

Time and Nonsense

“Philosophy must be ontology, it cannot be anything else; but there is no ontology of essence, there is only an ontology of sense.” (Review of *Logic and Existence*, DL, pg 15)

That philosophy must be an ontology of sense is a bold claim on Deleuze's part, and although he takes it from a Hegelian philosophy, the direction in which he develops it across the rest of his work is resolutely, if not infamously, opposed to Hegel. Whereas Hegel will construct a *logic of sense* which is fundamentally a logic of the concept, Deleuze will deny that sense is reducible to signification and its universal or general concepts. Deleuze will later provide his own logic of the concept, but for him, although the concept will posit itself, this will not be as the immanent thought of the sense or the *content* of the matter itself, but will rather function to extract or capture a *pure event*, or the sense at the surface of things. Similarly, although Deleuze will agree that “sense is becoming”¹, this will not be a becoming in an atemporal logical time, opposed to a historical time that would play it out, but a pure becoming without present, always divided between past and future, without arrow or *telos*, and actualised in the present while never strictly 'happening'. The most distinctive difference, however, will be Deleuze's invocation of a nonsense that cannot be simply incorporated within sense, that will not be sublated and subsumed in the folds of the dialectic, a nonsense that is itself productive of sense. Moving beyond Hegel, Deleuze will deny the reducibility of sense not only to the universal meanings of signification, but also to the functions of reference or denotation. Moreover, he will deny its reducibility to the dimension of manifestation, or the meanings of the subject of enunciation – the 'I' who speaks. Sense can neither be found in universal concepts, nor reference to the individual, nor in the intentions of the subject, but is rather that which grounds all three. The questions remain however: what exactly is sense? What is nonsense? And how do they relate to time?

Sense is intelligibility, but it is the intelligible as that which is *expressed*. As such, we must strictly oppose it to classical conceptions of the intelligible: “Saying that this world is sufficient not only means that it is sufficient *for us*, but that it is sufficient *unto itself*, and that the world refers to being not as essence beyond appearances, and not as a second world which would be the world of the Intelligible, but as the sense of this world.”² Sense can be neither essence as that which lies beyond the world, as in Plato's Ideas, or as an identical and thinkable form imposed on an unthinkable and genetic matter, as for Aristotle. In these cases, and in much philosophy since, the intelligible aspect of the world has been understood in relation to a particular conception or 'dogmatic image' of thought. In accordance with this image, thought has been taken for granted as

1 DL, pg 18

2 Ibid., pg 16

the province of the subject, possessed of a *good sense*, capable of unifying the activity of its various faculties in the apprehension of a single object, the identity of the object between these faculties (that it is the same object that is sensed, remembered, imagined and ultimately thought) being *common sense*³. The subject as such has been taken as pre-constituted, over against a similarly already-made world whose particular features it can *recognise*, its ability to recognise them guaranteed in virtue of its status as subject. Although there is the possibility of error, this is an extrinsic possibility, one which can be deployed in tame hypothetical 'doubts', but which can never challenge the fundamental possibility of grasping the intelligible. It is this image of thought which has bred the major examples of modern epistemology, concerned as it is with my knowledge that there is a cup on the table in front of me, or that the bird in my yard is a chaffinch. Not only is knowledge understood on the basis of these trivial limit cases of recognition, but learning is subordinated to knowledge as a static end state. Knowledge is equated with propositions as answers, the truth of these answers being determined by their *correspondence* to the intelligible features of the world, and the questions which illicit these answers understood purely in terms of their ability to illicit these ready-made propositions. Learning is thus understood on the basis of a bad analogy with classroom learning, where the only questions which are asked are those to which there is a pre-prepared propositional answer⁴. Problems become the ineffectual doubles of propositional solutions, their own truth understood simply in terms of their solvability, or their relation to a pre-existent propositional solution. The form of the intelligible is thus imaged from that of propositions, its ultimate elements being the general or universal concepts out of which they can be constructed, and the arrangements of their particular instantiations within the world – the *states of affairs* to which the propositions correspond. This is the model of thought as representation.

The role of the subject is here somewhat fixed. True, the subject must *transcend* what it is given in experience, but it transcends it toward a pre-ordained point – the view from nowhere or the standpoint of objectivity, surveying a single unified plane of intelligibility. The problem with this view is that it begs the question of the place of the subject within the world itself, if the world as a whole is, at least potentially, open to its view. This is the problem of *transcendence*. To rephrase the problem: how is it that something which is in the world, subject to conditions of the world and bound up within causal interactions with other beings, can, through these interactions, attain to something unconditioned? Kant's response to this problem involved the invention, or discovery of the domain of the transcendental. He denies the subject access to real essence, to the thing-in-itself, but at the same time he guarantees the possibility of knowledge by having the subject condition the given through the application of the forms of thought (the categories) to the pure forms of intuition (space and time) through which all intuition is given, thus producing an *a priori* accord between

3 *D&R*, pg 169

4 *Ibid.*, pg 197

thought and sensation; moreover he attempts to deduce this accord from the subject as the very unity of this activity of conditioning (the transcendental unity of apperception)⁵. However, not only does this conditioning of possibility fail to be sufficient, covering as it does only the limits of possible experience, and not extending to the genesis of experience, but it deduces the whole transcendental apparatus from a pre-existing conception of thought, as recognition in the act of judgment. Kant simply reinforces the dogmatic image of thought, while still not providing a suitable remedy for the apparent transcendence of the subject.

Hegel provides an alternative approach. He identifies the position of 'natural consciousness' as that of a subject that relates itself to the object or in-itself in knowing it, while at the same time distinguishing its knowing (which is not other than itself) from the object as it is in-itself⁶. In essence, the subject takes itself to know the object, but that this object is separate from its knowing, as such opening the up the possibility of error. From this simple logical form Hegel manages to derive the fact that such consciousness, in distinguishing itself from the in-itself, must have a conception of this in-itself which provides the very criterion of truth of its knowledge, which is to say provides the form of possible knowledge of the object. However, natural consciousness suppresses any mediation of the in-itself, and as such is not conscious of the fact that the in-itself is not truly in-itself, but is already for-consciousness; this is the essence of natural consciousness for Hegel. Hegel then proceeds to turn this concept of natural consciousness upon itself, by immanently thinking what is necessitated in its content. The result is the dialectical progression of forms of consciousness found in the *Phenomenology of Spirit*, wherein each form of natural consciousness, starting with the most simple, proceeds through all of the possible knowledges of the in-itself enabled by its criterion of truth, each one ultimately contradicting this criterion, until it has exhausted the possible forms of knowledge, in doing so contradicting the criterion itself, and producing a new conception of the in-itself, the mediating nature of which it again suppresses, thus becoming a new form of consciousness. Hegel thus incorporates error in a way that enables the basic concept of natural consciousness to negate itself, transforming itself into the position of Absolute Knowing, or the concept of Science – the non-separation of subject and object. This standpoint is that of the beginning of the *Science of Logic* – the identity of thought and Being. This attempts to escape transcendence by making the structure of thought and the structure of Being identical, which is to say that thought and Being are identical in that Being and the concept of Being are identical, making the movement of the concept, *sense* itself, the movement of Being.

However, the movement of the concept which leads to Absolute Knowledge is a false movement⁷. It is an atemporal logical movement between fully constituted knowledges, and as

5 FIND SIMPLE REFERENCE

6 *Phenomenology of Spirit*, pg 52, §82

7 *D&R*, pg 63

much as Hegel believes that it is *echoed* in the process of education of the child⁸, it does not itself approach any notion of real learning, but always subordinates it to the dialectic itself. Furthermore, as much as Hegel attempts to undermine what he conceives of as the ordinary conception of thought, as much as his *Logic* is an attempt to uncover the true structures of thought, and the method of dialectic, without presupposing any method to begin with, the very genesis of the dialectic still depends on the assumption of a certain minimal conception of thought, a certain minimal claim to what 'everybody knows'. This is the initial assumption, prevalent at both the beginning of the *Phenomenology* and the *Logic*, that there *is* an immanent thought, and by this we mean a thought that moves itself, that provides its own content, and that has a necessity that 'no one can deny'. This is the unconditioned thought to which anyone can potentially gain access, but such access is dependent upon the assumption of the possibility of such access, much like the clear and distinct perception of Descartes. Hegel attempts to escape the dogmatic image, and yet succeeds only in cementing it, albeit it in a new near inescapable form.

Deleuze's own attempt to solve this problem is grounded in Sartre's criticism of Husserl in *The Transcendence of the Ego*: "Sartre's presupposition of an impersonal transcendental field restores the rights of immanence. When immanence is no longer immanent to something other than itself it is possible to speak of a plane of immanence."⁹ This was the attempt to purge the transcendental field – what was originally the Kantian field of possible experience – of any transcendence, by situating the subject within the field itself, rather than having it as a condition of the field as it was for both Kant and Husserl. Of course, Sartre did not take this far enough. For him the transcendental field still remained the field of *consciousness*, even if the 'I' was located within it. Deleuze attempts to take this a step further by purging the transcendental field of consciousness, and locating consciousness as something that appears within the field. In this he follows a Bergsonian maxim, opposed to that of Husserl: "consciousness is always consciousness of an object", it is rather "consciousness is always an object". This transcendental field purged of all remaining transcendence is the above mentioned *plane of immanence*, within which all things and all subjectivity is individuated. Thought is as such something which takes place upon the plane, being part of the play of matter, rather than an outside observer. As yet this does not mean much, but in order to make sense of Deleuze's solution to the problem of transcendence we must first understand how he overturns the other aspects of the dogmatic image of thought. Most importantly, we must understand how it is that Deleuze refigures the nature of the problem-solution relation, and the related process of learning. In order to do this it is helpful to contrast this to Sartre's later work in *Being and Nothingness*, which Deleuze is also sensitive to, albeit it less prominently¹⁰.

