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**The Rhythm of Sensation on the
Surface of Sense:
Communication in Deleuze as
non-Sensed and Intense**

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Abstract:

This thesis examines Gilles Deleuze's philosophy of affect communication, with a focus on his writing on sensation in his book on the painter Francis Bacon. It also outlines a broader project that ties these ideas to Deleuze's philosophy of language. The main finding of this thesis is that a disorganization of the body (the "body without organs") is fundamental to communicating affections, and the thesis details how this process unfolds by means of the experience of disruptive visual rhythms. This analysis includes examinations of the works and theories of Paul Klee, Jackson Pollock, Wassily Kandinsky, Stan Brakhage, Olivier Messiaen, and Pierre Boulez.

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*I dedicate this work to my beloved,
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 whose care and support made this entire thesis possible.*

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Preface:

The Technique of Deleuze's Philosophical Language

We might find the craft of Deleuze's thinking in his insightful critiques — and in his ingenious innovations — of philosophical ideas. If so, when we explicate the meanings and roles of these concepts and the *ways* they are put-in play, then in a sense we are analyzing his philosophical *technique*: his unique way of doing philosophy. Deleuze himself refers us at times to artistic techniques, and even to media technologies, when giving substance to his more perplexing concepts regarding communication. We will explore some of these examples without losing sight of their philosophical purpose. Thus, I offer the following analysis of Deleuze's philosophical notions — along with their relevant illustrations — so that we may better integrate them into the larger context of his novel thinking.

We find Deleuze breaking from such philosophical traditions as the Kantian, phenomenological, and post-structuralist, in his efforts to provide new ways to consider perception, communication, self-identity, and thought. One philosophically unique feature of Deleuze's method is the balance he strikes between principles of order and chaos. This position proves sensible, because many other theories fall short by imbalancing order and disorder; as for example Derrida — in explaining the alteration dynamic of language — can be said to have overemphasized its chaotic element to the peril of his own theory; for, he admits that writing must be meaningless (hence his very own too), and that deconstruction would eventually self-deconstruct.¹

¹ Jacques Derrida, *Positions*, Transl. Alan Bass, (Chicago: University of Chicago Press, 1981), p.68. *Dissemination*, Transl. Barbara Johnson, (Chicago: University of Chicago Press, 1981), p.98. "Difference," *Speech and Phenomena And Other Essays on Husserl's Theory of Signs*, Transl. David B. Allison, (Evanston: Northwestern University Press, 1973), p.135.

We will not, in the following, examine the metaphysical implications of Deleuze's concept of change. Our focus lies in the *becoming* that thought, our selfhoods, and language undergo. We find that this tension between order and chaos reveals that we communicate when *non-sense is our medium*, that we think only when *confused*, that we are most ourselves when we *become into a new self-hood*, and that phenomena appear to us when we *fail to synthesize our perceptions*. However, we will focus primarily on communication, only sometimes suggesting how these other considerations could be further explored. (As well, the more developed doctoral version of this project will include certain other concepts and themes outside our current scope; for example, the psychoanalytic dimensions of Deleuze's thinking, as well as some material from his later works with Guattari).

Deleuze addresses the technical dimensions of communication, which we could ignore if all we wanted to know was *why* these notions appear in Deleuze's thinking; however, might not these examples obtain greater weight if we discovered *how* chaos and order mix in communication? Would we not be more compelled if we could see and hear this mixing happen with our own eyes and ears? Hence, I include some of Deleuze's technical explanations so to give concrete *force* to his position. Yet, the weight of these technicalities might become somewhat ponderous, and distract us from our real philosophical purposes. Hence, I save the most technical material for the appendix (for example, material from Olivier Messiaen's *Technique of my Musical Language*), which should be ignored unless one desires a more thorough and concrete explanation for what Deleuze means by 'rhythm.' Likewise, I bracket some technical material within the text, so that the reader may pass to the end bracket where I explain its philosophical import. I explore these technicalities, simply because Deleuze often provides no other illustrations. For example, when explaining rhythm, he does not reference other philosophers, but rather art and music. Such references as these accord with the nature of their

concept, because rhythm — according to Paul Klee — is a non-conceptual concept: it is something which obtains greater clarity in our minds especially when it is experienced in its natural milieu. And fortunately, Deleuze's musical and artistic examples offer enjoyable research material for those interested in following him in these directions.

Yet, the philosophical purpose of these illustrations lies more in adding demonstrative force so that they bear something like the weight of 'proof' for his theories, serving to 'verify' that his subject matter is really something, and not just an interesting and provocative combination of words or concepts. These intuitable examples offer a sort of 'evidence' to his claims which makes them more difficult to dispute.

Secondly, as we noted, the examples serve the purpose of illustration, which reinforces his concepts with more *substance*, if you will. My aim here is to enrich his terminology so that when we come across his seemingly vacuous technical terms, we become inundated with mental associations providing tangible and readily-accessible conceptual content.

To add to the difficulty of our task is Deleuze's tendency to twist the conventional meanings of certain words. At first we might stumble over his seemingly unwieldy usages, although in time his new meanings come to comfortably inhabit their respective words. Hence, we will have to reconsider the meanings and connotations for such terms as chaos, disorder, non-sense, stuttering, and catastrophe, so to obtain Deleuze's more positive and affirmative senses.

Also, because these terms receive their alternate meanings through his numerous different elaborations (and because I have chosen to remain faithful to Deleuze's explanations), we find that a byproduct of our examination is the occasional redundancy. Fortunately, however, each new elaboration clarifies the many nuances of his terminology, along with the continuities running through them. Yet in preparation, we will address some of Deleuze's more

prevalent and important terms, so that we may know in advance which ones have alternate meanings in his lexicon.

Disorder:

“Chaos” is a central concept in Deleuze’s thinking, and we address here Deleuze’s unique usage of it, on account of its far-reaching philosophical consequences. We will at first consider it abstractly, so that we have a framework for its more concrete elaborations in the text. We would normally define chaos as being the polar opposite of order. However, Deleuze’s definition of chaos is obtained from artist Paul Klee, who writes that *order* and *the opposite of order* sit on opposing pans of a scale, with *chaos* serving as the point of balance between them. It is important to find this median point; for, if Deleuze reduces everything to *static* order, then positive change and creativity become inexplicable. Or, if he overstresses disorder, then things cannot be grouped or added to each other, thus genesis would at best be a matter of continual disintegration (rather than being his additive repetition of differences). That is to say, the first approach cannot explain change, because if there is nothing to disrupt order, then there is no cause for alteration; yet, in the second case, if there is only disruption, then there would never begin to be something that could change in the first place.

