moment so it really does not make sense to say that a work of art is a symptom of a state of mind. However, applying the above model, we can say that it is the original impulse, stimulus or *impression* that is spontaneous. This is the input to the psyche of the artist which over time, through the application of artistic craft, produces an *expression*, a work of art. One must guard against the possibility of misunderstanding this simple model of input/process/output as a causal or even mechanistic process. There is *no causal relation* between the expression and the impression. Bearing in mind Josephson's words and the essentially transcendental – in the sense of 'trans-conceptual', or more accurately, 'ante-conceptual' - nature of consciousness and the musical resultant, it should be understood that the expression is of a different *order* to the impression. Although one order might be dependent on another (lower) order the principles that apply on the higher order are completely independent of the principles that apply on the lower order. Consider, for example, the gymnast or ballerina who presents an image of spontaneous and effortless grace. Superficially, in response to such a performance, we might be tempted to apply Langer's statement but upon further reflection we can conclude that there is no necessary correlation between the impression received by the audience to what the performer is experiencing. The sinews of the ballerina's body are being stretched to their limits and her performance is the result of years of exertion, pain, sweat and premeditated considerations and calculations. She will probably be experiencing extreme nervousness during the performance and other enormous psychological pressures. The experience of the audience and the experience of a successful performer are of two different orders. Similarly, a study of the basic biochemical processes of life give no indication of the possibilities of art or psychology. Although there would be no art without biochemistry the principles of art bear no relation to the principles of biochemistry. The clearest example of dependent but mutually exclusive orders can be seen in cellular automata. The simplest of these are usually demonstrated on an orthogonal grid. Each cell can be coloured black or white according to a simple rule or algorithm. Apart from the most trivial cases there is no way of deducing what the pattern will be without executing the algorithm. Stephen Wolfram in his book, *A New Kind of Science,* exhaustively explores some of the simplest cellular automata. Some features of these patterns are quite idiosyncratic and cannot be inferred from the original algorithm.

Langer goes on to develop her argument by making a distinction between any form of expression and art [Langer: 26]. This is an important distinction to make. In these postmodern, quasi-egalitarian times where everybody can be an 'artist' the meaning of art has been debased, devalued and lost. While it is true that we are all essentially creative beings, and the expression of this creativity is ongoing and varied and should be encouraged, to encourage it by labelling it all 'art' is meaningless and limiting. The element of craft which includes musical intuition has already been suggested as indicative of the difference. Langer sees the difference in the distinction between signals and symbols:

> A signal is comprehended if it serves to make us notice the object or situation it bespeaks. A symbol is understood when we conceive the idea it presents [Langer: 26].

She sees 'artistic significance' as the successful 'expression of the Idea'. She does not clarify what is meant by 'Idea'. It obviously means something different from an idea which can be *conceived*. The phrase *expression of the Idea* is from Flaubert and she mentions how this has been identified with 'Clive Bell's famous but cryptic phrase 'Significant Form'' [Langer: 25]. It is quite appropriate that this term should not be clearly defined. However, in terms of the above model, Idea can be understood as the motivating aspect of an *impression* in the human psyche which seeks *expression* through the application of intuition and craft to the artistic medium, the artistic medium being the raw stuff from which the appropriate symbols can be constructed. This is borne out by what Langer says later on: 'Under the influence of the total "Idea," the musician *composes* every part of his piece'. [Langer: 123]

To try to define this Idea and what is being expressed is surely, given the non-conceptual, non-discursive nature of music a doomed enterprise yet many have tried. Meyer, for example, in *Emotion and Meaning in Music* articulates the problem in his introduction:

> … if the aesthetics and criticism of music are ever to move out of the realms of whim, fancy, and prejudice, and if the analysis of music is ever to go beyond description which employs a special jargon, then some account of the meaning, content, and communication of music more adequate than at present available must be given. As I A Richards puts it, "The two pillars upon which

> a theory of communication must rest are an account of value and an account of communication" – and included in an account of communication is obviously an account of the meanings communicated. [Meyer: vii]

This is an impossible task and it is arguable that Meyer's book is no different from the type of book that he decries. The problem is that when we say that music has meaning and involves communication we are tempted to ask what is this meaning that is being communicated? Instead of 'meaning' we should perhaps talk of 'significance' or 'import' [Langer : 31] and instead of 'communication' we should talk of 'interaction'. The interaction is ultimately with the universe, either actively as a composer or performer or less actively as an audience. The communication is *the revelation of pattern*. 'Music has *import*, and this import is the pattern of sentience – the pattern of life itself, as it is felt and directly known.' [Langer: 31]

Because of the sense that something is being communicated music is often described as a language.

> … yet music is not a kind of language. Its significance is really something different from what is traditionally and properly called "meaning." [Langer: 29]

Although 'intuition is the basic process of all understanding' and is 'just as operative in discursive thought' [Langer: 29], Langer makes a distinction between the functions of art and the functions of discourse. Taking music as her starting point she describes it as

> the articulate but non-discursive form having import without conventional reference, and therefore presenting itself not as a symbol in the ordinary sense, but as a "significant form," in which the factor of significance is not logically discriminated, but is felt as a quality rather than a recognized function.[Langer: 32]

The *quality* mentioned here would correspond with the result of an *impression*.