8 *Phenomenology of Spirit*, pg 16, §28

9 *WIP*, pg 33

10 *D&R*, pg 77

At the beginning of *Being and Nothingness*, Sartre enters into a detailed analysis of the existential mode of questioning. This analysis is undertaken because of Sartre's concern with the relation of the for-itself to the in-itself, or what he calls the *metaphysical question*¹¹. In asking the question "is there any conduct which can reveal to me the man-world relation?" we must first understand what relation we stand in to being in asking this question, we must put in question our very mode of questioning. It is revealed that questioning is a relation between a questioning being (man) and a questioned being, and that there is an aspect of the questioned being *about which* it is questioned. It is also revealed that "that *about which* I question the being participates in the transcendence of being"¹², that there is an appeal for an objective response. The question is asked with the expectation of an answer, and as such on the basis of a 'interrogative familiarity with being'¹³, the nature of this familiarity being further delimited later. Sartre determines this expectation as requiring a positive or negative answer; he maintains that this is precisely not a privileging of the yes/no question, as for all questions there is the possibility of a negative answer: 'nothing' to 'what?', 'no one' to 'who?', 'never' to 'when?', etc. Thus there is included in every questioning orientation an expectation of a possible non-being which delimits the range of possible answers. This is the first non-being presupposed by the question, and in presenting the dichotomy of affirmation and negation it distinguishes the being of the question from the being of either. The second non-being is a non-being in the questioner which must be presupposed by any authentic questioning, that is, a lack of knowledge of the actual answer to the question. The third and final non-being which conditions the question is that of the necessary limitation of the answer, given the appeal to Truth, or the 'transcendence of being', in the expectation of the answer. This means the expectation of an answer which precludes other possibilities, a 'this way, and no other'. As such, in asking the metaphysical question, we presuppose a triple non-being which conditions the question in our expectation of an answer. This non-being limits the reply of being itself, and as such Sartre can derive a principle of limitation: "What *will be* must of necessity arise on the basis of what it *is not*. Whatever being is, it will allow of this formulation: "Being is *that* and outside of that, nothing."¹⁴

In locating non-being (or nothingness) as this negative limitation of the reply of being, Sartre now moves to show its reality. He does this through an enquiry into the act of negation, formulating the question: "Is negation as the structure of the judicative proposition at the origin of nothingness? Or on the contrary is nothingness as the structure of the real, the origin and foundation of negation?"¹⁵ In framing this as the crucial question of the reality of negation Sartre has set up two mutually exclusive alternatives: either that non-being should be dependent upon a judicative mode

11 *Being and Nothingness*, pg 29

12 Ibid., pg 28-29

13 Ibid., pg 29

14 Ibid., pg 29-30

15 Ibid., pg 31

of the subject and hence *illusory*, or that the judicative mode of negation should be founded upon it, necessitating its reality. Sartre reduces the former position to the claim that “all is plenitude of being and positivity”¹⁶, thus explicitly opposing himself to Bergson, who he takes to have held the negative to be a purely psychological operation of the faculty of judgment, and being to be full and positive. Although there are many arguments which Sartre deploys to back up his own position, there are two which are of particular interest to us.

Firstly, Sartre claims that “it is not true that negation is only a quality of judgment”¹⁷, because although the formulation of a question itself has the form of a judgment, the actual mode of questioning is itself pre-judicative. This is demonstrated by our ability to interrogate being, to take a questioning stance without formulating an explicit question; as Sartre puts it: “In posing a question I stand facing being in a certain way and this relation to being is a relation of being; the judgment is only an optional expression of it.”¹⁸ Sartre puts forward that the desire to identify the response to the question with a judgment, and as such the possibility of a negative response with a subjective act of negation, comes from the fact that most of our questions are in fact put to other people rather than to being itself; yet it must be acknowledged that such questions can only be a species of the mode of questioning. To combine Sartre's examples in demonstrating this: if my car breaks down I may ask a mechanic what is wrong with it, but in turn he must ask the car. He must expect a disclosure of being, and as such, if he interrogates the parts of the engine to find faults in them, for each part he must expect the possibility of a negative response, the disclosure of the non-being of a fault which transcends his subjectivity. Presaging Deleuze, Sartre has here distinguished questioning from the propositional form of judgment, and has attempted to find, by way of non-being, a reality for the problem beyond the psychological. The question is whether this analysis in terms of non-being as negativity can sustain the question as separate from the proposition, or provide a truly adequate account of problematics.

Secondly, Sartre maintains that if we lived being as a kind of purely positive causal continuity, then we could not take an authentic questioning stance towards being. This is because the question becomes unintelligible given the determinism implied by a purely positive causal continuity, the questioner cannot be open to a range of possibilities as real possibilities, and as such both the question and reply recede into being as terms in a causal series, the question losing its authentic character. Sartre thus claims that “in posing a question a certain negative element is introduced into the world.”¹⁹ This nothingness is the nihilating withdrawal of man from the world, a detachment from Being which enables the questioning. This is a double nihilation whereby “he

16 Ibid., pg 35

17 Ibid., pg 31

18 Ibid.

19 Ibid., pg 47

nihilates the thing questioned in relation to himself by placing it in a *neutral state*, between being and non-being” opening up a field of possibilities, “and he nihilates himself in relation to the thing questioned by wrenching himself from being in order to be able to bring out of himself the possibility of a non-being”²⁰ which delimits the field of possibilities as possibilities of lived experience. So, for Sartre, there must be holes within being, lakes of nothingness opened up within its full positivity, in order that the subject can receive its necessary transcendence in relation to the immanent causality of the world. These nothingnesses are always limits, for limitation is the fundamental character of the negative for Sartre.

Sartre's analysis of questioning as a kind of expectation which is conditioned by the non-being presupposed by this expectation makes the question a static attitude, an attitude which, although pre-judicative, is always adequate to a propositional answer. All enquiry proceeds in strictly delimited question-answer complexes, which although instigated by the subject's projects (such as meeting Pierre in the café), always dissolve back into those projects, disconnected from one another. This means that there are no provisional answers, no enquiries which evolve as they are carried out, with expectations shifting and developing over time. It is in relation to the third non-being that the inadequacy of this account becomes most apparent, in that we can provide a whole class of questions which break with Sartre's characterisation, namely questions of the form: “How can I do *this*?”. These questions are by no means limited to a single answer whose truth excludes other possibilities, and it is most certain that being does not respond by providing a complete conjunction of all possible solutions. The important aspect of these questions is that they are exactly the kind of questions to which provisional answers are found in the course of the continual development of knowledge or technique, and in which the problem which the question poses can itself change and develop in response to its solutions. We can see here that Sartre has privileged the form of stunted classroom learning, in which answers easily line up with their questions, over a more fundamental developmental form of learning, which we have simply described through the paradigm case of the “How do I...?” question, precisely the kind of learning which proceeds through provisional answers which further open up the problematic field in which the learning takes place. This kind of questioning cannot be accommodated by Sartre, because in principle there is the possibility of multiple answers, invalidating any negative limitation of the answer. This is to say that the solution to the question that is revealed by being is revealed in a way which does not exclude alternatives. The misconception is also apparent in his account of the non-being of the questioner, where what is unknown (or *undetermined*) is determined in such a way as to prevent the revelation of an unknown unknown within the context of the questioning. For Deleuze “the undetermined is not a simple imperfection in our knowledge or a lack in the object: it is a perfectly

20 Ibid.

positive objective structure which acts as a focus or horizon within perception.”²¹ Essentially, the unknown is not a negative limitation of what we can learn from any answer to a given question, but a positive structure which functions to focus or organise learning, while itself being open to change and development over the course of it.

Taking his opposition of judicative and pre-judicative negativity and his arguments against fully positive Being together, we can see that Sartre has set up a pair of mutually exclusive options in his argument against the negative as illusory, but also that he has neglected a third possibility. Although he does not directly reference Sartre when posing this opposition, it would seem that Deleuze has him in mind, as he captures this distribution perfectly:-

“The alternative is thus the following: either there is no non-being and negation is illusory and ungrounded, or there is non-being, which puts the negative in being and grounds negation. Perhaps, however, we have reasons to say *both* that there is non-being *and* that the negative is illusory.”²²

Essentially, Sartre's argument against Being as full positivity can be bypassed by creating an alternative characterisation of non-being. Deleuze follows Heidegger over Sartre, claiming that “Being is also non-being, but non-being *is not the being of the negative*; rather, it is the being of the problematic, the being of problem and question.”²³ As such, Deleuze re-inscribes non-being as (non)-being, or ?-being, to distinguish it from negation. By characterising (non)-being as the being of the question, we diffuse Sartre's argument that if Being is full positivity there can be no authentic questioning, by introducing the question directly into Being without the requirement of negative transcendence. The question also retains its pre-judicative character, but its form is completely severed from that of the proposition, by freeing it from the puerile classroom analogy which still dominates Sartre's approach. This being of the problem, which is not a *non-being*, but an *extra-being*, is what Deleuze identifies as *sense*.

So, the intelligible is not identified with that to which the proposition corresponds, to a fact or an essence, but is understood as that which constitutes the specificity of the field within which learning takes place. To understand this it is best to examine the example Deleuze presents of a learning opposed to the simple acquisition of fully constituted solutions propagated in the dogmatic image:-

“To learn to swim is to conjugate the distinctive points of our bodies with the singular points

21 *D&R*, pg 207

22 *Ibid.*, pg 76

23 *Ibid.*, pg 76-77

of the objective Idea in order to form a problematic field. This conjugation determines for us a threshold of consciousness at which our real acts are adjusted to our perceptions of the real relations, thereby providing a solution to the problem. Moreover, problematic Ideas are precisely the ultimate elements of nature and the subliminal objects of little perceptions. As a result, "learning" always takes place in and through the unconscious, thereby establishing the bond of a profound complicity between nature and mind."²⁴

In learning to swim, although it is certainly possible to be primed by a teacher, to be shown movements and techniques before one encounters the water, this itself is not learning to swim. No amount of practice on dry land produces a swimmer. It is only upon being thrown into the water that a capacity to swim can develop in response to the specific material potentials of water. This ability cannot be reduced to a set of propositional instructions which would constitute a completed 'knowledge' of swimming, not even if we assume that such knowledge could be habitual or unconscious. The unconscious components of swimming are not contingently unconscious, always retaining the possibility of our developing consciousness of them, but are eminently unconscious. The consciousness involved in the activity is by necessity above a threshold which is constituted by the minute and unconscious perceptions which pass beneath it. We are not aware of every flux of the current, of every to and fro of the water about us at all times, nor are we consciously calculating a pattern of movements to maintain our movement in the face of them, in accordance with some acquired algorithm; neither are we calculating our movements unconsciously, in a way opposed to a consciousness that would be added on top of this processing. It is out of the multiple unconscious interactions and implicit calculations that the threshold of consciousness emerges, a consciousness of a body moving in water, which feeds back into the minute interactions between muscle and flow. The process of learning to swim is thus not a process of acquisition of an algorithm or method for the direction of the body's parts by a centralised consciousness, but a process in which the body as a system of overlapping and interacting processes combines its own potentials (its singularities) with those of the water, posing a problem, or creating a problematic field, which resolves itself in the adaptation of the body-as-system to the problem or Idea presented by the wave. This process of learning or adaptation is not purely conscious, but neither is it purely unconscious in a way opposed to consciousness; it can only proceed to consciousness through the unconscious.