Although, one complication with the term is that it is unclear whether *chaos* for Deleuze lies at the polar opposite of order, or at the balance-point between order and its opposite. This distinction really need not be determined, so long as we keep in mind that Deleuze is interested in the outcome of mixing order and disorder, whatever their degree of opposition on a scale.

Rhythm:

Rhythm is commonly considered to be a consistent temporal repetition. For Deleuze, *sensation itself* is rhythm, and he uses visual and musical analogies to illustrate. Generally speaking, rhythm for him is an *inhomogeneous repetition* in the way that sense impressions are given to us. Yet, his task first is to explain how any rhythm or repetition can be heterogeneous.

More accurately, Deleuze's rhythm is *between* the extremes of regularity and irregularity. It is both ordered and the opposite of being ordered, because there must be a "germ of order" before repetitions can be considered in terms of their disorderliness.² We might, then, imagine what is conventionally considered a rhythm, the ticking of a clock. Yet, for how long can we listen to those ticks before our minds wander? And what if the mechanism slipped, while our minds went drifting, and the clock skipped a beat? Would not we notice immediately? And what if something went terribly wrong with the mechanisms, so that the tics came fast at some times, slow at others, never bearing enough regularity so to be predictable? In this case, we would attend more to each tic in its individuality rather than regarding them as all the same, and we would remain attentive so long as the erratic tickings continued to defy our expectations. But who would consider this as rhythm? Deleuze does, following Pierre Boulez, Olivier Messiaen, and Paul Klee. They claim that irregular repetition is "rhythm," on account of it having enough regularity to suggest the possibility that some pattern runs through it, even though its irregularity continually defies our efforts to reduce it to any such perfectly self-consistent repeating sequence. The periods between tics cannot be so heterogeneous as to bear no relations to each other, or so homogeneous that we perceive them mindlessly. This is important to Deleuze's philosophy of phenomena and thought, because he claims that we do not think or have sensations when our faculties synchronize harmoniously, as they would do if

² Gilles Deleuze, *Francis Bacon: Logic of Sensation*, Transl. Daniel W. Smith, (London: Continuum Books, 2003), p.72. *Francis Bacon : Logique du la sensation* (Paris : Les Éditions du Seuil, 2002), p.96.

they unified all the regular tickings under the simple concept of “one per second.” Do we not soon become mindless and *insensitive* when listening to the clock? Thus, it is only when our faculties lose their synchrony that sensation and thinking happen, because our minds do not think unless they are challenged to learn new things, and it is only when phenomena do not appear as they should that we become most sensitive to them. For Deleuze, then, the chaotic mismatching of the faculties is related to our experience of *rhythm*. The example of irregular musical rhythms is really an analogy for a more obscure way that sensation happens. Certain other examples suggest themselves, but are not quite right. For instance, we might think of how a carnival mirror distorts the proportions of our reflection with each subtle change of perspective, thereby disorienting our faculties. Yet, this illustration also does not suffice, because eventually we would become accustomed to these distortions after soon recognizing the consistencies in the ways the images bend. Perhaps Deleuze's best illustration for the rhythm of sensation is his analysis of Kant's sublime, which we later address in full detail.

Intensity:

We normally would not consider intensity as a matter of difference. Yet for Deleuze the statement, “Intensity is difference,” is a tautology.³ Still, his definition bears a common attribute with our usual sense of the term, because we might regard intensity as resulting from the tension between contrary forces; and, similarly for Deleuze, intensity is the difference between our discordant faculties. If we were to encounter some bizarre exotic animal, we would perceive something for which we lack a satisfactory concept. This tension between our perception and cognition is something like Deleuze's intensity.

³ Gilles Deleuze, *Différence et répétition*, (Paris: Presses Universitaires de France, 1968), p.222. *Difference & Repetition*, Transl. Paul Patton, (New York: Columbia University Press, 1994), p.287.

Non-sense:

Deleuze ambiguously uses the term non-sense to mean two types. 1) Nonsense can refer to the disorder of our empirical faculties which are too disorganized to be able to sense and recognize a common object; this actually serves as a productive force for thought and sensation. In these cases when our faculties are highly activated but unable to coordinate, there is an empirical “non-sense” that can be detected in a different way (which he provocatively claims to be *transcendental*). 2) Deleuze's other meaning of the term *non-sense* resembles its conventional reference to logical nonsense or absurdity. What is interesting and unique about Deleuze's conception of this sort of non-sense is that it reveals the paradoxical inner workings of language.

Communication:

We usually consider communication as a transmission of some message or object. For Deleuze, however, aesthetic communication conveys among people the *differences* between their discordant faculties. These disorders, or *intensities*, can be transferred if the expression of one person's disorder deforms a medium which in turn disorganizes someone else's faculties.

Metaphorical Diagrams and Literal Diagrams:

Deleuze refers us to two different artists with contrary techniques for incorporating chaos in painting. We focus primarily on Francis Bacon's *diagramming*, and we should note from the beginning that in these cases, the term is used in a highly unconventional way: when Bacon diagrams, he introduces *disorganization* into his painting, and *not* order as we might expect. Thus, we must use this term metaphorically, because it signifies a random irrational mark on the painting that is *read as though it were* a graph or

diagram that shows new dimensions into which the painting may be deformed and distorted.

While in Francis Bacon's case he begins with *order* and deforms it with expressions of his internal disorder, Paul Klee begins with his internal *chaos* and partially orders it with a sort of formalizing structure which we would normally call a "diagram." Thus, only in Bacon's exceptional case will we take up this odd meaning for the term.

Although at first we might stumble over Deleuze's unusual meanings and concepts, it soon becomes clear how they carve his place outside prevailing philosophical traditions, by injecting new life and vitality into such stagnated notions as *faculty* and *sensation*. Our method here is to explore the many ways he elaborates the unique meanings of his terms, so we may obtain the philosophical value of his innovations.

Introduction:

The Logic of Difference

After first learning that Deleuze's text *Francis Bacon : Logique de la sensation* (*Francis Bacon: Logic of Sensation*) is about the artist and not the philosopher, a common initial curiosity is, "what could be Deleuze's reason for studying a painter?" And likewise we might wonder why Lewis Carroll's children's literature dominates his *Logique du sens* (*Logic of Sense*). What we find is that these unconventional examples demonstrate the central principles of Deleuze's critical apparatus, which successfully counters the prevailing schools that dominate theories of self-hood, thought, perception, and communication.