According to Trevor Wishart in *On Sonic Art*, Susanne Langer remarks in chapter 7 '…in its articulation of the time-continuum of concrete experience, [music] corresponds directly with the continuum of our experiencing, the continuous flux of our response-state' [Wishart: 16]. I could find no such remark in chapter 7 or

anywhere else in Langer's book. He is on similar territory so perhaps he is paraphrasing. He goes on:

> There is an immediate dialectic of musical action and experience by which music reaches directly to us in a way which language can never do, communicating powerful messages which are not refutable within the socially-approved categorical systems of any scribe-culture. [Wishart: 17]

One assumes that Wishart is referring to language that involves the communication of concepts and information – the *cognitive* aspects of language - rather than language in the form of poetry and literature.

> The essential feature of this direct musical communion is what I shall describe as *musical* gesture… Gesture is essentially an articulation of the continuum.

Gesture is in effect the means by which *expression* comes about. It is the essence of the creative process. In his book, *Science, Order and Creativity*, Bohm identifies *metaphor* as the heart of this process. Metaphor is the equating, or mapping, of two heretofore unconnected elements. The two 'unconnected' elements in this case are the unformulated consequence of an *impression* in the continuum of experiencing and its *expression* in the form of gestural articulation, in other words between being and aspects of the world. It is the same process by which language is learnt. Someone who is good with metaphor in this sense would, in the case of language, be regarded as good with words. In the case of music, we could say that they have good musical intuition. Bohm was talking in the context of scientific intuition. He regarded scientific intuition to be in crisis and spoke of a loss of intuition in science. Physicists had lost a feeling for the subject and were now being led by the mathematics. Mathematics had until then been an *expression* of intuition, a tool for the expression of truth [Bohm: 30]. Now it was being regarded as the *source* of truth. A similar case could be made for the decline of *musical* intuition. Wishart would surely agree [see chapter 2 of *On Sonic Art*]. Wishart gives as an example the use of permutations of notes in Serialism. To invert or reverse a sequence is a perfectly valid thing to do but the question should be asked in each case – is it a *musically* viable thing to do? Mathematical viability had become more important than the aural experience. Here music is being regarded as something intrinsic to the tools themselves rather than an expression of being and intuition. The intuitive factor seems to be regarded as an

embarrassment. Aleatoric music and algorithmic music have nothing to do with it and John Cage, for example, was at pains to remove the human element altogether. See also Lerdahl and Jackendoff's *A Generative Theory of Tonal Music* . Lerdahl and Jackendoff 'take the goal of a theory of music to be a *formal description of the musical intuitions of a listener who is experienced in a musical idiom*' [Lerdahl & Jackendoff: 1]. For them, a piece of music is a 'mentally constructed entity' [Lerdahl & Jackendoff: 2] and as such is accessed mentally. They admit that '[a]n artistic concern that we do not address here is the problem of musical effect – the interplay between music and emotional responses' [Lerdahl & Jackendoff: 8]. It is difficult to see the purpose of their enterprise if is this is not paramount. They were inspired by Chomsky's linguistic insights into the structure of language to attempt to develop a theory of musical grammar. The confusion between the nature of language and the nature of music is evident here. Language is a cognitive phenomenon. It conveys data, information and concepts. Music is non-cognitive. It communicates non-conceptually. Intellectuals try to conceptualise this. It is necessary to step back and consider why the absurdity of this enterprise, the intellectualisation of music, is not apparent. First though, a point that Wishart makes in his denunciation of this intellectualisation needs to be addressed. He blames what he calls 'lattice-based' or conventional analytic music notation, music notated with primary concern for pitch and duration. He sees it as a tool used in 'scribe-dominated societies' [Wishart: 15] to exercise control over what can be communicated. He blames this system of notation for a multitude of crimes, one being the sundering of the above-mentioned 'immediate dialectic of musical action and experience' Firstly, the conventional score is simply a tool and cannot be blamed for anything. Secondly, perhaps because of his declared anarchism [Wishart: 42], he is essentially politicising score-based composition. The feeling is conveyed that to compose using conventional score-based notation is to be a lackey of 'scribery'. This might not have been Wishart's intention but whether such a consequence was intended or not, it is a possibility that needs to rejected outright as an infringement on a composer's right to choose whatever tools are suitable for him and to allow oneself not to be limited by somebody else's political vision. Wishart argues that the conventional score is not a suitable vehicle for the communication of gesture but surely the history of music proves otherwise?