What is important in this model of learning is that the ability to learn is not understood in terms of something possessed by the subject in advance. We do not need to see a human being as containing within itself the inherent possibility of swimming, whether such a possibility is there by design or otherwise. It is the interaction between the subject and its environment, the interweaving

²⁴ Ibid., pg 205

of singularities in the constitution of the problematic field, that causes the new behaviour, or the solution, to emerge. Importantly, we can also see the potential for numerous different solutions to the problem to emerge given the same conditions (breast stroke, front crawl, wading, etc.). On the basis of this and other examples, Deleuze claims that there can be no method for learning. On the face of it, this claim seems somewhat counter-intuitive, given that there is a whole industry devoted to producing learning aids, such as text books and instructional manuals, let alone the tried and tested techniques that are incorporated within the education system. However, Deleuze is not claiming that all learning proceeds by blind chance, and that there cannot be reliable methods of teaching and learning developed in relation to specific problems, as even swimming has developed such methods, but rather that there can be no universal method of learning. We must understand Deleuze's alternative to the dogmatic image further to understand the significance of this.

The dogmatic image of thought, although it might accept that such things as learning to swim are dependent upon the material constitution of the individual's body, would deny any such similar relation in the case of the discovery of the laws of physics. Whether uncovering physical laws, classifying biological phenomena, or acquiring the information second hand from text books, thought is understood to be the same in each case – it is the recognition that this proposition corresponds to the intelligible aspect of the state of affairs, that *things are this way*. It abstracts from the contextual and no less material conditions in each case: the high powered equipment, its continual calibration, the multiple physicists interacting as a sociological system or paradigm that both enables the collection of data, its interpretation, and the situation of this interpretation in the context of other physical knowledge; the similar social and real machinery required to enable both frontier research and individual classroom style learning in biology and other fields. The dogmatic image treats the individual in each of the above cases as a transcendent subject, each with the same guarantee of grasping the intelligible, and although these other conditions may be necessary in practice, they take no part in the *thought* itself. To put it another way, the processes of learning are made ontologically distinct from the material processes upon which they depend, and among which they should be situated. This contrast is most keenly felt in the transition between biological and cultural evolution, where at some point a species must make the leap from a material process of adaptation to its environmental conditions to representing those conditions and their inherent intelligible aspects, in short there must be a point at which *thought* emerges²⁵. All of this is a consequence of the dogmatic image's privileging of knowledge, which is ontologically distinct from

²⁵ In a sense, Hegel is the only one to have maintained something like this position in a consistent fashion, albeit without any modern conception of biological evolution. Nevertheless, his conception of the development of consciousness in the *Phenomenology* provides a hierarchy of pre-determined (though not necessarily linear) stages for consciousness to develop through in history, thus reaching different levels of access to the intelligible. Of course, Hegel makes such a position consistent by maintaining this movement of development, that of the material processes included, to be the movement of thought itself.

any other result of a process of adaptation, in that it corresponds to the intelligible. The development of the eye and the development of the theory of relativity are ontologically distinct because the latter echoes the intelligible and the former does not.

However, through making the developmental form of learning primary, Deleuze has re-situated the process of learning among the other material processes of the world. Learning to swim is of the same ontological character as the adaptation of a species to the problem posed by a change in its environment. The real innovation is to extend this beyond the simple cases of *knowing-how* to the cases of *knowing-that* which form the staple of the dogmatic image. To do this is not only, as we have argued for above, to deny that cases of knowing-how, such as swimming, can be understood on the basis of knowledge that can be adequately expressed propositionally as knowing-that, but to reverse the subordination and to understand cases of knowing-that, such as relativity theory, as a kind of knowing-how within a very specific context. Given that we take knowing-how to be ontologically indistinct from other adapted capacities, this re-situates propositional knowledge within the world as just another form of capacity. Such a move is counter-intuitive, as it seems to imply that there could at least in principle be a number of different and incompatible theories which could 'solve' the same problem, much as there can potentially be a number of different phenotypic adaptations that can fill the same niche, whereas theories such as general relativity are supposed to be universal in their truth. It must be clarified that to claim that there can be multiple potential solutions to the same epistemic problem does not imply an equality of solutions. Different solutions can have relative advantages or disadvantages depending upon context, which can become very important if differing solutions are actually produced and as such are forced to compete, as is the case in the confrontation between quantum loop gravity and string theory. However, such differences should not be understood to be purely in terms of content, as this is a notion that is still loaded with the connotations of the dogmatic image. Differing solutions diverge in terms of what they can do, but this does not necessarily translate into a propositional difference between knowledges. Some analytic philosophers have argued that there cannot be different adequate and yet incompatible theories, or general conceptual schemes for representing anything, on the basis that all such theories, to be properly adequate would have to be translatable into one another in virtue of their mutual correspondence to the intelligible structure of the world. However, abandoning the dogmatic image and the corresponding conception of intelligibility as imaged on propositions undercuts this view. Moreover, that there can be multiple solutions to the same problem does not imply any naïve relativism or superficial idealism whereby reality is relative to our representations of it – Deleuze is strongly opposed to such a view. Rather, what must be understood is that theories no longer correspond in their form to the intelligible structure of the world, being compatible on the basis of some isomorphism between them, but rather are solutions

which have developed in response to the world as a constraint, the intelligible not being found in the form of the solution to be achieved but in the form of the problems which are posed.

Thus, in contrast to the dogmatic image, Deleuze claims that “It is from “learning”, not from knowledge, that the transcendental conditions of thought must be drawn.”²⁶ It is on this basis that Deleuze establishes an ‘imageless’ conception of thought. Although this conception refigures much about the way thought is to be understood, its most striking feature is given by the following quote: “Every body, every thing, thinks and is a thought to the extent that, reduced to its intensive reasons, it expresses an Idea the actualisation of which it determines.”²⁷ For Deleuze, every individual thing, every being, is thinking or perhaps, rather, is *a* thinking. To explain the significance of this it is useful to contrast it to the Hegelian position we outlined briefly earlier: Being is identical to thought, but not in the sense that Being and the concept of Being are identical. That thought is without image means that it cannot be assumed to be conceptual, nor can there for that matter be any pure form of thought which would guarantee absolute knowledge through being itself the structure of Being. The *Logic* is precisely the exposition of the structure of Being through being the exposition of the fundamental structures of a pure and immanent thought. It is because of this that Hegel can claim not to presuppose a method of thinking in the *Logic*, but rather that it is the unfolding of the universal method of thought and the content thought simultaneously. Deleuze’s claim that there can be no universal method of learning is equivalent to the claim that there can be no such pure thought underlying all specific thought. Thought is problem solving, and as such from the intricate web of balancing gravitational fields which form galaxies to the alignment of molecules into crystalline lattices there is thought taking place. There is however no single thought within which all of these are bound up, nor is there a way of thinking which in principle encompasses them all.

We can now see the way in which Deleuze deals with the problem of the transcendence of the subject. He has transformed the transcendental field of experience into the plane of immanence by removing any possible transcendent thinker to which it would be immanent. The transcendental field is now shot through with thought itself, and as a result the intelligible is no longer something alien to the material processes which make up the world, but fully immanent to them. However, this immanence of the intelligible, or sense, is not the same as the immanence of thought. Thought is now by definition bound up in the purely positive causal interactions that take place within the field of experience, whereas sense must remain neutral in relation to these; it does not fully transcend causality, but neither does it function as a cause – it can only be a pure *effect* of material causes in the world²⁸. Thought as learning is equivalent to a continuing process of individuation undergone by

26 *D&R*, pg 206

27 *Ibid.*, pg 316

28 *LoS*, pg 7

the thinking individual, whereas sense cannot be individuated, cannot be manifest in any actual thing, but must be strictly *pre-individual*. In other words, sense must retain a certain *minimum* of transcendence in relation to actual individuals, while at once being immanent to them. It is on this account that Being is split into *actual* beings and the (non)-being of the *virtual* problems of which they are solutions.

The relationship between sense as the intelligible and the proposition must be radically rethought on this basis. Although Deleuze has undoubtedly undermined the status of the proposition as providing the form of the intelligible, he has not simply abandoned any further understanding of it. For Deleuze, it is sense which provides the condition under which a proposition can be either true or false, while sense itself is neither. Intelligibility is no longer the province of universals, distributed amongst individual beings in accordance with propositional forms, but as sense it is that which forms the border between propositions and the states of affairs which they denote. Sense is at once “*both the expressible or expressed of the proposition, and the attribute of the state of affairs*. It turns one side toward things and one side toward propositions.”²⁹ It is both expressed and attribute, but an expressed which is irreducible to the universal and general concepts of signification, the personal intentions of manifestation, and an attribute irreducible to the qualities of the denoted individual. It is irreducible to either proposition or state of affairs. Deleuze claims that sense can have this paradoxical character because it is always a *pure* or *ideal event*, as opposed to a real or actual event which 'happens'. A real event is an *actualisation* within space and time of such an ideal or *virtual* event, but this is not to say that the ideal event itself occurs. Sense as event is opposed to essence, as accident to substance; the event expresses a contingent happening that is no function of any identity. The sense which is expressed in a proposition, which is not equivalent to any notion of meaning, although it is that which makes such meaning possible, must be thought in terms of a verb, or a pure infinitive. As Deleuze notes: ““Green” designates a quality, a mixture of things, a mixture of tree and air where chlorophyll coexists with all the parts of the leaf. “To green,” on the contrary, is not a quality in the thing, but an attribute which is said of the thing. This attribute does not exist outside of the proposition which expresses it in denoting the thing.”³⁰ On this basis, the proposition 'the tree is green' should rather be understood as 'the tree *greens*'. Qualities are produced within the depth of bodies, through the particular material structures constituted by processes of individuation, whereas the expressed event of sense is a pure becoming that, although perhaps involved in such an individuation, is not part of the completed, actual individual. As such, it is not the specificity of the detailed material structure of individuals that provides the sense of the propositions which denote them, but rather the elements of the problems to which this structure is a solution. This leaves open the question of exactly how the processes within which language usage is

29 Ibid., pg 25

30 Ibid.

manifest can capture these events of sense so as to express them in propositions, without slipping back into an illicit transcendence on the part of the speaker. This question can only be returned to later, once we have further examined the nature of the virtual and its actualisation.