Phenomenology, for example, presumes that phenomenal objects appear to us when we synthesize a plurality of related sense "data" into a unified thing. This process happens often without our active intervention, because all the object's features already refer to each other associatively on account of their kinship relations: in perceiving a tree, for example, I need not consciously examine each leaf to determine whether or not it should be grouped with the leaves around it; for, their colors and proximities automatically associate them together as being parts of a whole. This *appearing* of the tree not only presupposes an internal harmonious organic operation of our consciousnesses, it also assumes we are in harmony with the world around us. Something appears to me when I am in such an intentional relation to it that I may correctly synthesize it and constitute it in my consciousness. Chaos enters the scene only in instances of *disappointment*, when new perceptions cause us to reconsider our syntheses, which Husserl illustrates with an example that works like this: we call upon the assistance of a store clerk whose back is turned, and he mysteriously refuses to acknowledge our requests. We

normally consider clerks as being helpful, so for a time there is a conflict that prevents us from synthesizing the phenomenal data into a unified object; for, his inattentiveness conflicts with his appearance as a clerk. However, we eventually will acquire more data; we might, upon arriving closer to the figure, see its plastic skin, and thus, we cover-over the previously-synthesized *clerk*-identity with its new constitution as a mannequin.⁴

Phenomenology depends on this guarantee that eventually these conflicts in synthesis can be resolved; for otherwise, our attempts to make sense of the world around us would prove utterly futile. There would be no need to do phenomenology if perception was nothing but continual ‘disappointment,’ that is, if the objects around us did no more than persistently disintegrate and become replaced by different disappearing objects. Why study object constitution if it were already an impossibility? It is for this reason that Deleuze’s contrary theory of perception poses such a threat to phenomenology; for, if he can offer an account of appearances that is based on a positive disorder and that better explains genesis without sacrificing a principle functioning like *unification*, then phenomenology loses its monopoly on the science of appearances. Throughout this thesis, we will detail the way that Deleuze adopts and *modifies* Kant’s doctrine of the faculties, which allows him to give a fruitful account of perception in terms of disorder.

In so balancing between order and its opposite, Deleuze introduces to philosophy a strange sort of unifying principle which is neither properly considered unity nor disunity; for, it is a relation of an entirely different order, based on a *new logic of difference*. In the case of the mannequin, the unity of synthesis was only possible when a uniformity was established in the phenomena, because the object’s different appearances as a clerk — and as

⁴ Husserl, Edmund, *Analyses Concerning Passive and Active Synthesis*, Ed. Rudolf Bernet, Transl. Anthony J. Steinbock, (Dordrecht: Kluwer Academic Publishers, 2001), p.63-72. Husserl’s mannequin example is slightly different, but it is modified here for clarity.

inattentive — had such a repellent force to each other that the phenomenal experience was suspended until additional data could determine which of the two object constitutions should prevail. Here, the disjunction between the two possible syntheses was a strict matter of exclusive *either...or...* (it could not be both, as with *inclusive* disjunction). For Deleuze, however, disjoined alternatives may *affirm* the other options rather than negate them, and each incompatible possibility (each *impossibility*) can coincide with the others, if some force causes them to superpose upon each other. This will only become clear through the elaborations in this paper, but we might begin with this example: something would not normally appear to us as being both a bird's outstretched wings and also as an animal carcass. Yet, Deleuze directs our attention to one of Bacon's painting techniques, which deforms figures so much that many incompatible pairings, such as wings and carcass, appear together as though they were the same phenomenon, which throws our faculties into disorder. In these cases, the disjuncts are impossible; but instead of negating each other, they affirm the difference spanning between one another. We will later see how Deleuze's modification of Kant's doctrine of the faculties makes this possible.

As well, when exploring Deleuze's theories of meaning-sense, we might be tempted to consider them as following in the post-structuralist tradition, being somewhat akin to its most successful theory or "strategy:" Derrida's deconstruction. And in a sense, Deleuze's portrayal of language as stuttering resembles deconstruction, in that it involves language changing from within itself. Yet Deleuze is anti-post-structuralist, because language for him is not a matter of the structural instabilities of significations that bring about their self-induced demise. The dynamics of language for Deleuze should not be considered in terms of the *de-structuring* process of language, but rather its *deforming* dynamic. This is his stuttering, in which meanings are disorganized so that new languages are born from within, and as well it operates by the

affirmative disjunction we mentioned above. Deconstruction works more by *negative* disjunction: when the new mark inscribes itself into the previous one, the prior becomes “erased” and replaced with another mark whose structural instabilities doom it to be effaced again.⁵ Yet for Deleuze, new meanings are added to previous ones, and still both remain together in their contrariety, with neither being negated. We will see how Carroll’s *portmanteau* words mash together two normally incompatible meanings in a way that keeps both distinct from one another while still being coupled. Thus, although Deleuze’s notion of the stuttering of language introduces new meanings into language by causing it to turn-back upon itself, his stuttering does not make language self-deconstruct. Rather, it forces language to encounter itself in such a way that it becomes something new through that encounter. Because these new developments in language are not explicable in terms of the weaknesses or instabilities in language’s structure, Deleuze seems not to be a post-structuralist (certainly not a deconstructionist). Thus, one reason we have for taking seriously Deleuze’s notions of communication is that if his theories are viable, then we may have at our disposal an alternate way to look at meaning which succeeds just as well as post-structuralism in explaining language’s dynamic, but without using its doctrines and methods.

Deleuze’s new ways to consider thought and self-hood will only be suggested here for later development, but some consequences are clearly implied: if our internal states are perpetually disorganized, then we can never obtain a stable self-identity. It is not that the self lacks a stable identity because it continually disintegrates, but rather because new properties (predicates) are continually added to it, which de-centers it without disintegration. This again is deformation rather than destruction. Also, our facultative disorder prevents us from recognizing an object; yet, our profound

⁵ Derrida, *Positions*, p.68. *Limited Inc*, Transl. Samuel Weber and Jeffrey Mehlman, (Evanston: Northwestern University Press, 1988), p.50.

efforts in trying to do so result in our mind's fullest activation, which causes us to continually create new concepts. It should be evident then, just how much philosophical weight lies in Deleuze's ideas, even if here it is beyond our task to show all the dimensions of his confrontations with philosophy's dominant traditions. Our primary aim is firstly to show that Deleuze has succeeded in creating viable alternatives and has provided compelling support for them. Thus, I offer the following work as material demonstrating that indeed Deleuze has revolutionized certain domains of philosophy and has provided a *fresh new promising* approach to longstanding philosophical enigmas.