The problem is the hijacking of this system by 'scribes' to attempt to turn music into something that it is not. It is indicative of the corner that intellectuals have painted themselves into that Meyer, for example, in *Emotion and Meaning in Music*, like many others, seems to think that we need 'evidence of the existence of emotional responses to music'! Why should such evidence need to be sought? Any teenager could tell us the answer. There seems to be some confusion between intellectual perspective and reality as it is. The reality is that we respond emotionally to *everything* – wallpaper, a banana split, the work of John Cage, a television program, an idea… Everything makes an *impression*. The academic conceit is that we are unassailable rational beings and any evidence to the contrary is simply bad form. This is a useful attitude to affect for the purposes of scientific objectivity but it is not our moment to moment reality. Indeed, scientific objectivity itself is also driven by emotion. Bohm describes the permanent breakup of the friendship between Bohr and Einstein over their different interpretations of quantum theory. [Bohm: 85]. Another example is the heated exchange between Wittgenstein and Popper in 1946 culminating in the infamous 'poker' incident. Meyer inadvertently reveals that intellectualism is also driven by emotion:

> Whether a piece gives rise to affective experience or to intellectual experience depends upon the disposition and training of the listener. To some minds the disembodied feeling of affective experience is uncanny and unpleasant and a process of rationalization is undertaken in which the musical processes are objectified as conscious meaning. [Meyer: 40]

Meyer on the one hand seems to be saying that there is a choice between an affective and an intellectual experience but on the other is saying that the intellectual option is dependent on the affective experience.

It is obvious upon consideration that intellect itself *must* be driven by some degree of passion otherwise why bother?

The dichotomy between intellect and emotion is not only questionable but unhelpful and has contributed to a topsy-turvy notion of ourselves. Its roots in western philosophy will now be explored.

Descartes' *I think therefore I am (cogito ergo sum)* gives expression to the paramount importance of conceptualisation in western *thought*. Our existential condition is predicated on being able to think. Our affective nature is relegated to inconsequence with a stroke. Descartes was a philosopher. Descartes was simply stating his prejudice as a philosopher. Of course, philosophers are going to prioritise thinking. Thinking, after all, is what philosophers do. If Descartes had been more rigorous in his a priori enquiry then, rather than settling for an affirmation of his own prejudice he would have asked the question *What is this* I *that is doing the thinking?* Since this 'I' is prior to thinking it is not possible to give a conceptual reply which, if the question had occurred to Descartes at all, is why he would have ignored it. However, the impossibility of conceptualising it is no reason to consider it as irrelevant. This 'I' or 'I am' is clearly the ground of our being. Given that it is non-conceptual there is not much that can be said about it. Other labels could be suggested which might give an indication of what is being referred to here. It is the ground of our being. It is consciousness pure and simple. Without being, without consciousness, how can thinking be possible? So Descartes' pseudo-syllogism should be rephrased, albeit less punchily, as *I am therefore there is the possibility of thinking (sum ergo est potestas cogitandi)*.

In more recent times, the philosopher Wittgenstein also affirms the primacy of thinking:

> Our relation to reality is accomplished in the activity of thinking. The doubling of I and world is mirrored in the activity of thinking. Language is the vehicle of thinking. Accordingly language is the authentic medium in which world and I double one another and relate themselves to one another [Brand:53].

If one understands that what Wittgenstein means by the 'doubling of I and world' is nothing other than the creative process of metaphorical mapping described by Bohm then there is little to take issue with here. It is true as far as thinking goes but is our relation to reality which is 'accomplished in the activity of thinking' our *sole* manner of relating or simply one mode of relating? The world of the arts would indicate the latter. And why should language be 'the authentic medium'? It is perhaps the most common or obvious medium but is music any less authentic?

Philosophy is essentially an extension of the cognitive process. It works by dividing the 'world' into contrasting concepts and then discussing the relationship between them. 'World' is in quotes because it itself is the result of this process, usually contrasted with 'I' as Wittgenstein does in the passage quoted. What is it that is being notionally divided? Again, something prior to the conceptualising process is being referred to. It could tentatively be referred to as *the field of experiencing* (or Wishart's *continuum of experiencing* [see above]). It is what is always *right here*. We learn early on to divide it into self and other and then to divide this self and other into aspects that are desirable or undesirable. Philosophy is a formalisation and continuation of this process. Mind and body, cause and effect, good and bad, sentient and non-sentient, experiencer and object of experience, idea and object are some popular divisions. These categories are a result of the cognitive process and have no reality whatever except as agreed upon conventions. Pirsig [1974: 41,42] arrives at a similar conclusion from a consideration of laws of nature. He begins with the assertion that 'the law of gravity and gravity itself *did not exist* before Isaac Newton'. He goes on:

> The problem, the contradiction the scientists are stuck with, is that of *mind.* Mind has no matter or energy but they can't escape its predominance over everything they do. Logic exists in the mind. Numbers exist only in the mind….Laws of nature are human *inventions*… Laws of logic, of mathematics are also human inventions…The whole blessed thing is a human invention, including that idea that it *isn't* a human invention. The world has no existence whatsoever outside the human imagination.

Much of Pirsig's book is concerned with the apparent split between the intellect and the emotions, what he calls the dichotomy between the classical mode of understanding and the romantic mode of understanding [Pirsig: 72].

> *Two* realities, one of immediate artistic appearance and one of underlying scientific explanation, and they don't match and they don't fit and they don't really have much of anything to do with one another… [Pirsig: 61]

> It's an old split. Like the one between art and art history. One does it and the other talks about how it's done and the talk about how it's done never seems to match how one does it. [Pirsig: 163]

And of course the same applies to music composition and music analysis.