Out of the three dimensions of the proposition that Deleuze identifies: denotation, manifestation and signification, sense is most often confused with, or reduced to signification. The reason for this is that signification shares a characteristic of sense, that of conditioning the truth of the proposition while itself being neither true nor false. Whether it is true that the tree is green, or whether it is false, is a matter for the denotation of the proposition. Either the state of affairs that the proposition describes is picked out by it, or it is not, the tree's leaves perhaps having turned brown with the change to autumn. However, it is supposedly the elements of signification, such as the concepts of 'tree' and 'green', which provide the possibility of such denotations, and as such also the possibility of their failure. It is by providing these *forms of possibility* that signification supposedly functions as the condition of truth. However, this conceptual form of possibility is entirely inadequate. As mentioned earlier, Kant, who elaborated this form of possibility in a way more detailed than any who came before him, through conceiving of the transcendental in terms of it made the transcendental ineffectual, or as Deleuze would put it “too general or too large for the real.”³¹ What Deleuze means by this, in Kant's case, is that the categories which ground the transcendental field, or the field of all possible experience, merely delimit the boundaries of the possible while playing no part in the *genesis* of real experience, or what properly appears within this field.

This criticism holds of not merely the categories as *pure concepts*, but also of the empirical concepts as well. The empirical concept (e.g. 'tree', 'green' or 'dog') functions as ground of an object's possibility, if not its existence, but it does this in a way which is functionally that of essence, in that it is an atemporal and ahistorical sufficient ground of *the necessary conditions of self-identity*. Of course, Kant is not an essentialist strictly speaking, phenomenal knowledge does not extend to things themselves or to any *real essence*, and the concepts and schemata which are applied to objects can be further elaborated, that is, they can change. However, this change is always retrospective elaboration, not real temporal change. The concept in Kant thus has the character of *logical essence*³². The significance of this is that the concept delimits the possible individuated states that an object can attain while still falling under the conceptual identity, but it does not do this by grasping the intrinsic potentialities which govern the real variation within these limits, or the production of the limits themselves. The concept of bird does not only not include

31 *D&R*, pg 81

32 Kant outlines this distinction between real essence and logical essence in the *Blomberg Logic*, affirming that “We cannot actually cognize the real or objective essence of a single object of experience or of the senses. At the most it is possible for us properly to have insight into its logical or subjective essence.” (*LL*, pg 90-92)

within it the various differing species of birds, but gives us no grasp of the real *internal* factors governing the development and speciation of birds, it merely enables the identification or recognition of anything that falls within a certain space of possibility. This is related to what Deleuze, following Aristotle, identifies as the logical blockage of the concept, which maintains the generality of the concept, or its potentially infinite extension, by excluding differences beyond a certain level³³, preventing it from extending to the individual. However, to push the concept all the way to the individual, as Leibniz did, would not be to account for this potential variation internal to these 'general' phenomena, but merely to reduce all such potential variation to actual variation.

Leaving this aside for the moment, we must return to the fact that the possibilities which are delimited by the concept are individuated states. Of course, the abstract possibility of being combusted which is contained within the concept of coal is no more a fully individuated possible state than it is a fully individuated actual state, i.e., the possibility of *this* particular piece of coal combusting in *this* way at *this* time, or that same possibility realised. Rather, such abstract possibilities function in a way similar to the logical blockage discussed above, ranging over series of fully individuated possibilities. These individuated possible states of affairs are in effect identical to actual states of affairs, the only difference being that the former lack the reality, or existence possessed by the latter. This means that if there are various different possible series of events which can occur, the selection or *realisation* of one possibility as an actuality cannot be grounded by those possibilities. Reality or existence is something added on to a possibility. This is what is meant by the criticism that the Kantian concepts as conditions of possible experience fail to account for the genesis of real experience: they provide abstract images of finished products that have no bearing on the production of states of affairs, they merely delimit sets of possibilities that are indifferent to their own realisation. Although this description of the form of possibility provided by concepts relies largely on Kant it can be taken as representative, at least for the purposes of this exposition.

Kant's philosophy can reveal a further way in which the conceptual form of possibility is inadequate, specifically his attempt in the *Critique of Teleological Judgment* to account for the organic in its incompatibility with the determinate form of judgment in recognition. For Kant, the organic possesses a purposiveness, or rather, must be thought as if it possessed an objective purposiveness as a "a kind of causality in nature, in accordance with an analogy with our own causality in the technical use of reason"³⁴. However, this does not mean we must think it in terms of this causality alone, because, as in the Third Antinomy, although the representation of its noumenal (or supersensible) causality is necessary and sufficient unto itself, it can only act upon the field of experience, and as such must do so in a way conforming to mechanistic causal laws. As Ginsborg points out, this seems to create a tension between thinking the organic being as a product of nature

33 *D&R*, pg 14-15

34 *CPJ*, pg 254-255

and thinking it as a product of art, or an artifact whose ground of reality would be the representation of it as an end in the mind of a designer³⁵. This apparent contradiction is mitigated when we realise what this “analogy with the technical use of reason” amounts to is the deployment of the principles of reason in a regulative rather than a constitutive fashion, meaning that we can “regard something as a purpose without regarding it as an artifact [by regarding] it *as governed by normative rules* without regarding those rules as concepts in the mind of a designer.”³⁶ This is to say that the function of teleological judgment with regard to the organic is to enable the assessment of the correct functioning of organised beings and their parts, in accordance with *normative* rules that prescribe the limits of such correct functioning (e.g., that a heart *should* pump blood around the body). It is just this normative dimension which Kant thinks is necessary to supplement scientific inquiry into the organic and the particular experiential regularities in the biological domain³⁷. This supplementation is thus the deployment of technical judgment so as to make up for the deficiency of the understanding in supplying rules for cognition of these biological regularities; we will defer discussion of this under-determination for now.

So, we must think of organisms in terms of two complementary forms of causality: firstly, we must judge them as *mechanistically causal* in terms of the way their parts reciprocally determine each other, in terms of both their form and combination, so as to constitute, or determine a whole³⁸; secondly, we must judge them as finally causal in terms of the way both the form (determinate possibilities) and existence (reality) of these parts is grounded in cognition by the concept of the whole as end³⁹. The concept of the whole as end enables judgment in its technical exercise to be guided by the principles of reason (this does not make it schematic) in cognizing the systematic nature in which the parts actually determine one another as though it were a systematic technical activity guided by an end. It might still seem as if there is no particular difference between the self-organising being and a designed or externally organised artifact. However, the difference is in terms of the specific way that the mechanistic causality functions. The reciprocal causality of the parts does not merely involve a unified functioning so as to constitute a mechanical whole, as in the example Kant gives of a clockwork watch⁴⁰, but involves the *reciprocal production* of the parts, as seen for example in an organisms ability to heal itself and replace its constituent matter. Importantly, it is not only upon itself that it can exercise this action, in that the organic has the ability to reproduce itself, producing the whole of a new being in accordance with its own concept. This systematic activity of imposing *form* upon *matter*, be this in maintaining itself under the form

35 Ginsborg, pg 231-232

36 Ibid., pg 251

37 CPJ, pg 254-255

38 This can be thought in accordance with the category of community in terms of its schema, reciprocity (CPR, pg 185). However, this is not a *sufficient* ground for cognizing their reciprocal causality.

39 CPJ, pg 244-245

40 Ibid., pg 246

of its concept, or in producing a new being under this same concept, is what makes it a properly self-organising system. This is what Kant identifies with “a self-propagating formative power, which cannot be explained through the capacity for movement alone”⁴¹.

Abstracting from the specificities of the teleological mode of judgment and returning to the question of the under-determination of the concepts of the understanding, the important question to ask is: why is this normative dimension required in the study of biological regularities in nature? This depends on Kant's definition of purposiveness as a lawfulness of the contingent as such. The normative dimension is introduced to provide a ground (in a principle of reason) for cognizing this lawfulness, a ground which cannot be found within the understanding. So, biological regularities have a certain contingency relative to the rules provided by the understanding, but yet they can still appear as regularities in experience. Kant describes this paradoxical status in the example of the bird, where he explains that “nature, considered as mere mechanism, could have formed itself in a thousand different ways without hitting precisely upon the unity in accordance with such a rule, and that it is therefore only outside the concept of nature, not within it, that one could have even the least ground *a priori* for hoping to find such a principle.”⁴² This contingency must be understood in a very specific way, in that it is not simply the contingency of anything that is incredibly unlikely, as many such things can be sufficiently cognized in accordance with natural (mechanistic) laws. The contingency is specifically with regard to the internal, and thus systematic structure that organic beings exhibit. For instance, one does not find organs that are not organised within a self-organising being, unless these have been purposively extracted, i.e., the concept of the whole functions as the condition of the reality of the parts. The mechanistic coming together of several causes that in conjunction produce a highly unlikely effect, or a highly unlikely aggregate, is still sufficiently cognizable by the understanding despite its extreme contingency, whereas the conglomeration of parts that are not produced outside of these aggregates, and are in fact produced by these very contingencies themselves, that is to say a self-sustaining contingency, is a lawfulness of the contingent as such.