Part I: A Program for the Entire PhD Project



Introducing:

The Rhythm of Sensation on the Surface of Sense:
Communication in Deleuze as non-Sensed and Intense

The fruits of this thesis are obtained by analyzing the following passage:

Et si le sens est nécessairement un non-sens pour l'usage empirique des facultés, inversement, les non-sens si fréquents dans l'usage empirique sont comme le secret du sens pour l'observateur consciencieux dont toutes les facultés sont tendues vers une limite transcendante. Comme tant d'auteurs l'ont reconnu de manières diverses... le mécanisme du non-sens est la plus haute finalité du sens.⁶

If sense is necessarily a nonsense for the empirical function of the faculties, then conversely, the nonsenses so frequent in the empirical operation are like the secret of sense for the conscientious observer, all of whose faculties point towards a transcendent limit. As so many authors have recognized... the mechanism of nonsense is the highest finality of sense.⁷

This is Deleuze's puzzling association of sense and sensation, as though connected by a shared non-sense. This project aims to uncover the philosophical notions relating and differentiating these two non-senses.

We will find that both communicate differences, except one remains submerged within the bodily depths of disordered faculties and organs where

⁶ Gilles Deleuze, *Différence et répétition*, (Paris: Presses Universitaires de France, 1968), p.201.

⁷ Gilles Deleuze, *Difference & Repetition*, Transl. Paul Patton, (New York: Columbia University Press, 1994), p.155.

rhythm reigns, while the other lies up above, on the surface where paradox and absurdity reside.

And yet, Deleuze may still have connected the two levels in his notion of *stuttering* in the art of writing. This thesis will explicate the differences between the levels of communication, and suggest how they might be intertwined in stuttering.

Doing so is a sizable undertaking; hence, the following work will contain both an introduction to the whole project, along with a more fully detailed elaboration of one of its parts. This way, the thesis will function dually as a doctoral project-proposal while also offering focused thetic research. Given its purpose and format, the introductory overview may seem inadequately researched. However, the thetic material will better satisfy our curiosities, and it will hopefully stand well enough on its own to demonstrate the feasibility of the project as a whole. One result of this format is a small redundancy, because the programmatic first part summarizes the whole project, including the expanded fourth chapter found here in the second section. To avoid this repetition, one could read the second section instead of its summary, before resuming the rest of the programmatic introduction.

We begin with Deleuze's modification of Kant's facultative discord in sublime experiences. Deleuze takes up Kant's doctrine of the faculties and his notion of intensive quantity, but critiques his claim that sublime experiences result in resolution. We then compare this notion of intensity with Bergson's formulation, finding the essential difference to be that for Bergson intensity is a matter of *heterogeneous quality*, while for Kant it is a *homogeneous quantity*. Deleuze's intensity borrows something from each, and diverges in a new direction: intensity for him is a *heterogeneous quantity*, on account of it coming about through an irregular and unpredictable *rhythm of sensation*. Because the intensities resulting from these sensational rhythms entirely disrupt our body's organic functioning, Deleuze will speak of such an intensified body as being

without organs. The body without organs (BwO) may communicate its intensities to other BwO's by means of *aesthetic analogies*, the created media whose deformations transfer facultative chaos from one disorganized body to another. A painter may create aesthetic analogies by means of *diagrams* which mix *ordered* modes of expression with *disordered* ones; these are the two sorts of communication that Deleuze names *analog* and *digital*. This mixture conveys the rhythm of sensation by preventing our faculties from ever synchronizing harmoniously so to recognize one-and-the-same object.

This empirical non-sense lying in the bodily depths of the BwO is expressed through an analogical language that Deleuze characterizes as Artaud's *schizophrenic speech*, which he contrasts with the more digitally based "surface" non-sense in Lewis Carroll's logical paradoxes and word-plays. Yet, although schizophrenic speech communicates the rhythm of sensation, it does not do so through written language. Carroll's nonsense, however, can at least express meanings, but it is incapable of conveying bodily intensity. We explore finally a possible solution in Deleuze's notion of *stuttering* language, in which the deformities of written texts cause not merely surface paradoxes but rather creative disruptions that break the steady rhythm of language's regularity with interruptions that could potentially function like diagrams do in painting.

Outline of the Program:

Part I: *Magnified Intensity*

Chapter 1: Sublime Rhythms

Chapter 2: Under Bergson's Hypnosis

Part II: *Rhythm in Chaos*

Chapter 3: Intensely DisOrganized Bodies

Chapter 4: A Shorthand of Sensation

Part III: *Language Disorders*

Chapter 5: Speaking Schizophrenically — Writing Nonsensically

Chapter 6: The Marriage of Sound and Sense: Language Born in Stuttered Script

Part I: *Magnified Intensity*

Chapter 1: Sublime Rhythms

We may trace Deleuze's notion of intensity to his commentary on the role of intensive magnitudes in Kant's sublime and the resulting violence and discord of the faculties. When our faculties function normally in sensation, the object we encounter is given to us with extensive magnitudes: it extends in time and space. Yet for Kant, the phenomenal object is not something that merely bears extensive magnitudes, it itself is a magnitude: "we might think of a walking stick as having a magnitude of [one meter]... in contrast, Kant thinks of the walking stick as *being* a magnitude."⁸ Objects appear to us with temporal and spatial features; thus, to be a phenomenal object is to be a magnitude (*eine Größe sein*), and we may estimate how great (*wie groß*) the extent of the magnitude (*Größe*) is.⁹ When we confront an object, we do not grasp its extensive dimensions all at once; for, no matter how small the object, a passage of time is required to scan its full spatial extent.¹⁰ It is not until we take all the extensive parts together that we comprehend the object, to take it as a whole; but this is done through a succession of apprehensions of the parts which are then retroactively synthesized into a whole. The imagination does this by reproducing the representations of the previously apprehended parts and then uniting them all into a synthetic representation of the entire object. The understanding then proceeds to recognize the object by identifying it with its proper concept. This harmonious cooperation of the faculties recognizing a shared object is our "common sense."¹¹

⁸ Daniel Sutherland, "Kant's Philosophy of Mathematics and the Greek Mathematical Tradition," (*The Philosophical Review*, Vol. 113, No. 2, April, 2004), p. 158.

⁹ Immanuel Kant, *Kritik der Urteilskraft*, (Frankfurt: Suhrkamp Verlag Frankfurt, 1957), B81; *Kritik der Reinen Vernunft*, (Frankfurt: Suhrkamp Verlag Frankfurt, 1956), B203.

¹⁰ *Kritik der Reinen Vernunft* B202-204.

¹¹ Gilles Deleuze, *Logic of Sense*, Transl. Mark Lester (London: Columbia University Press, 1990, reprinted by Continuum, 2001), p.89. *Logique de sens*, (Paris: Les Éditions de Minuit, 1969), p.95-96.

Unlike the magnitudes of these recognized objects whose extensive features we apprehend successively, *intensive magnitudes* are apprehended instantaneously and entirely, and their magnitude is a matter of their degree of influence on our senses. For example, the full moon's diameter may appear to be only somewhat less than the sun. However, emanating from this same approximate extent of space is a vast difference of intensity: the moonlight's glimmer is pale in comparison to the sun's shine, which is "about 200,000 illuminations of the moon," so bright as to burn the retinas of our eyes.¹² Yet, even though upon reflection we may compare their intensities according to standard moon-units of brightness, we do not perceive the intensity as having such a quantity, but instead only as being an unextended magnitude of greatness.