It seems obvious to suggest that when a particular problem has been intractable for a long time then perhaps there is something wrong with the categorisation, with how the cognitive knife has been wielded, which has resulted in the intractable notions – eg, mind and body, intellect and emotion. It is arguably no more than a western idiosyncrasy. In Indian thought the term *citta* though usually translated as 'mind' is more correctly translated as 'mind/heart'. The distorted polarisation between mind and emotion is not evident in Asiatic thought.

Bohm gives a description of the cognitive process (though he does not call it that) as applied to that subset of the field of experiencing concerned with vision.

> … perception begins through the gathering of differences as the primary data of vision, which are then used to build up similarities. The order of vision proceeds through the perception of differences and the creation of similarities of these differences.
> In thought a similar process takes place, beginning first with the formation of categories. This categorizing involves two actions: *selection* and *collection*. According to the common Latin root of these two words, *select* means "to gather apart" and *collect* means "to gather together." Hence categories are formed as certain things are *selected,* through the mental perception of their differences from some general background [Bohm: 112].

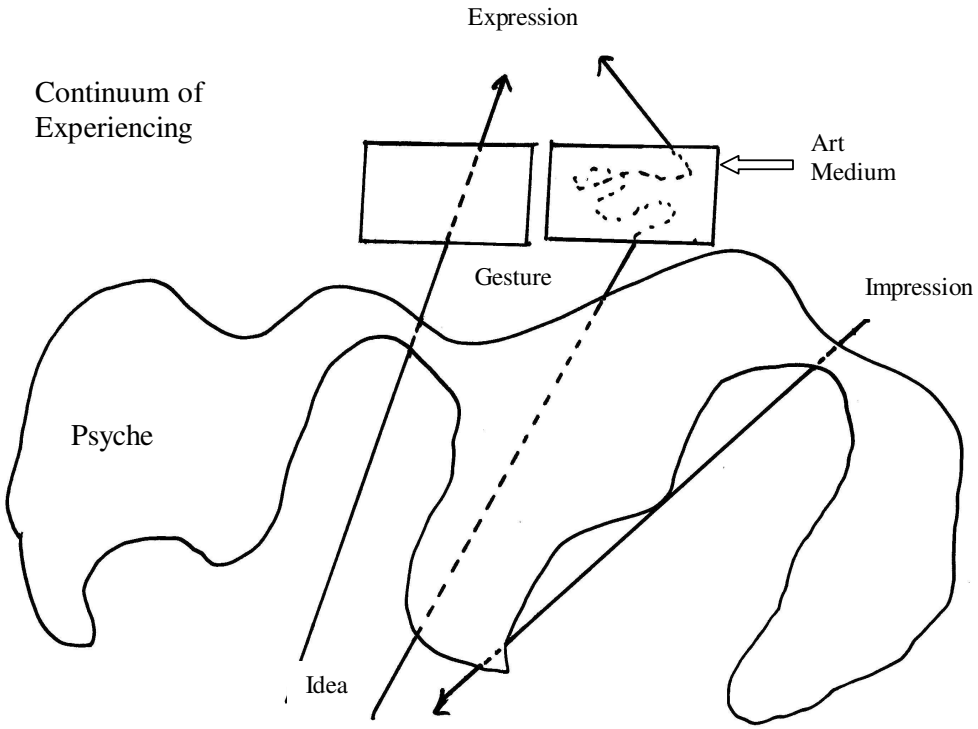
What it is that does this selecting and collecting is *intelligence*.

> The word *intelligence* is often used in a general and fairly loose way today, but something of its original force can be found in the Latin root *intelligere*, which carries the sense of "to gather in between." It recalls the colloquialism "to read between the lines." In this sense, intelligence is the mind's ability to perceive what lies "in between" and to create new categories. This notion of *intelligence* which acts as the key creative factor in the formation of new categories, can be contrasted with the *intellect*, which could be then thought of as "what has been gathered." Intellect, therefore, is relatively fixed, for it is based primarily on an already existing scheme of categories. While the intelligence is a dynamic and creative act of perception through the mind, the intellect is something more limited and static. [Bohm: 114]

This is all very well but something beyond intelligence needs to be brought into play, something which is aware of the cognitive activity of intelligence. There does not appear to be a specific word for this but it is obviously a fundamental insight or awareness. It could be construed as something which works in the *opposite direction* to intelligence, a return to that which has been notionally divided. It allows us to be free of redundant dichotomies such as the one between intellect and feeling. From this point intelligence can once again be employed as a 'dynamic and creative act of

perception through the mind'. This is the essence of creativity: freedom from restrictive dichotomies to the extent that one can not only be aware of them but use them creatively and create new ones as necessary, to create metaphor. The clichéd mind is one that is not aware of the dichotomies under which it is operating. It is a mind that understands itself in terms of these artificial dichotomies rather than intuits itself as pure being, as consciousness in operation.