In Kant's system, there are two ways in which a regularity can be grounded by a rule of the understanding: firstly, atemporally or logically by an empirical law derived from the category of causation; secondly, temporally, within intuition in accordance with the transcendental schema of the category of causation. In both cases, the rules of the understanding function as insufficient grounds for the cognition of biological regularities. In terms of the latter, this is because self-organising entities fall outside of the chains of mechanistic causation that make up the field of experience; they are self-causing⁴³, and the formative power which is contained in them can merely

41 Ibid.

42 Ibid., pg 234

43 Ibid., pg 243

be traced to another self-causing being that produced them, thus perpetually deferring its origin in a way which fails to connect with any mechanistic causal chain. In terms of the former, it is also the case that biological regularities regress in grounding as well as causing, in that they are grounded by further biological regularities (e.g., the respiratory cycle is grounded by the other more basic processes that constitute it conjointly), much in the way that empirical laws are grounded by more general laws. However, it is also the case that no matter how far one follows the train of biological regularities down, one cannot find any sufficient ground in the laws of the understanding. There can be no connection between the two, because biological regularities always ground or cause others in virtue of their correct functioning (or *telos*). A heart that does not beat is still a heart, merely a malfunctioning one, whereas coal that is not combustible is either not coal or refutes the law that all coal is combustible. Biological regularities are thus partial regularities, which is to say not universal ones, and as such are not derivable from physical regularities as their grounds of cognition, unless these are in turn combined with other biological regularities that would add a purposiveness to the cognition.

The counter-argument to biological regularities as partial regularities is to claim that they are in fact proper mechanistic regularities, but ones with amazingly complex sets of conditionals governing their realization, in virtue of an incredibly complex fine structure. The problem, as Ginsborg points out, is that: “this proposal relies on the very strong assumption that organic entities such as acorns and hearts do in fact share common internal structures, so that the concept of an acorn is coextensive with the concept of a certain configuration of matter. For it shows the lawlikeness of the behavior of any given acorn, not *qua* acorn, but *qua* particular configuration of matter. And if, as seems possible, biological classifications do not line up with classifications on the basis of physico-chemical structure, then the kinds of regularities that come out as lawlike on this proposal will cut across the regularities that are of interest to biology.”⁴⁴ As such, the multiple realisability (within different fine structures) of the regularities subsumed under the concept undermine this response. This kind of variation in fine structure is present in one of Deleuze's more favourite examples, that of embryogenesis. As Stuart and Cohen point out, the processes of individuation through which the embryo progressively gains greater internal structure are not coded atom by atom, or even cell by cell (except in nematodes)⁴⁵, but function on the basis of constantly shifting and interacting relative differences. More problematically, this proposal fails to explain why, in the study of acorns, one would focus upon the possibility of the acorn turning into an oak, given that in this case it is far likelier to be trodden on, eaten, or simply fail to find the right conditions⁴⁶. The number of acorns that actually turn into oaks are small compared to those that do,

44 Ginsborg, pg 247

45 *The Collapse of Chaos*, pg 125-126

46 Ginsborg, pg 247

and this kind of situation is replicated across the field of biological regularities.

This concern with likelihood enables us to better identify the problematic object of the *Critique of Teleological Judgment*, and in turn a problem for the conceptual form of possibility. Essentially, Kant is attempting to grapple with statistical causality, and the problematic object is the self-sustaining or *self-regulating* statistical regularity. Kant has no resources to deal with this, given that, as discussed earlier, his conception of the grounds or conditions of possibility depends upon *universal and necessary limits*, of which neither characteristic is possessed by statistical regularities; the mode of grounding or conditioning being an *atemporal* imposition of *form* by some act of freedom. As such, he deploys the notion of purposiveness to compensate for partial or statistical regularity, and the systematicity of reason, in an analogy with the causality of freedom, to understand their self-regulation or self-forming activity. Thinking beyond Kant, we can see that the kinds of regularity that conceptual causality can deal with are only those which are *universal* in nature, and that although this is perfectly acceptable for mechanistic causal relations it is inadequate to grasp the more complex and seemingly purposive causality of the organic. Traditionally such purposiveness has only been able to be thought on the basis of some form of teleology, whether it be in terms of really possessing some form of final causality, as in Aristotle's philosophy, or through an analogy with the subjective positing of ends as for Kant. Either way, such teleological accounts violate the immanence that Deleuze requires of the transcendental field, by requiring some transcendent ascription of purpose, be it from a figure such as God or the Kantian subject in reflective judgment. The other way of incorporating such partial or statistical regularity within the conceptual form of possibility is through the use of probability. This is not as straightforward as it might seem however.

The mathematical understanding of probability has always been linked with the history of games. This is because games offer idealised sets of rules which dictate fixed possible states between which the total sum of all probabilities, certainty = 1, can be apportioned. This is most obvious in games of chance, for instance, where a die has six possible and roughly equally probable outcomes, dividing certainty 6 ways. However, we can imagine games that are not immediately based on chance, such as chess, wherein there are a fixed number of possible first moves for either side, and as such a fixed number of possible second moves, etc. creating a space of all possible games within which only certain possible states can follow from certain others. Here, the probability of a given state is not determined purely on the basis of the distribution of possible states, but also on the player's skill in choosing between moves. Nevertheless, the rules prevent the players from deviating from the fixed distribution of possibilities, say by moving a rook diagonally or shooting the other player through the chest. As Deleuze notes: "In games with which we are familiar, chance is fixed at certain points. These are the points at which independent causal series

encounter one another (for example, the rotation of the roulette and the rolling ball). Once the encounter is made, the mixed series follow a single track, protected from any new interference.”⁴⁷ In all such games chance only enters at predetermined points, and at these points finite sets of possible states branch out, between which probabilities, or shares of chance, are apportioned. So a game of dice may involve three throws, and the probability of the overall result is a function of the probabilities of each taken separately, but this always excludes 'outside chances' which interfere with the ideal distribution at the points in between throws. The understanding of any system on the basis of probability involves this idealisation, through which it is broken down into universal regularities, providing the necessity of each transition between the fixed points of chance, and the eruptions of contingency which these chances represent. Once these points are isolated the total set of all possible outcomes is *delimited* as the product of the sets of outcomes of each fixed point of decision. The real measure of probability is introduced by the constraints on these fixed points, understood as extrinsic to the possibilities themselves. In reality, the die as a whole is constituted by billions of molecules, each with its own motion and its own possibilities, all feeding back into the whole. At each moment all of the interactions of the die with the molecules of air, with each bump on the rough surface of the table upon which it is rolled, introduce contingencies into the throw. Of course, it is correct to say that no system at all can be modelled on the basis of the totality of its conditions, if chance were to be introduced at every point there could be no calculation of probability. On this basis there could not even be the delimitation of the set of possible outcomes. However, although we may accept the practical necessity of understanding systems on this basis, we must be able to conceive of Being as a properly *ideal game*, in which there are no rules laid out which fix all possible outcomes in advance, within which chance does enter at each point. This is to think of Being as a dice throw, a single cast for each and every individual throw, for each and every individuation, all qualitatively distinct but not numerically distinct as those of the fixed points of static distributions⁴⁸. It is also to deny the *closure* of the set of possible states of any system.

In contrast to this inadequate conceptual form of the possible, Deleuze opposes the virtual and the ideal events of sense which populate it. Against the possible, “The virtual is opposed not to the real but to the actual. *The virtual is fully real in so far as it is virtual.*”⁴⁹ Deleuze thus borrows Proust's maxim to describe the virtual: “Real without being actual, ideal without being abstract”⁵⁰. Whereas the possible is effectively an image of the actual, to which reality or existence must be added, the virtual in no way resembles its actualisation⁵¹. The possible is retroactively constructed from the actual, a projection of images of actual states in which the actual terms have been

47 *LoS*, pg 71

48 *Ibid.*, pg 70

49 *D&R*, pg 260

50 *Ibid.*

51 *Ibid.*, pg 264

imaginatively varied, but this variation is purely the variation of the fully individuated products, and excludes the *pre-individual potentials* which condition their individuation. The virtual is the reservoir of such pre-individual potential on the basis of which actual states of affairs are constituted. The ideal event as such functions as an alternative form of possibility to that of the concept, and, as sense, is the condition of the truth of the proposition which is irreducible to signification. Similarly, the virtual provides an alternative way of conceiving of regularity, one that need not divide beings *a priori* into the organic and the inorganic, but can think both in the same sense, dissolving the false dichotomy between the organised and the self-organising⁵². In doing so, it also provides a way of affirming the whole of chance, thinking Being as an ideal game. The question is then: what is the structure of the virtual and how does it achieve these things?

It has already been noted that the virtual is (non)-being as the being of the problem. Deleuze inherited the virtual and the corresponding critique of possibility from the philosophy of Bergson, but his reworking of the virtual as problematic in nature has a properly mathematical inspiration. Deleuze locates what he calls the true Copernican revolution in the understanding of problems in the work of the mathematician Abel, who was the first to understand the solvability of problems on the basis of their own internal character, and as such to provide a method for understanding the truth of problems independently of their solutions. As Deleuze notes: “Instead of seeking to find out by trial and error whether a given equation is solvable in general, we must determine the conditions of the problem which progressively specify the fields of solvability in such a way that the “statement contains the seeds of the solution”.”⁵³ Specifically, Abel was dealing with the problem of determining whether a given curve or function could be integrated, and he developed a method based on the classification of the singular points of the curve, those points that were distinguished from the ordinary points that constituted the majority of the curve by the change in sign that the gradient of the tangent to the curve undergoes at them, for instance, the maxima and minima, or the points of inflection. It is these singularities that form the conditions, or make up the *sense* of the problem. Although Abel's method was limited to the differential calculus, Deleuze extends this insight beyond the realm of specifically mathematical problems. However, as we will see, this does not mean leaving mathematics behind.

As has been mentioned, a problem is an *Idea*, or a virtual multiplicity. For Deleuze, “An Idea is an *n*-dimensional, continuous, defined multiplicity.”⁵⁴ This conception of the Idea as an *n*-dimensional multiplicity is derived from Deleuze's reading of Riemann and his work on *n*-dimensional geometry. The Idea is as such a space made up of *n* dimensions, each dimension

52 The problems of this dichotomy, and Deleuze's dissolution of it are covered by Alberto Toscano in his book *The Theatre of Production*.