When experiencing the mathematical sublime, we confront something formless whose extensive magnitude is absolutely great (*schlechthin groß*).¹³ As such, there can be no end to the succession of apprehensions; and, our imagination, which dually reproduces passing appearances while representing those still appearing, encounters the limit of the amount of representations it may reproduce and synthesize into one object. Yet still, we desire the pleasure that results when our faculties fulfill their purpose of comprehension, and thus we add to the violence that the imagination already experiences from its being pushed past its limits, by pressuring the faculties to comprehend the absolutely great object. However, on account of its endless magnitude, the absolutely great object cannot be represented by comprehending its extensive parts. The best the imagination can do is represent the "subjective play of the powers of the mind (imagination and reason) as harmonious even in their contrast."¹⁴ That is to say, our faculties cannot represent the object, but rather

¹² Immanuel Kant, *Critique of Pure Reason*, Transls. & Eds. Paul Guyer & Allen W. Wood, (Cambridge: Cambridge University Press, 1998), B221.

¹³ Immanuel Kant, *Der Kritik der Urteilskraft*, B81.

¹⁴ Immanuel Kant, *Critique of the Power of Judgment*, Transls. & Eds. Paul Guyer & Eric Matthews, (Cambridge: Cambridge University Press, 2000), p.142.

only their own failed coordinated efforts to do so. This “negative” representation is then correlated with reason’s idea of the *absolute whole*, and thereby the violence is resolved, and our pain from the sublime experience is replaced by the pleasure of satisfying our purpose as rational creatures.¹⁵

In these cases when no extensive magnitude is sensed, only intensive magnitudes are experienced; however, Kant still subordinates intensity to extensity. Magnitude is homogeneous, because it is made up of numerically diverse identical parts.¹⁶ By comprehending the parts of an extensive magnitude into a whole, and then by comparing that whole with another magnitude, we measure the extensities of objects. Intensity, however, is not given in its parts, so its quantity is represented only by artificially imposing an extensive-like measure upon its magnitude, as if it extended in a homogeneously quantified dimension. We will find that for Deleuze, intensity is likewise a quantity, yet not a homogenous one; and he detects an *implicit* evaluation of a chaotic heterogeneous rhythm in Kant’s sublime experiences. To better develop these ideas, we will look at Deleuze’s interactions with Bergson’s notion of intensity as being made up of heterogeneous qualities.

¹⁵ *Critique of the Power of Judgment*, p.143.

¹⁶ Sutherland, “Kant’s Philosophy of Mathematics,” p.168.

Chapter 2: Under Bergson's Hypnosis

Bergson counters the belief prevailing in science and everyday life that sensations and mental states have *greater* or *lesser* quantity of intensity. He defines quantity as the degree to which one magnitude contains the other. Yet, 1) he notes that to make such an assessment, one magnitude must be superposed upon the other for comparison, and 2) intensive magnitudes cannot be superposed. Thus, we cannot speak of an intensive magnitude or quantity, because that would be an *inextensive quantity*.¹⁷ Despite this incompatibility, we are inclined to regard intensities as *quantitative*, because one intensity often *seems* greater than another. We reinforce this misconception by determining extensities that serve to measure intensities; for example, some scientists mistakenly measure intensity by reducing it to the extensity of the mechanical movements of atoms inducing our sensation: they might, for instance, attribute a strong sonic sensation to the vibrating air's molecular movements. Bergson's objection is that sensations which are disproportionate to their causes sometimes result from over-sensitivities to certain stimuli.¹⁸

Bergson distinguishes and exemplifies two forms of intensities, muscular efforts and psychic states, to illustrate their qualitative nature. It may seem at times that, for instance, our psychic experience of joy increases in intensity, when instead there is a large series of successive mental states, each one becoming differently "tinged with an indefinable quality." We then designate arbitrary "points of division" between successive forms of joy, which gives us the impression that they are increasing intensities of the same emotion. However, this distinction is really one of a gradual series of different

¹⁷ Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, Transl. F. L. Pogson, (New York: Dover Publications, Inc., 2001), p.1-3.

¹⁸ Bergson, p.6-7.

psychic states, a “progressive stepping in of new elements,” each one adding a different coloring to the emotion, and not a greater amount of it.¹⁹

Art provides an excellent example of the qualitative differences making up what *seems* to be an increase of emotional intensity. Art puts to sleep our active or resistant powers so that we may sympathize with its suggested ideas and emotions, as though entering a state of hypnosis. This is most evident in the rhythm of music and poetry, which suspends “the normal flow of our sensations” by causing our attention to sway to-and-fro between “fixed points.”²⁰ Yet, the plastic arts as well bear this hypnotic power of rhythm: sculpture perpetuates a sense of movement that is forever about to begin, which absorbs “our thought and our will in their own eternity;” architecture creates rhythm through the symmetries in its form and the repetitions of its motives, which causes “our faculty of perception to oscillate between the same and the same again.”²¹ Art seems to hypnotize us in progressive “variations of degree” that are really “differences of state or of nature:” at first we are partly attentive to the art, but also to peripheral matters. Slowly the rhythm draws us in until nearly all our sensations have become aesthetic ones. Hence, it was not the degree of the aesthetic feeling that increased, but merely that the conglomeration of constituent psychic states came to be colored differently by the art-work, as we progressed through a series of different emotional states.²²

Regarding the other type of intensity — the one involving muscular efforts — Bergson claims they involve a greater number of qualitatively-different muscle contractions, rather than a greater intensity of one fixed set of muscles.²³ To demonstrate, Bergson has us clench our fist with increasing force, which gives us the impression of a sensation of effort located in our hand and increasing in a scale of magnitudes. This feeling of increase,

¹⁹ Bergson, p.10-11.

²⁰ Bergson, p.14-15.

²¹ Bergson, p.15-16

²² Bergson, p.16-18.