It might seem after all this that the un-clichéd mind, the creative mind, the mind that intuits its own fundamental nature is a rare and rarefied thing. However, it is operating in all creative endeavours. It is simply to what degree it is allowed to shine. An expansion of the model introduced earlier is called for:



Being/Consciousness
– localised eddy of the continuum of experiencing

The black box that contained the human psyche has been opened up revealing an amorphous shape. It is a shifting shape, consisting of all our clichés, an expression of a localised eddy in the continuum of experiencing. Contrary to what the diagram indicates it is non-different from pure Being/Consciousness, just as a whirlpool is non-different from the water that it consists of. The individual is impinged upon by

many impressions some of which will generate an Idea which demands some form of expression. Two possible paths for the expression are shown in the diagram. It is possible that these two paths represent two possible avenues of expression within one artist but the intention was to show the difference between a good artist to an inferior one. The path on the left indicates a more objective, impersonal response to the impression passing through as narrow a band of clichéd mind as possible. The Idea travels through the psyche relatively undistorted resulting in fluent gesture within the artist's medium – the arrangement of tones or other sonic material for example into expressive symbols through the application of the artist's craft. (It should be pointed out that fluency of expression does not necessarily mean *ease* of expression. Fluency might entail a considerable struggle, the nature of which is indicated by Beethoven at the end of this essay.) The path to the right results in inferior artistic creation. The Idea travels through a huge swathe of clichéd mind. In all likelihood the Idea will be transformed into an *idea*, a concept. Rather than taking full responsibility for expressive gesture with the tools available the mediocre artist will be inclined to criticise the tools for not being capable of expressing his great idea and so will use them in ways not intended or introduce new ones under the pretext of originality. The result might be an 'experimental' work. Why should this be called 'art'? It is experiment. There is nothing wrong with experiment. Experiment involves its own kind of creativity. Swinging a microphone between speakers is an interesting experiment but it is not art or if we wish to designate it as art then we can say it is very poor art. This is because the initial impression – presumably an initial curiosity, a notion, an idea – has little affective content and the resultant expression involves no significant craft. Conceptual art could be ranked a little higher than experimental art though strictly speaking it should not really be considered art either. It cannot rise beyond the idea which it conveys. It is rooted by and large in the clichéd mind. Duchamp's 1917 *Fountain* – a porcelain urinal, is a case in point. The idea might be interesting or have some political or social message. Then it should be called a political or social statement or conversation piece. It is really quite wrong for Duchamp to be considered as an artist in this respect. Did he give any credit to the original craftsman? There is no doubt a degree of craft and art in the original production but for Duchamp to put his own name on somebody else's work and claim this as his art is extremely cheap. To wish to challenge cliché is to be motivated by

cliché and the result is usually instant cliché as evinced by so much modern art music. Here is another example of conceptual 'art':

It is *The Writer* by Giancarlo Neri. It was installed on Parliament hill on Hampstead Heath in north London in the summer of 2005. This is a fun and interesting installation. It could be surmised that the concept behind it is to do with 'bigness' as applied to a couple of everyday items. Perhaps we could even describe it as making a statement or even as *provocative* (the sole criteria by which some people care to judge a work by). Perhaps it is making a social, psychological or political statement. This is all very well but then let us describe it as such – a statement or conversation piece. There is undoubtedly some creativity in the original conception but as with Duchamp's urinal the real art is hidden. In the case of Neri's table and chair the real art will be in whatever problem the construction presented to the engineers and its solution. The essence of art is identical to the essence of problem-solving. As Pirsig says in *Zen and the Art of Motorcycle Maintenance*: 'The Buddha, the Godhead, resides quite as comfortably in the circuits of a digital computer…as he does at the

top of a mountain or in the petals of a flower [Pirsig: 26]'. And, '…about the Buddha that exists *within* analytic thought, and *gives that analytic thought its direction*, virtually nothing has been said.'[Pirsig: 83] Well, Pirsig said something about it and something will be said about it here. The essence of art and analytic thought (problem-solving) is referred to by the term *Quality*. Pirsig insists that Quality cannot be defined. Even so, he goes on to say that: 'Quality is the response of an organism to its environment' [Pirsig: 251]. The organism seeks high quality environments. Given the complexity of the organism it will

> seek images and symbols from its previous experience, to define the unpleasant nature of its new environment and thus 'understand' it. We call these analogues reality. But that which causes us to invent the analogues is Quality. Quality is the continuing stimulus which our environment puts upon us to create the world in which we live. All of it. Every last bit of it.

Pirsig's *analogues* are clearly the same as Bohm's *metaphors* and Wittgenstein's *doubling up*. It will be posited here that Pirsig's Quality is identical to what is being referred to as Consciousness in this essay. He describes art as 'high-quality endeavour' [Pirsig: 258]. Or, in more conventional terms: 'Art is the Godhead as revealed in the works of man'. Good art is what reminds us of Quality. Good art is the product of a mind that allows Quality to work through it. (It is difficult to see Neri's table and chair or Duchamp's urinal in this context.) And Quality 'is the source and substance of everything' [Pirsig: 252]. It is Consciousness (or Mind) and it is existentially prior to sensory experience, cognitive conceptualisations, and the psyche and yet it also the stuff of them. Pirsig suggests that Quality is the same as the *Tao* of Lao Tzu's *Tao Te Ching*. He is a little hesitant about doing so because of the dubious procedure of equating two unknowns but in this case, a careful reading of the *Tao Te Ching* shows that it fits and is entirely appropriate. The main thrust of this essay is that good art is dependent on the role of Quality or Consciousness in its production. This understanding is not conceptual but intuitive and in practice is concerned with not being afflicted by that 'strange separation of what man is from what man does'. [Pirsig: 35] A comment by Pirsig on the same page that there is 'No manual about actually *caring* about what you're doing' – gives a clue to what this entails. Schoenberg's *Fundamentals of Musical Composition* is a case in point. It might as well be a manual on motorcycle maintenance. It is no doubt an excellent manual but