53 *D&R*, pg 227

54 *Ibid.*, pg 230-231

corresponding to a variable of a given system, the topology of the space being governed by or expressing the relations between these variables. As such, any point within such a space corresponds to a single actual state, although this is not to say a fully individuated state of affairs. This means that a trajectory within the space, which encompasses a series of (ordinary) points corresponds to a full actual solution to the problem posed by the space. Such spaces also have singular points, or singularities, in the vicinity of which such trajectories are constituted, which as such describe the behaviour of trajectories within said vicinity. The distribution of singularities within the multiplicity thus provides us with “information about the pattern of all the solutions.”⁵⁵

As has been pointed out by Manuel DeLanda⁵⁶, among others, Deleuze's notion of virtual multiplicity corresponds to that of *phase space* in contemporary dynamic systems theory. Phase spaces are used to model all kinds of complex systems, and have the ability to bring out many salient features of such systems without providing general formulae for solutions, and may be especially helpful in understanding systems for which such formulae are either difficult or impossible to find, most importantly far from equilibrium non-linear dynamic systems. To model such a system one must first select the relevant variables or degrees of freedom of the system. As DeLanda notes, we may be able to melt down a pendulum into molten metal, but this kind of change is not really relevant for studying the motion of the pendulum⁵⁷. Once a relevant space has been determined, the system is then observed, starting it from various different initial conditions and plotting the ways these change as trajectories within the space. Once a suitable set of trajectories covering the space has been gathered, these are then repeatedly differentiated, each given application of the differentiation operator producing a *velocity vector*, and these velocity vectors populate the space, giving it an intrinsic curvature, producing a *vector field*⁵⁸. This vector field can be used to predict unobserved trajectories through integration. DeLanda provides a good description of the character of a vector field:-

“The points that form a space can... be defined not by distances from a fixed coordinate system... but by the instantaneous rate at which *curvature* changes at a given point. Some parts of the space will not be changing at all, other parts may be changing slowly, while others may be changing very fast. A differential space, in effect, becomes a *field of rapidities and slownesses*, and via these infinitesimal relations one can specify neighbourhoods without having to use rigid lengths.”⁵⁹

55 *Virtual Mathematics*, pg 240

56 In his seminal book *Intensive Science and Virtual Philosophy*.

57 *Virtual Mathematics*, pg 236-237

58 De Beistegui, pg 268-269

59 *Virtual Mathematics*, pg 238-239

The vector field acts like the geography of the phase space, a simile which is far more literal in the case of two-dimensional spaces, in which one can very well represent the vector field in terms up the hills, passes, moats and dips formed within its landscape. Here trajectories are formed much like the path rolled by a ball placed at a given point on the map. This applies to higher dimensional spaces, although it is much harder to grasp intuitively, but what it indicates is that a multiplicity can in fact be treated like a *surface* (and in fact this was Riemann's intention), the topology of this surface being provided by the vector field, and the distinctive features of this surface, or its topological invariants (the hills, passes, moats, dips and such), are the singularities which govern the behaviour of the trajectories which form on the surface. It is precisely this kind of surface which Deleuze is appealing to when he claims that the ideal events of sense are surface effects, populating the surface between propositions and states of affairs⁶⁰. The ideal events of sense are precisely the singularities which constitute the conditions of problems.

A very simple example of such a system is a predator prey dynamic within an ecosystem, which can be described as a two-dimensional multiplicity. The two variables which constitute the space are simply the number of predators and the number of prey, say foxes and rabbits. If one plots the phase space of such a system, what one finds is that as long as the initial state of the system is within a certain area, then it tends to end up on a roughly circular trajectory which repeats itself periodically. This is because when there is an excess of foxes, they over-consume their prey, leading to a lack of food and a large portion of the fox population dying off, which in turn however causes the rabbit population to explode, which replenishes faster than the fox population due to a shorter breeding cycle; with a surplus of food the fox population then increases in size, beginning the cycle again. Even when the rabbit or fox population is very large or small, as long as it stays within certain rough values it will eventually settle down into a stable cycle of interdependent wax and wane. The singularity which describes this behaviour is called a *periodic attractor*, and the zone within which initial states tend toward it is called the *basin of attraction*⁶¹. In the vector field it is like a hill with a moat around it inside a dip, which is to say that if the trajectory begins inside the moat it will tend to roll down the hill into it, and if the trajectory starts outside the moat but inside the basin of attraction, then it will roll down the dip into it. Paradoxically, at least for our geographical intuition, the moat has the character of always inclining downwards, like the never-ending stairs in M.C. Escher's famous painting, all trajectories perpetually flowing around it. This is actually a slightly simplified picture of most predator prey dynamics, as there are usually multiple nested periodic attractors, like a series of moats at different heights on the hill, each indicating a particular stable periodic state of greater or lesser numbers of both predator and prey.

Moving on, the significance of the distribution of singularities within a given virtual

60 *LoS*, pg 209

61 *ISVP*, pg 14-15

multiplicity is that it describes the *tendencies* of that system. Importantly, singularities as ideal tendencies do not act as *causes* of the behaviour of systems, they are only *effects* of the real causal structure of the system, although in relation to one another they are *quasi-causal*. These singularities are pre-individual, in that they do not correspond to any individuated actual state of affairs, and they are ideal events, in that although they are actualised in real spatio-temporal occurrences they do not themselves occur. DeLanda explains this latter point best when he points out that: “trajectories in phase space always approach an attractor asymptotically, that is, they approach it *indefinitely close but never reach it*... Although the sphere of influence of an attractor, its basin of attraction, is a subset of points of the phase space, and therefore a set of possible states, the attractor itself is not a possible state since it can never become actual.”⁶² These singularities are also legitimately understood as events or accidents rather than essences in that although they can determine necessities such as the impossibility of a particular set of values of variables by preventing any trajectory from passing through it, these are never a function of any identity. However, a legitimate question can be raised with regard to whether the restriction of the dimensions of the multiplicity to relevant variables does not function like the delimitation of possibilities through the apportioning of chance between a fixed distribution of points. Although this may seem superficially similar, the important difference is that outside interference is possible at all points in the system, not just along the axes that are defined. For example, the fox-rabbit system described earlier does not seem to cover the rabbits food source, which is of course an essential condition of the stability of the periodic tendency. Although the relative constancy of this condition enables us to exclude it as a relevant variable, actual fluctuations in it, as might be caused by competitors, drought or disease, can effect the path of the trajectory through the space. This is to say that there can be 'shocks' to the system which displace the trajectory from the path directed by the vector field, but as long as these shocks do not displace the trajectory outside of the singularity's neighbourhood, or basin of attraction, then the shock will be dampened and the system will settle back to its regular movement. More sustained changes to conditions can warp the vector field, and large shocks can potentially cause the collapse of the system. For example, a disease that wipes out all rabbits, or a fox hunt that kills all of foxes will completely destroy the dynamic, perhaps redistributing the singularities along different lines, by providing a niche for new population of different predators to interact with the population of rabbits for instance. So, virtual multiplicities are not closed in the way that conceptual delimitations of possibilities are, nor in the way of the derivative fixed distributions of probability.

The vector field also provides a way of thinking the probabilities of different states as immanent to the surface it describes. Think of a bowl in which you place a small ball, the point at

62 *Virtual Mathematics*, pg 245

the centre of the bowl is the attractor and the bowl is the basin of attraction. Any shocks that the system undergoes can be represented by shaking the bowl. When the system experiences a shock, the ball will roll away from its steady state at the bottom of the bowl, up one side and may even roll from side to side for a period of time, but it will rapidly return to the stable state at the bottom. A single shock of a great enough intensity, or a similar series of shocks which take place in the time before the ball can settle back to its steady state, will cause the ball to leave the bowl, moving it out of the basin of attraction and thus preventing it from returning to the attracting steady state. Now, if we think that of the bowl as being shaken randomly, with different shocks of varying different intensities in varying directions, we can see that the probability of the ball being at any point in the bowl is relative to the gradient of that point, i.e. the farther up the side of the bowl the point is the less likely the ball is to be at that point at any given time. It is in this way that the probabilities of a trajectory passing through a point in a phase space is immanent to the curvature of the space itself. However, this form of probability is not based upon any kind of limitation of the possibilities of the system, meaning that the probability values are not independently fixed values, but rather that the space contains the sets of relations between states and their relative likelihoods in relation to one another. In other words, the virtual multiplicity captures the real tendencies which underlie the particular statistical regularities that are produced by the system. Moreover, although the examples we have given so far have only covered systems with single attractors, real systems often have multiple different attractors presenting a variety of stable states, or what might be seen as a variety of different possible outcomes. The curvature of the surface within which these attractors are embedded immanently provides the tendencies and as such the probabilities of the system ending up in any of the various possible end states. As such, not only do these end states not resemble the state of affairs they are actualised in, but the surface itself, as opposed to the set of *possible* end states, despite not *entirely* determining which outcome is actualised, is not *indifferent* to this determination. The selection of the actual is not an entirely extrinsic decision, but the combination of the real tendencies of the system with those of the context within which it is situated, or the interweaving of their multiplicities into a problematic field within which individuation takes place.

That the virtual provides the tendencies which constitute the statistical regularities seen in actual systems enables Deleuze to account for the biological regularities that Kant was unable to incorporate within the conceptual form of possibility, because he need not in principle derive them from universal regularities or laws constructed by linking universal concepts. The conception of singularities as attractors enables us to conceive of a certain directedness or purposiveness of organisms (and other beings for that matter) that is entirely immanent to the problematic fields within which they have been constituted, requiring no transcendent imposition of purpose. Deviation from these tendencies need no longer be seen as failure, error, or monstrosity, because it

is only through deviation and mutation that the field of potentials can change and new tendencies can emerge. Importantly this purposiveness can be conceived in a way which extends beyond the individual without becoming for that matter universal or transcendent. Of course we can talk about the propensity of a given heart to beat, without thinking of it as that *this* heart *should* beat, but there is a problem trying to articulate the general tendency of hearts without invoking that it is of the *essence* of hearts that they should beat. An individual heart, and indeed any individual is what Deleuze refers to as a signal-sign system⁶³. This system is the communication of at least two different and heterogeneous orders of potential, which are made to resonate and as such to form a signal link across which phenomena, or *signs*, flash⁶⁴. The individual heart, rather than being a static and finished product, is, *qua* individual, a continuous process of individuation. The establishment of a signal between the two heterogeneous orders is the posing of a problem, or the creation of a problematic field out of which a solution, or sign, emerges. However, the emission of a sign is not once and for all. This is to say that although the heart could be considered the final or definitive solution to the problem of circulating blood and as such oxygen and nutrients throughout the body, within the individual organism of which it is a part this problem *insists*, meaning that the heart is constantly solving the problem from moment to moment as it beats. We might here rather identify two problems, the problem of which the heart is faced with at every moment, and the problem of developing an organ capable of continuously solving this problem; the latter problem is precisely that within which the general tendency of hearts beating is found, whereas the local problem of translating certain informational inputs into the appropriate activity to regulate blood flow is that of the individual heart (although of course, one could generalise these local features so as to make up the specific conditions of the 'general' problem). This returns to the earlier discussion of thinking as problem solving, as here we have an example of a stable or *habitual* process which *contemplates* its conditions and in doing so *contracts* a difference, sign, or solution out of them. These contractions constitute what Deleuze identified in *Difference and Repetition* as the first synthesis of time, or the foundation of time.