²³ Bergson, p.24.

however, is an illusion. What really happens is a qualitative change of the sensation we feel in the hand, accompanied by qualitative changes in peripheral muscles, all of which change continuously and organically. What results is the false impression that a magnitude of intensity is increasing. Not only does the sensation in the hand alter, so too the sensations change qualitatively in the muscles of our arms and shoulders. In fact, as we squeeze our fist as hard as possible, our other arm stiffens, as do our legs, and our respiration becomes restrained, all as our whole body works merely to clench but one fist. Thus, while it may at first seem that the intensity of the sensation has increased, instead, we have become aware to some degree not only of the original primary sensations, but also of the peripheral ones, and as well of the qualitative changes altering the “colorings” of them all.²⁴ It is not like a note increasing intensity as it is played louder, but more like a symphony in which instruments join-in one after another to contribute new tones and timbres.²⁵

Also, unlike Kant’s intensive difference between the moon and sun, we often judge the intensity of light really by the changes of hue in the objects around us.²⁶ To demonstrate, we may perform an experiment of laying paper in front of four lit candles, then blowing them out in succession; it seems as though the light intensity decreases, when really a layer of shadow comes to pervade the paper, and thus the paper takes on a different shade of white. Black, he explains, has no less reality in our consciousness than does white.²⁷

Unlike in Kant’s case, intensity here is not a matter of a homogenous quantity, but is rather heterogeneous quality; that is, it is made up of a complex variety of smaller states, none of which having greater magnitude than another, but instead each being differently ‘colored.’ Yet, Deleuze’s intensity, we will find, is a matter of *heterogeneous quantity*, which is also for

²⁴ Bergson, p.24-26.

²⁵ Bergson, p.35.

²⁶ Bergson, p.51-52.

²⁷ Bergson, p.53-54.

him an uneven rhythm. One of the clearest examples that Deleuze offers for a heterogeneous quantity is found in his treatment of the energetic principles described in J.H. Rosny's *Les sciences et le pluralisme*. Although the book might seem more scientific than is appropriate for a philosophical analysis, I think that still if we grasp the basic notions which Deleuze derives from the text, we can have a concrete explanation for how quantity can be heterogeneous.

[In this text, Rosny explains that science studies our world, which is thoroughly complex. Yet, science's methodology begins with oversimplifications, so to determine basic principles. These provisional formulas and hypotheses really can never be more than approximations, because the complexities they reduce are far too diverse to be simplified.²⁸ As the sciences progress, their rigid simplified formulas become more approximate and numerous so to better fit the plurality of the objects and phenomena they study; hence, differences come more-and-more to replace what once were believed to be similarities.²⁹

One such relationship of difference that energetics studies is what they consider *intensity* (in the scientific sense of the term). Rosny notes that a gram of water may be heated to a higher temperature, but its heat does not extend in space and time as the water does. As we would expect, material objects in the world have spatiotemporal extensive features: they occupy space for a duration of time. They also have other measurable features and modalities that are *not extensive*. Temperature is considered to be one of these *intensive* properties.

To increase something's temperature requires the application of some amount of energy, and part of the task of determining that amount involves comparing the heat levels before and after it changes. So much energy is needed to heat an ice-cube until it becomes water and then evaporates. Yet,

²⁸ J.H. Rosny, *Les sciences et le pluralisme*, (Paris: Alcan, 1922), p.5.

²⁹ Rosny, p.6.

before the water boils, it must first be warmed to 50 degrees centigrade; and, to have raised it to that mid-point required some smaller amount of energy. Thus, each temperature change involves countless smaller divisions “concealed” within larger ones: 0 to 50 and 50 to 100, which conceal 0 to 25, 25 to 50, 50 to 75, and so on, each requiring a certain amount of energy to warm the water to these intermediate stages. Rosny’s formulation for this principle is the following: when intensive values change from $E - E'$, they conceal smaller ones, $e - e'$. This formula simply means, that when changing from one intensive magnitude to another, there are smaller constituent changes involving smaller amounts of energy. Deleuze, then, adopts and modifies this formula to explain the heterogeneities involved in what he means by ‘intensity.’ (When Deleuze speaks of intensity, he refers not the property studied by physics, but to the disorder of our faculties).

Rosny then explains two problems with measuring energy changes: the first is that there can be no complete absence of movement, vibration, heat, or energy (no state of absolute 0, for example).³⁰ Thus, the quantitative values of the change cannot be placed on a scale beginning from zero. Instead, all attributions of energy levels will always be relative to one other, and standard units will always be arbitrary and provisional; for, without an absolute 0, there is no orientational fixed-point *outside* their values against which we may measure their changes. We can only choose one state arbitrarily as a standard point of comparison, and measure changes against it. Yet, even this effort is complicated by another problem: energy levels are always changing and never completely stable. There is no fixed level of energetic intensity that can be arbitrarily assigned as the orientational point for determining changes, because no level of energetic intensity is ever fixed in its place. Thus from the beginning, there is reason to believe that our

³⁰ “It is said that in general there are no reports of null frequencies, no effectively null potentials, no absolutely null pressure, as though on a line with logarithmic graduations where zero lies at the end of an infinite series of smaller and smaller fractions,” Gilles Deleuze *Difference and Repetition*, p234. *Différence et répétition*, p.302.

homogeneous numerical scales of quantity — increasing from zero and having determinate points of value along through it — do not apply well in the case of energetic intensities, which necessarily lack this zero-point.

Yet, many scientists make such measurements under the hypothetical presumption that for any change of temperature, the change must first reach a half-way point before proceeding to the end point. The amount of energy needed to make the first half-change, they presume, must be equal to the second half-change. And furthermore, they presuppose that this proportionality holds no matter how many times we divide the changes. In other words, according to this methodology, intensive energy-changes are homogeneous values, because they are composed of consistent and regular units.

However, according to Rosny, energeticists and kineticists have found that there is not homogeneity on the infinitely-small scale. Rather, on these minutest levels, the differences within differences are not quantitatively homogeneous. If we looked at an infinitely small difference in temperature change, and looked at the small changes within it, on this level, the amounts of energy needed to make these small sub-progresses is erratic and inconsistent, and thus not quantitatively homogeneous throughout. If that is so, then the larger differences they compose are likewise not homogeneous, all the way up to original change we considered before taking into account its divisions, which thus could not then be homogeneous.^{31]} Hence, measurements of energy or other intensities are additions of non-uniform quantitative differences.³² In this way, quantity reveals its qualitative content, because a change of intensive quantity is made-up of a heterogeneity and not a homogeny.³³

³¹ Rosny, p.67-69.

³² Rosny, p.66.

³³ Rosny, p.6-7. Also, *Difference & Repetition*, p.222. *Différence et répétition*, p.287.

This illustration is of central importance to Deleuze, who is not critiquing scientific methods, but instead theories of sensation. Deleuze's position is that there is a particular magnitude involved in our perceptions, but it is "intensive," and is thus a heterogeneous quantity. We later explain this in terms of Deleuze's modification of Kant's doctrine of the faculties. Yet, what is pertinent here is that because this intensive magnitude cannot be given a standard unit of measure, our efforts to do so result in an internal disorganization; for, our faculties *try* to reduce the magnitude to a value made-up of standardized units, but inevitably and continually fail to do so. With his work with Rosny in mind, then, we might better understand why for Deleuze intensities are a matter of heterogeneous quantities made up of mutually affirming differences of other differences.