the whole presentation conveys the impression that affectively one is in for an experience akin to dressing a corpse. Not only should one *care* about what one is doing, as Langer remarks, some of the great composers have felt a *moral obligation* to their work:

> … the most striking thing about it is the *objective* character already mentioned. Once a matrix of musical thought, a "commanding form," has been grasped by one's artistic imagination, it assumes a peculiarly impersonal status, *like an impression from outside* [italics not in the original], something "given". Great musicians have spoken of the musical "Idea" with an unmistakable feeling of moral obligation toward it, a sense of responsibility for its development and perfection. [Langer: 131]

This is true of any creative endeavour but it is rarely if ever acknowledged. Art has become confused with sentimental notions to do with expressing feelings or making statements or juvenile sensationalism. Not being able to acknowledge it is because we have forgotten who we are, unable to acknowledge existentially our roots in pure Being, Consciousness or Awareness. Again, this skewed vagary on the role of Consciousness – there are many who would argue that there is no such thing! Or that it is an epiphenomenon of the brain – is another peculiarity of Western thought. In the Buddhist teaching of Conditioned Co-Production (*pratitya samutpada*) we have a more empirically obvious presentation of our situation. In this teaching the body and the psyche (*nama-rupa*) are dependent on the individualised consciousness (the 'localised eddy in the continuum of experiencing' in the above diagram). The five senses and the mind (as the organ of thought) (*sadayatana*) are in turn dependent on the body and the psyche. Essentially then, our whole experience of reality is dependent on what is indicated by the word *I*. We have forgotten the simple sense of Being that we had as children and replaced it with a necessary but misplaced sense of conventional reality. Here is a description of somebody who did not seem to forget:

> One has to see that one's personality is not what one is. It's an organ through which I experience life. So, how can one come to see that? Years of observation, years of discipline ... Not long after I was born - I think I was between about three and six months old - I had a clear moment of, I suppose you'd say, waking up in my body. Here was a little Fripp baby in a pram, and I saw quite clearly that this was the animal that I inhabited ... Then, in March 1976, when I was in retreat in England, as I was wheeling a wheelbarrow of compost in the garden, in a flash I saw quite clearly that Robert Fripp did not exist ... Robert Fripp consists of a collection of impressions and experiences over a period of years that seem to have some coherence, but the level of

> coherence is very, very fragile."

This is a quotation from the guitarist Robert Fripp in Eric Tamm's book about him, *Robert Fripp – From Crimson King to Crafty Master*. Unfortunately, Fripp's enlightened relationship with Being does not extend to the nature of expression and he exhibits the usual clichéd understanding of expression at least in the following passage:

> Although he can respect the discipline of orchestra life and musicianship, Fripp himself "would find it very frustrating" to be an orchestral player: "How awful that the only person who is expressing himself is the composer, with the conductor as the chief of police and the musicians as sequencers ... It's *stuck*. There is a cap on how far it can go. There is a cap on what it can *do*." [Tamm: Chapter 3]

This is rather like complaining that a hammer is 'limited' because you cannot plane a piece of wood with it. There is nothing limited about what an orchestra can do but there is certainly something limited in the *type* of things it can do. But this is true of all things. It is helpful to be aware of what an entity can and cannot do but it is unhelpful to condemn it for what it is intrinsically unable to do. Fripp's criticism of the orchestra, along with Wishart's attack on 'lattice-based' notation seem wilfully obtuse. Both of their arguments are nicely countered by a passage from Meyer:

> The musical relationships embodied in a score or handed down in an oral tradition do not fix with rigid and inflexible precision what the performer's actualization of the score or aural tradition is to be. They are indications, more or less specific, of what the composer intended and what tradition has established. The performer is *not a musical automaton or a kind of musico-mechanical medium* [italics not in the original] through which a score or tradition is realized in sound. The performer is a creator who brings to life, through his own sensitivity of feeling and imagination, the relationships presented in the musical score or handed down in the aural tradition which he has learned.[Meyer: 199]

This brings us to a crucial difference between a traditional work and an electroacoustic work. The former usually results in a score and the latter in a CD. The former depends exclusively on a real-time performance for its musical realisation. This is because a traditional composer does not produce music but an *abstraction* in the form of a score. This abstraction is the template for a theoretically infinite number of musical works. Consider the number of different versions of a Beethoven symphony that there are. How many different versions of Wishart's *Red Bird* are

there likely to be? Where does rigidity and inflexibility lie? A score is far more plastic than a CD…

The essential fact here is that, in spite of the considerations normally given to composers, without performers there would be no music whatsoever. It is in the performance that Quality or its absence is immediately apparent. No matter the genre we can recognise Quality. It is when the performer's being is devoted to the performance. It is when they are in sympathetic resonance with the music that they are performing and their instrument of expression. Perhaps we can say that it is when they are *enthousiasmos* – filled with *theos*, Quality [Pirsig: 303].