Leaving the syntheses of time for the moment, what we have crudely been referring to as the 'general' problem of an organ that regulates blood circulation must not be confused with some universal possibility that would pre-exist not only organisms with hearts but organisms entirely, being transcendent in relation to the causal processes which are productive of these organisms over time. Although we must think of the problem as pre-individual, but in a way different to the still pre-individual field out of which a given individual heart is constituted, we must resist the temptation to make it into a universal. Stuart and Cohen provide a good example for thinking about this, which they introduce by asking the question: "Why do herbivores on the planes of the

⁶³ *LoS*, pg 298

⁶⁴ *D&R*, pg 280

savannah have eyes on the sides of their heads, whereas carnivores have them on the front?”⁶⁵ The answer is that herbivores need as close to a 360 degree field of vision as possible to spot incoming predators, whereas the predators require focus to be able to lock on to their prey and chase them down. In fact, the adaptation in both cases is even more specific, in that both have eyes with high density clusters of receptors corresponding to the horizon of their vision, in response to the flat and spartan geography of the planes. What is interesting about the example is that the different species of herbivore and predator which manifest the same feature have all developed it independently through *convergent evolution*. This is to say that although the particular phenotypic adaptation must be encoded for in each species DNA, the similarity in the the feature between species has nothing to do with similarity of DNA. This reinforces the point Ginsborg made about the multiple realisability of particular regularities. Getting back to the point, each species and each individual organism within that species has actualised one of two ideal events that populate the virtual plane of the savannah. These events are pre-individual in that they are not manifest directly in any given individual, but are still immanent to the savannah in that they are constituted out of the interacting potentials of the populations of predators and prey (including the real physical constraints upon their development) and the potentials of the geography within which they interact. Each species, as itself a larger individual, has through a process of adaptation incorporated this event, meaning that each individual organism exhibits it as actual, or rather, *tends* to exhibit it. It is this situation of ideal events within a given economy of potentials, such as an ecosystem and the various reciprocally conditioning niches which constitute it, that provides the 'general' purposiveness that we were looking for. That this purposiveness allows for what we have earlier called multiple realisability, or for tendencies in which different actual causal series can converge upon the same virtual event, is what Deleuze will affirm as the causality of *destiny* freed from that of *necessity*, precisely because it allows for freedom and variation despite providing something akin to a *telos*⁶⁶.

The individual signal-sign systems which evolve within particular contexts contract signs through being sensitive to particular conditions and responding to them appropriately. The sensitivity to these conditions is itself sensitivity to the signs emitted by other systems. This is in turn to say that they develop capacities to grasp the *sense* of these signs in relation to the problem which they must solve. So, the amoeba has evolved to be sensitive to particular concentrations of chemicals in its vicinity, whereas the fox is sensitive to the movements of rabbits and the smell of fresh water, and a high street shop is sensitive to the changes in spending habits of its customers. None of this is to say anything about the consciousness of any of these things, to impute an awareness of the necessity of these things for their survival, or rather the maintenance of their regular habitual behaviour (which can of course preference the process, such as the species as a

65 *The Collapse of Chaos*, pg 244

66 *LoS*, pg 194

whole, which is productive of individuals). As in the example of the swimmer given earlier, each individual sign system is constituted out of other lower level systems, the amoeba of organelles and complex proteins, the fox of organs and muscles, and the high street shop of building materials, sales staff and managers; each of these has its own *unconscious* micro-perceptions and its own sensitivities which come together to form a higher level system with its own perceptions and sensitivities. As Deleuze notes in his lectures on Leibniz, a cow does not desire the sugars, minerals and proteins that its cells do, it desires 'green', or the grass that provides these⁶⁷. A system that is individuated within a given context or environment has a sensitivity to those signs upon which its own perpetuation or stability depends, and it gains a sensitivity to these signs in virtue of adapting to the *senses* to which they correspond, which populate the environment as so many ideal events. An environment has its own code of signs immanent to it, which the individuals populating it can incorporate in part. An ecosystem has its various niches, each reciprocally conditioning the others, acting as so many different independent roles which are actualised in various different spatio-temporal combinations; a war has its own events, its own standard tactics and roles which each side falls into not through some prior design but because of the way the pre-individual tendencies of each come together to form a new problematic field with its own singularities within which the soldier is individuated.

We can now sketch an answer to the question posed above, of “exactly how the processes within which language usage is manifest can capture these events of sense so as to express them in propositions, without slipping back into an illicit transcendence on the part of the speaker?” The rough answer is that we create *concepts*, which are supra-personal collective systems which function in a way similar to individual species in adapting to and capturing events of sense. The individual persons bound up with the concepts thus gain a sensitivity to the corresponding signs in much the way that individual organisms of the species do. However, not only can these sensitivities change and develop in ways which are not constrained by the reproduction cycle as in biological evolution, but they enable the new collective forms of posing and solving problems supplied by discourse. Deleuze's account of concepts and their creation in *What is Philosophy?* should neither be taken as an account of the Idea by a different name, nor as an account of some new (perhaps *pure*) way of thinking, but as a proper description of the particular way of thinking involved in human discourse. It is this difference between the dialectical movement of Ideas, which is the movement of Being, and the nature of the concept that truly sets Deleuze apart from Hegel.

Now that we have a proper conception of the way in which Deleuze's ontology of sense reconceives of intelligibility we are in a position to complete this account by situating it in relation to time and nonsense. It is important to understand these in relation to one another, as they are

⁶⁷ Course on *Leibniz*, 29/04/1980, pg 10

intimately linked. Beginning with nonsense, which Deleuze has elsewhere called the aleatory point, the dark precursor, the object= x , intensity and *difference-in-itself*, it is not the absence of sense, but is opposed to this absence understood as the absurd. Nonsense is rather the donation of sense⁶⁸. A sign or proposition can never express its own sense, but nonsense is a paradoxical sign which expresses its own sense. As a dark precursor, it is never identical to itself, lacking its own identity, and as such is never identical to anything actual despite being productive of identity. As difference-in-itself or intensity it is the noumenon closest to the phenomenon, the sufficient reason of the sensible, which cancels itself in qualities and extensities⁶⁹. Most importantly however, it is the imperceptible which can only be sensed, that which begins at the faculty of sensibility and works its ways through the other faculties, pushing them to their limits, as the immemorial in memory, the unimaginable in imagination, the revolutionary in sociability, etc. always culminating in the faculty of thought as the unthinkable which still *must* be thought – that which *forces us to think*⁷⁰. Nonsense is as such the *unintelligible* opposed to the intelligible, but not as a lack of intelligibility, or as a thing-in-itself in principle beyond thought, but rather as that which disrupts and yet produces the intelligible.

Before we explore this further we should introduce more of Deleuze's conception of time. Deleuze has two different albeit compatible descriptions of the nature of time. Firstly, in *Difference and Repetition*, he describes time on the basis of three passive syntheses of time; these are present, past and future, respectively⁷¹. Secondly, in the *Logic of Sense*, he describes time as split into two different times: the cyclical time of the present, or *Chronos*, in which actual events occur, and the straight and tortuous pure form of time, or *Aion*, in which the present is merely a pure instant without thickness, perpetually divided between past and future⁷². We have already encountered the first synthesis of time in part, in the contractions of the individual signal-sign systems, or the larval subjects, and their emissions of signs. These larval subjects, or passive selves, go through series of contractions and expansions, each emitting a sign, or a phenomenal quality which measures a single lived present. As such, each individual has its own *rate of experience*, or *rhythm of duration*. DeLanda has described this best in terms of the way different cycles are nested within one another, thus constituting a whole range of different spatio-temporal scales⁷³. For example, a human has a particular circadian rhythm, which emerges out of the rhythm of its organs (pulsing of the heart, excitation of the senses, processing of the brain), which are in turn composed of the unique rhythm of the cells that make them up, so on. This is not to mention the rhythms of the economic cycles, all

68 *LoS*, pg 83

69 *D&R*, chapter 5

70 *D&R*, chapter 3

71 *D&R*, chapter 2

72 *LoS*, pg 72-73

73 *ISVP*, chapter 3

the way from working weeks to Kondratiev waves, which the activity of humans constitute. These different cycles together are the time of Chronos, which should not be read as a single cyclical time opposed to Aion, but as this multiplicity of different rhythms of duration.

However, this cyclical conception of time is inadequate. As Deleuze says, there must be a time in which the present can pass⁷⁴, or a time within which the contractions of the first synthesis can occur. To think of this another way, no particular rate of flow of time can be taken as *the* rate of flow of time, for to do this would be to privilege a particular form of being and as such to reintroduce a transcendence. However, the normal way of conceiving of a time without rate, to conceive of it not as a flow but as a dimension, is also inadequate (as Bergson has famously shown), because it creates a plenitude of actuality that leaves no room for virtuality – everything proceeds from one actual term to another, and all change effectively becomes the false movement of fully constituted actuals. The only alternative is to conceive of *a time that flows, but at no rate in particular*. This is quite difficult to conceive of, but Bergson provides the most fantastic metaphor in his cone of time. Each level of the cone contains the whole past but at a different degree of contraction or expansion, the higher up the cone the more dilated the past, and the more detailed or particular are the instances or presents which constitute it, and the lower down the more contracted and thus the more general these become. Deleuze notes that this infinity of levels provides all the degrees of difference⁷⁵.