To emphasize these points, Deleuze adopts Rosny's formulation when describing intensity in terms of difference, writing that each intensity is an $E - E'$, and each E refers to an $e - e'$, then adding to Rosny's formulation, that each e refers to an $\varepsilon - \varepsilon'$ to underscore the endlessness of the divisions. In Deleuze's case, intensity is the difference between heterogeneous *series* that each include heterogeneous terms.³⁴ How we might conceive these terms is unclear: they are indeterminate differences between other differences, with seemingly no self-same term emerging out from those differences. (In fact, it even could be that these terms are somehow no more than quantitative differences).³⁵ Perhaps it helps to consider that etymologically the word "*term*" suggests "limit" or "boundary." If the series are made up of indeterminate differences, then we might consider the terms to be the indeterminate boundaries between those differences, where differences come together without overlapping "organically" or synthetically; that is to say, terms do not

³⁴ *Difference & Repetition*, p.222. *Différence et répétition*, p.286.

³⁵ "That is why differentials certainly do not correspond to any engendered quantity, but rather constitute an unconditioned rule for the production of knowledge of quantity, and for the construction of series or the generation of discontinuities which constitute its material," *Difference & Repetition* p.175. *Différence et répétition*, p.227.

merge with each other in synthetic continuum as do for example the intentional Now moments of Husserl's stream of time consciousness. Rather, they are boundaries or breaks, although not between *things*, but between *differences*. Hence, we might think of "terms" as these elusive indeterminate boundaries between heterogeneous differences, but this will be elaborated later when we explore indeterminate rhythms.

Moreover, just as intensity for Rosny was the sum of incongruous differences, similarly for Deleuze, intensity is the "sum" or "affirmation" of the differences between series (which themselves are made up of differences). To remain focused on the topics of sense and sensation, we do not here in this thesis treat the series as metaphysical or mathematical abstractions, but instead as sequences in our faculties and in language. However, the difficulty we encounter is understanding the differences between series (their intensities), because we cannot do so compositionally by progressing in our account from the simple to the complex, beginning first by considering the differential terms, then imagining them in series, and finally thinking of the differences between two series. Terms are not homogeneous or self-identical, but are rather differences of other differences, or maybe even the indeterminate boundaries between differences. Thus, we cannot begin our explanation by building up from these elusive terms, as though they were bricks lying upon a solid foundation.

To better grasp how something can be no more than a difference between other differences, we might consider Saussure's account of terms deriving their meanings according to their differential relations to all other terms. In other words, in language there are no positive terms, because each term is no more than its differences to other terms which likewise are no more than differences: "*Dans la langue il n'y a que des différences sans termes positifs.*"³⁶ Hence, each term is a difference with other differences.³⁷ Deleuze

³⁶ Ferdinand de Saussure, *Cours de linguistique générale*, (Paris: Payot, 1967), p. 166.

does not mean exactly the same thing by “terms,” and precisely why is hard to say, but we know that terms are positive differences. A term for him is not a “focal point of economic condensation” in a network of other terms;³⁸ rather, it seems to be the coupling agent that brings one difference together with another, even though they are incompatible and heterogeneous.

Because we cannot consider Deleuze's “term” as a compositional atom, we begin instead at a higher level of complexity — rhythm — which is the superposition of different and changing intensities. Starting from this level will not make the matter entirely concrete; for even Deleuze ponders, “what could be more abstract than rhythm?”³⁹ Nevertheless, our efforts will enhance Deleuze's sparse elaborations.

³⁷ Jacques Derrida, “Différance,” *Margins of Philosophy*, Transl. Alan Bass, (Chicago: University of Chicago Press, 1982), p.5; 11.

³⁸ Jacques Derrida, *Positions*, Transl. Alan Bass., Chicago: University of Chicago Press, 1981), p.40.

³⁹ Gilles Deleuze, “Cours Vincennes: synthesis and time - 14/03/1978,” webdeleuze.com.

Part II: Rhythm in Chaos

Chapter 3: Intensely DisOrganized Bodies

As we described previously, in Kant's experience of the sublime we encounter something whose magnitude exceeds our capacities to comprehend it. Normally we apprehend objects part-by-part in their chain of succession, eventually comprehending them together, which, Deleuze explains, we accomplish by selecting an apprehension to function as a standard unit of measure. This unit should be in proportional "harmony" with what it measures, although it varies for each instance, because, he says, "apprehending successive parts implies... something like a lived evaluation of a unit of measure. But in following the nature of objects there is no constant unit of measure," (*Appréhender des parties successives ça implique... déjà comme une espèce d'évaluation vécue d'une unité de mesure. Or suivant la nature des objets il n'y a pas d'unité de mesure constante*).⁴⁰

For example, when seeing a tree, we might apprehend the parts by looking first to the top, then move our eyes bit-by-bit towards the bottom, thereby assessing that the tree has a height of ten people. But when seeing the mountain behind the tree, we look-it up to the top and assess it as ten trees tall. So the unit of measure varies according to the circumstance, but in each case, it must be in due proportion and harmony with the object it measures. What must be involved in these acts of comprehension, Deleuze suggests, is an *aesthetic comprehension* of the unit of measure, based on an evaluation of the "rhythm" of the succession of apprehensions, as though they had a rate which could be quantified by juxtaposing a homogeneous part to the whole flow, like a beat with a particular tempo.

⁴⁰ Gilles Deleuze, "Cours Vincennes: synthesis and time - 28/03/1978," webdeleuze.com.

Yet, as sublime experiences demonstrate, the rhythm cannot be assessed by an equal, steady, and consistent comparison of homogeneous differences; rather, this rhythm is continually heterogeneous and uneven. However, merely for the purpose of comprehending our experiences, we evaluate an *approximate* regularity in the flow of temporally and spatially determined apprehensions, as Deleuze says, “we plunge into them in a sort of exploration,” (*on s’enfonce comme dans une espèce d’exploration*).⁴¹ Which is to say, that the proportions in our apprehensions are continually changing, as though we were looking upon our reflection in a carnival mirror from different angles at a time. Objects, then, are originally given to us as deformations, because they appear at varying scales, distances, and angles.

This inconsistency of proportion is one reason that Deleuze discovers a heterogeneous rhythm in Kant’s notion of perception. We should look first at the metaphorical implications of the term *rhythm*. We normally measure temporal rhythm by consistent ratios: the clock ticks were one per second. Kant’s *aesthetic comprehension* of a unit of measure is analogous, but considered more in terms of *spatial extent* (‘ten trees per mountain’) rather than *temporal extension* (‘one tick per second’). However, there is also a sort of temporal rhythm to the apprehensions, because if, for instance, our eyes are moving more rapidly, then the smaller apprehensions might be arriving faster. As well, there is a temporal rhythm to our comprehensions, because if we were standing far from the tree, we would comprehend its size quicker than if we were standing underneath it; because, from this more awkward angle, we would have greater difficulty comparing the disproportionate top with what lies near us at the bottom. Thus, it would require more apprehensions per comprehension.