The Idea is the work to be played. This, along with the audience and the performance venue, contribute to the *impression*. This is fed through the performer's psyche, hopefully as freely as possible, and out again through gestural articulation of the instrument. The resultant expression results in the transmission of an impression to the audience. An excellent performance is when the audience intuitively appreciates that that impression has been reflected from the stillness of pure Being. Being resonates with itself at this point. As David Keane says, in *At the Threshold of an Aesthetic,* after considering the limitations of thinking of music as a language:

> A musical expression cannot be paraphrased, condensed or elaborated with regard to meaning. A musical idea is only what it seems to be. *Being* is its essence. Music does not stand for something else, but is concerned with the way experience itself progresses. [Emmerson: 105]

Now we can have a clear understanding of what it is to be 'original'. Original relates to the origin or source. To be original is not about responding to pressures to be 'original' or innovative. It is about being true to the source, to the consciousness at the heart of one's being. 'Good music is music that *knows* where it is coming from.' [1] It results in what Roger Fry, in *Vision and Design*, (quoted in [Langer: 37]) describes as a "disinterested intensity of contemplation". It is disinterested in the sense that it does not relate to the personal. It is contemplation in a meditative, non-discursive, non-intellectual sense and it is arguably not as rare or rarefied as both Fry and Langer make out.

Simon Emmerson in *The Language of Electroacoustic Music* states that electroacoustic music is 'the only truly original development of Western music in the 20th century'. [Emmerson: 1] It is an astonishing claim to make but he does not offer any evidence to support this. To what extent can it be said to be original? It is certainly *novel*. It is certainly different but is it even *possible* for electroacoustic music to be truly original? In common with most modern art music, on an affective level at least, it has the effect of instant cliché. The listener knows within a few seconds of listening, the affective experience he is in for. It does not vary much and it usually is not particularly pleasant. To what extent can electroacoustic music even be said to be a *development* of western music? If Wishart's attack on score-based music is indicative then it seems to be more of a rejection rather than a development. Such an attitude was also apparent in Russolo's *Art of Noises* written in the early twentieth century wherein he rejects orchestral timbre in favour of his noise boxes. For him, the timbres of the orchestra were tired out and clichéd. Now, there is nothing wrong with wanting to develop new timbres and the orchestra itself has accommodated new timbres throughout the course of its history but there are alternative responses to perceived cliché and one need not automatically respond with outright rejection. For example, consider what jazz musicians do. They take a 'standard' and, ideally, use it as a vehicle for musical expression. Brindle gives a good example from the classical tradition:

> … the small cell  was so amply used in the classical period that one would think a composer of originality would have looked for something different. But Beethoven constructed page after page using nothing but this rhythmic motif. [Brindle: 10]

The most famous example perhaps is the *Allegretto* of the Seventh Symphony. Why did Beethoven, who was regarded by his contemporaries as an iconoclast, not reject this cell as an overused cliché and try something in 5/8, for example, instead? Perhaps this was the challenge, the challenge that jazz musicians accept, of turning a perceived cliché into something exceptional. Is it a challenge that will ever become irrelevant or outmoded? Not so long as there is musical intuition to exercise. This, for Beethoven, was an exercise for his musical intuition. Beethoven's main drive was not innovation but expression through music. If innovation was required then it was in the service of the Idea, of the musical genius. As Boulez said in 1977, in his essay,

Technology and the Composer, 'Invention must remain the private exclusive property of genius , or at least of talent'. [Emmerson: 6] But now, however, we are in the era of innovators. Innovation has its own form of genius. It is the genius of problem-solving and of course this is an excellent thing but is it dancing on the coffin of musical intuition? For example, consider the modern emphasis on the development of timbre. Like Russolo, Wishart [2002: 30,6,58] argues against what he sees as the traditional secondary nature of timbre. Wishart argues that pitch is actually an aspect of timbre but, even so, timbre does not lend itself to abstraction the way that pitch and duration do. There is no reason why it should given that timbre is what *concretises* the abstract score. Traditionally there was composition then there was orchestration – the application of timbre. The score is the blueprint and the timbre is the building material. It might be interesting to play around with the building material and to try developing extra options but to what end? What is the motivation? Is it simply doing it for its own sake or is it because there is a musical need? Of course, there is nothing wrong with doing it for its own sake but let us be clear about it. And why, if pitch and timbre are as intimately related as Wishart points out, is the use of pitch-based material so taboo in electroacoustic constructions? According to Langer, 'The tonal structures we call "music" bear a close logical similarity to the forms of human feeling…Music is the tonal analogue of emotive life'[Langer: 27]. (Why this should be so would make an interesting digression but for the time being it will just have to be acknowledged as a commonly held sentiment which might have some truth in it.) If timbre-based constructions are to abandon the infinite potential offered by the relationships of pitch and duration then what is to replace it? Whatever it is, it certainly is not music. Wishart seems happy enough to go along with this, hence the title of his book: *On Sonic Art*. It seems that the electroacoustic 'establishment' are also prepared to accept that what they do is not music. (See Keane in Emmerson [1986: 97]) But can we even call it art? Perhaps a more accurate term would be *sonic* or *electroacoustic problem-solving* or *electroacoustic construction.* In April 2005, composer and performer, Matthew Burtner (http://www.burtner.net), performed at Hull University on his 'metasaxaphone'. Each piece entailed a novel re-jigging of the metasaxaphone. I queried him about this afterwards and it seems he composes one piece of music for each configuration of the metasaxaphone and then moves on to develop a new configuration. This is really the thrust of electroacoustic problem-solving. Novelty and innovation are the order of the day. The focus is on the *means*