To understand the significance of the metaphor of the cone it is important to ask: why is it a cone and not a triangle? It seems that the contraction and expansion of levels could be represented by such a shape. The reason this is not the case however is because the different degrees of contraction and expansion correspond to different *rates* of contraction and expansion, the different rates or rhythms of duration belonging to the larval subjects of the first synthesis. This can be seen by the fact that if one takes a cone and spins it on its end, each level will rotate at a different speed, and there is an infinite number of speeds distributed in a continuum along it, each being a different rate of change, or a *degree of differing*. We need not ask the absolute speed at which the cone itself rotates, this question stretches the metaphor to breaking point, all that matters is that there is a flow which is not that of any particular rate, a non-cyclical straight line of time, like a string wrapped around the cone and pulled continuously in one direction to make it spin. This time is the time of Aion, the pure form of time which brings together past and future.

Aion brings together the second and third syntheses of time, the pure past and the future, memory and death in contrast to habit in the present. Technically, the cone of Bergson belongs to the second synthesis of memory, and we must correct the perception that actual series of events are distributed around its edge, for the cone of the pure past is purely virtual. Rather, the pure past, as a

⁷⁴ D&R, pg 100-101

⁷⁵ Bergsonism, pg 112

transcendental memory, is the retention of the pre-individual tendencies out of which the actual is constituted, including those which are not currently actualised, but insist within actual solutions. Memory is this *insistence* of potential. The cone is as such constituted out of interwoven virtual multiplicities, those at each level governing the cyclical behaviour of the processes at that level, such as the simple predator prey cycle described earlier. The higher level, or spatio-temporally larger processes which the lower level processes constitute are the contractions of these lower level processes in the pure time of Aion, the lower level virtual multiplicities interpenetrating to constitute new surfaces with new singularities. This communication of singularities in the pure time of Aion is the *quasi-causality* of events among themselves that is distinguished from, although manifest in, the causality of actual states of affairs. We are now in a position to note why it is that asking for the absolute speed at which the cone spins in the above metaphor breaks this metaphor. The salient point is provided by Ian Stuart in his discussion of the merits of a phase space diagram of a pendulum:-

“If you want to keep things simple, there's usually a price to pay. Here the price is throwing away the precise time-dependence. The picture gives us no information at all about the sizes of the periods. In return for this omission, it does give a coherent and convincing qualitative description of *all possible motions* of a genuine – though idealized pendulum.”⁷⁶

The one dimension which we can never find in any phase space is time, it is only on the basis of abstracting from it that the virtual tendencies of the system, rather than the series of actual states the system occupied, can be isolated. It is in this sense that a dimensional conception of time leaves no room for virtuality. What we might think of as the 'motion' of the trajectory around this timeless space as such has no points of reference which could give us any notion of its speed. This is the reason that the points within the phase space do not correspond to a fully individuated actual state of affairs, but can be repeatedly actualised in different times. This is also why different potential final states can coexist in the same virtual multiplicity in the form of attractors, and these states can remain as potentials even while a different one has been actualised.

It is in the third synthesis, or the eternal return, that time and nonsense truly come together. To understand this synthesis, it is important to understand why the second synthesis is not enough, indeed why Deleuze had to move beyond Bergson, who had already attained the first two syntheses, to Nietzsche. The reason for this is that Bergson's pure past, in simply pre-existing the present, becomes transcendent in relation to it, taking on the character of a platonic realm of Ideas, which function as the original terms of which actual phenomena are merely copies. The reason for this is

⁷⁶ *Does God Play Dice?*, pg 81

that the pure past has complete retention – no potentialities are lost – and as such it is hard to see how they can be authentically *created*. It is as if the pure past acts like a single tendency which differentiates itself, of itself, into all other tendencies over the course of time, which is indeed the kind of picture which emerges in creative evolution, lacking any real creation, any discontinuous leap or transversal interaction between tendencies. In order for there to be a real flow of time, in which the virtual is truly immanent to the actual, the virtual must be reconstructed out of the actual at every moment. This is to say that in addition to habit as the foundation of time, and memory as the ground of time, there must be an *ungrounding* of time, in which all possible transcendent principles would be annihilated⁷⁷. This functions as a power of forgetting in relation to transcendental memory, a loss of structure, freeing up potentials for the generation of new tendencies (such as takes place in neotenus evolution⁷⁸). As such, we must affirm that just as there are singularities that can coexist, meaning that one can insist within the very actualisation of the other, there are also singularities that are incompatible, in which the actualisation of one means the abandonment of the other as a recurrent potential. It is for this reason that the third synthesis is that of death, but the other, positive side of death. This is because the death or destruction of a system is in turn the freeing up of the potentials of its parts to form new and different configurations. Situations such as this are examined by catastrophe theory⁷⁹.

Aion is this the pure instant with no thickness, between which the past and future are divided, which is to say that it is the time of the constitution of time (Chronos). The third synthesis binds together the first and second syntheses in their difference from one another as the form of the *unequal* itself, binding the virtual and actual together in their mutual immanence. However, in the case of each individual actual, there is a unique inequality which binds it to its virtual pre-individual tendencies. This is an intensity, or a nonsensical sign which initially causes the heterogeneous potentials of differing or disparate multiplicities to resonate and form the problematic field out of which an individual emerges. It is that which explicates itself in the quality that is the phenomenal *sign* that flashes across this system. Thus, in beginning the genesis of the individual system it implicates itself within it, continuing to function beneath its apparent extensity and quality, circulating between the series and maintaining the signals which constitute the system. However, this does not tell us where nonsense fits into our understanding of virtual multiplicities as phase spaces. *The Logic of Sense* is helpful on this point:-

“the entire organisation of language presents three figures: the metaphysical or transcendental *surface*, the incorporeal abstract *line*, and the decentred *point*. These figures correspond to

77 D&R, pg 113-114

78 *The Collapse of Chaos*, pg 88

79 *Virtual Mathematics*, pg 181-182

surface effects or events; at the surface, the line of sense immanent to the event; and on the line, the point of nonsense, surface nonsense, being co-present with sense.”⁸⁰

The transcendental surface is the virtual multiplicity populated by its ideal events, the line of sense is the trajectory which moves through the space, the solution which is actualised within space and time, and nonsense as the nonsense of the surface is the point which traverses this line, drawing the trajectory upon the surface, while at the same time never occupying any one point upon the surface, always displacing itself, lacking its own identity. The line of Aion is the line of the trajectory, but it is at once the line of all trajectories, the line of a time which cannot be measured. As Deleuze notes: “the entire line of Aion is run through by the Instant which is endlessly displaced on this line and is always missing from its own place. Plato rightly said that the instant is *atopon*, without place. It is the paradoxical instance or the aleatory point, the nonsense of the surface and the quasi-cause.”⁸¹ This means that the pure present or instant of each system which flows in the single time without rate, thus enabling the interaction of systems across differing spatio-temporal scales, is a nonsensical sign or intensity. At each moment all of the virtual is exhausted in the actual, but for that which insists within the actual by means of the nonsensical instant underlying every actual individual. There can thus be no identity or resemblance between moments, these must always be reconstructed or *simulated* by the eternal return of pure differences which always displace themselves, lacking any identity⁸².

However, this account of nonsense as the pure instant, or as the nonsense of the surface, only accounts for it as implicated within already individuated systems, but does not cover its role in the genesis of such individuation. This is the same difference as that between the two forms of thinking sketched earlier: that thinking or *contemplation*, which, although it is in a sense a problem solving, its adaptation stays still, changing to stay the same, and the thinking within thought that is the genesis of thought – that thinking which is *forced* by an *unthinkable*, an *uncontemplatable*. This latter thought returns us to learning as that from which the transcendental conditions of thought are drawn. To understand in what sense nonsense is unintelligible it is important to understand how the contemplation of larval subjects in the first synthesis functions. This contemplation functions on the basis of a horizon of expectation, or rather, on the basis of predictability. The larval subject does not know exactly what environment will throw at it, but in virtue of its structure (as described by its virtual multiplicity) it expects certain kinds of events. This is just to repeat that it has a sensitivity to particular kinds of signs, which it can interpret and respond to, thus solving the little problems posed to it. These not entirely predictable but expected signs are the shocks which effect the system,

80 *LoS*, pg 210

81 *Ibid.*, pg 190

82 *Ibid.*, pg 300-303

but which the system can dampen and eliminate. However, the nonsensical sign is a shock that the system cannot dampen, a pure eruption of contingency that is beyond the system's horizon of expectation, a pure *unpredictable*. It thus disrupts the regular problem solving activity of the system, unable to be thought, which is to say unable to be responded to by the system's current organisation, but yet demanding to be thought. Deleuze elsewhere describes this as an imperative question which as such poses a new problem⁸³. Nonsense thus brings about the dissolution of the current structure of the system, causing a redistribution of its singularities into a new problematic field from which a different system or systems emerge. This can amount to anything from what would be the perceived destruction of system, such as is caused by the shock which sets the heart into an arrhythmia from which it can't recover, or in the creation of new structure, as in the case of the species confronted by a new potential niche which it evolves to fill (a *learning*). In all cases there is an objective loss and gain of potential, a redistribution of singularities and a posing of new problems which generates new contemplative thought. However, the intensity or nonsense is never identical to any actual occurrence or affection of the system. For example, when the hunters on horse back ride into the fox-rabbit ecosystem and irreparably damage the fox population, an intensity passes through them, but is not identical to them. The intensity is only nonsense insofar as it disrupts the established order of the ecosystem, forcing the system to bifurcate, weaving a new metaphysical surface which it passes on to, becoming the mobile point which draws the trajectories of its actual solutions, holding its actual and virtual halves together as the pure instant of its time.

In conclusion, time and nonsense are inextricably linked, the time of the constitution of time being the time of nonsense as the very form of intensity itself⁸⁴. It is through this pure form of time that the virtual, as the sole seat of the intelligible, is made immanent to the actual causal series which populate the world, thus eliminating all transcendence. Deleuze has provided an account of thought which is situated in the world, and an account of sense in which it is both the expressed of propositions and the pre-individual event which lies at the quasi-causal genesis of the actual events which the proposition denotes. The Deleuzian world is filled by a multitude of rhythms of duration, all of which are thinkings situated within a field of Ideas immanent to their thought, united by the single, volcanic time of the unthinkable which continually erupts within the world, feeding contingency and unpredictability into it while at the same time producing new sense. These nonsensical eruptions are dice throws, and the form of time the single and same cast of all such throws.

83 *D&R*, pg 247

84 De Beistegui, pg 324-325