of expression rather than what is being expressed. We live in the Age of Tools. There are so many tools of expression and we spend so much time learning them and developing new ones that we have forgotten why, how and what it is to express. We have settled for the easier option of innovation. Nowadays, gestural articulation of the continuum of experiencing can only be the crudest affair given that the rate of innovation is so great that by the time any of us have become fluent in the use of a particular tool or set of tools of gestural expression then we have automatically become 'old hat' and have thereby disqualified ourselves in terms of perceived artistic viability. Constant innovation effectively promotes ongoing obsolescence.

What then, is the difference between musical composition and problem-solving? In practice, pure composition is fundamentally a form of problem-solving. The terms of the problem contribute to the impression. The impression is the immediate precursor to *inspiration*, the enthusiasm for acting on the impression. The difference is in the nature of the commanding form, of the Idea. The commanding form for music will be suggested at the end of the essay. One could also perhaps say that there is a difference in the nature of the resulting expression. Perhaps the results of problem-solving take the form of a concrete product like a urinal or a set of concepts, for example related to audio-morphing. But consider the game of chess. The game of chess involves problem-solving creativity but what is the nature of the resulting expression? Like music, the resulting expression is neither a physical object nor a set of concepts. Duchamp gave up art and devoted his life to the game. Perhaps he was onto something. Chess is usually regarded as an intellectual game [for example see Brindle: 3]and yet chess grandmasters are not usually noted for their intellects. In fact, they are usually noted for their emotions and eccentricities. As the 2003 film *Game Over – Kasparov and the Machine,* which documented Kasparov's psychological trouncing at the hands of the IBM corporation in 1997 showed, chess is an emotionally charged psychological affair. It is difficult to see in what way chess is intellectual. Certainly the results of chess appear to be a direct result of mental operations but are they *conceptual* or *discursive* operations? If not, then these mental operations can hardly be described as intellectual.

Because grandmasters can now be defeated by computer programs, some people conclude (like those that perceive the orchestra as limited) that chess in its present

form is no longer of interest and that perhaps the game needs to be altered or changed. But this is to miss the point about the nature of chess. Chess is not the cryptically annotated diagram one sees at the back of some newspapers anymore than music is a lattice-based diagram. Chess is essentially a *non-discursive communication* between two human beings which can be enjoyed by an audience. It is a dance of pattern. Each player presents a problem, an impression, an inspiration to which the other replies with an expression in kind. A grandmaster is one whose 'chess intuition' (analogous with musical intuition) displays exceptional fluency of gestural articulation. Chess has its own genius, its own commanding form, its own relationship with Being. Chess and music allow us to partake of such relationships. Other forms of problem-solving, for example, computer programming, mathematics, electroacoustic construction tend to be highly specialist and as such can only be appreciated by the initiated elite and by those for whom this esoteric specialism conveys a mystique which they can enter into.

It probably is not a good idea to say too much about the nature of the commanding form of chess or music. It is something to be entered into and to be realised for oneself. However, Langer [1953: 31] gives a quotation attributed to Beethoven which is highly revealing on the commanding form of music: 'It takes spiritual [*geistigen*] rhythm to grasp music in its essence…' This is a rich insight worthy of much contemplation. Is it this 'rhythm' that is at the heart of musical structure and form? Could it be that pitch and timbre are actually 'secondary' to rhythm? Given that music unfolds in time and rhythm is a direct expression of time then it makes perfect sense that this *geistigen* should colour our musical intuition allowing us to 'grasp music in its essence'.

This essay will close with the rest of the quote attributed to Beethoven:

> All genuine [musical] invention is moral progress. To submit to its inscrutable laws, and by virtue of these laws, to overcome and control one's own mind, so it shall set forth the revelation: that is the isolating principle of art…
> Thus every true creation of art is independent, mightier than the artist himself…
> Music gives the mind a relation to the [total] harmony, which is Unity.

Is Beethoven simply expressing a romantic sentiment or is he expressing the clear reality of the situation? The whole thrust of this essay is towards the latter possibility.

[10,356 words]

[1]*Ride of the Psychenaut* Unpublished work by the author,2005

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