But even in these exceptional examples, the difficulties we have in making aesthetic comprehensions is not a complete disaster to our perception,

⁴¹ Gilles Deleuze, “Cours Vincennes: synthesis and time - 28/03/1978,” webdeleuze.com.

because we can adjust to the abnormalities after some time. Our exploratory “plunge” into the rhythmically irregular apprehensions results in our emerging with a sort of map or representative depiction of the objects and their correct spatiotemporal relativities to each other, despite them having been given without these universal regularities.

Yet, these *evenly-proportional* ratios between the measuring apprehension and the comprehension are not what Deleuze means by rhythm, which for him is *chaos* and *catastrophe*. He illustrates these notions with the powerful example of Kant’s sublime experiences. As we noted before, in these instances we perceive something with an absolute magnitude, which means that it goes beyond any possible measuring unit. For this reason, when perceiving it, there is no end to the succession of apprehensions; so, there is never a whole that can be measured with finite units. When we try to find one, the whole increases, and we continue to make larger-and-larger units, none being adequate: “each time I find one it is destroyed. So I am pushed as if by a wind at my back to choose bigger and bigger units of measure, and none is adequate” (*Chaque fois que j’en trouve une, elle est détruite. Alors je suis poussé comme par un vent dans le dos à choisir des unités de mesure de plus en plus grandes, et aucune n’est adéquate*).⁴² This is the *first catastrophe*: we become disoriented and dizzy, because without possessing a common universal measure, we do not have any stable point of orientation in our perception of the world around us. It is as though the whole world were appearing in a waving carnival mirror. We may then only distinguish “completely heterogeneous parts,” and as we come to have new apprehensions, we forget the prior ones, which pushes us “into going ever further and losing more and more,” enhancing our dizziness. This is the *second catastrophe*, in which we are no longer able to synthesize our apprehensions.⁴³ For example, our eyes might move upwards from the mountain to the expanse of the starry night

⁴² Gilles Deleuze, “Cours Vincennes: synthesis and time - 28/03/1978,” webdeleuze.com.

⁴³ Gilles Deleuze, “Cours Vincennes: synthesis and time - 28/03/1978,” webdeleuze.com.

sky; and when trying to measure its extent, we continually discover that between each star are more fainter ones, and between those even more. We uncover galaxies in what we previously thought were but single points of light, so that it becomes impossible to assess the night sky's extent, on account of its infinite depth: even its tiniest parts conceal cosmic expanses that are far beyond our comprehension.

As Deleuze explains, "beneath measures and their units, there are rhythms which give me, in each case, the aesthetic comprehension of the unit of measure. Beneath the measure there is the rhythm. But this is the catastrophe," (*Sous les mesures et leurs unités, il y a des rythmes qui me donnent, dans chaque cas, la compréhension esthétique de l'unité de mesure. Sous la mesure, il y a le rythme. Or la catastrophe est là*).⁴⁴ That is to say, we comprehend objects in the chaos of sensation by first aesthetically apprehending a unit to measure them. However, what determines the size of the measuring unit are the proportions and rates of our perceptions, which are not regular enough to be simplified into consistent numerical divisions; for, our sensations are given to us in a way that has both regularity and irregularity. Hence, spatiotemporal extents appear in unpredictable and varying ways, which nonetheless seem manageable. We continually try to find the proper units of measure, even though the irregularities of perception make it impossible for our measurements to be precise. This strange mixture of order and its opposite, which is inherent to all our sensations, is what Deleuze calls *chaos*. (Perhaps we might venture to say that Deleuze seems to think that for Kant, perceptions are given to us already with spatial and temporal features; however, the *way* these spatial and temporal features are given to us is *without spatiotemporal regularity*. Yet, we must artificially establish some regularity for the purpose of comprehension. So, the *inherent irregularity* of

⁴⁴ Gilles Deleuze, "Cours Vincennes: synthesis and time - 28/03/1978," webdeleuze.com.

their way of being given to us, then, might be the rhythm of sensation in this Kantian context).

For Deleuze, this heterogeneous rhythm is what disorganizes our faculties, although this relation between the rhythm of sensation and the discord of the faculties calls for clarification. The internal conflict in sublime experiences is found primarily between the faculties of imagination, understanding, and reason, all of which strive together to obtain knowledge, which is our purpose as rational beings. Reason is the faculty that forces us to “unite the immensity of the sensible world into a whole,” (*rien d’autre que la raison ne nous force à réunir en un tout l’immensité du monde sensible*).⁴⁵ The understanding provides us with concepts; the imagination synthesizes apprehensions into representations. When the understanding’s concept matches the imagination’s representation, the object is recognized.

Discord comes about in sublime experiences when this matching procedure is thwarted: the apprehensions are too numerous to synthesize, so the imagination never produces a complete representation that might correspond to a concept. Despite this impossibility of accord, reason violently pushes them to the limits of their capacities, which causes us to suffer pain.

If it is on account of the irregular rhythm of sensation that the imagination is unable comprehend the apprehensions, then we can see how rhythm is responsible for the disorganization of the faculties. We might also say metaphorically that they are out of *synchrony*, because when they recognize an object, they come together at the same moment, and then may together at once move-on to the next task. However, when they are in discord, the understanding might run through numerous possible concepts all while the imagination has synthesized only a few partial representations. Hence, we may consider the discord of the faculties both as a disruption of

⁴⁵ Gilles Deleuze, *Kant’s Critical Philosophy: The Doctrine of the Faculties*, Transl. Hugh Tomlinson & Barbara Habberjam, (London: The Athlone Press, 1984,) p.51. *La philosophie critique de Kant : doctrines des facultés*, (Paris: Presses Universitaires de France, 2004, originally 1963,) p.74.

harmony and *synchrony*, the latter metaphor being important for regarding disorder in terms of *rhythm*.

Because we are continually thwarted from comprehending and recognizing the object in sublime experiences, Kant claims that we sense the object as *formless*.⁴⁶ Deleuze adds that the object is also *deformed* (*difforme*), on account of the interesting way that he modifies Kant's doctrine of the faculties.⁴⁷ Deleuze's transformative renewal of this theory is central to his anti-phenomenological account of perception; so, he defends it with strong words, writing that Kant's doctrine of the faculties is "an entirely necessary component of the system of philosophy."⁴⁸ We noted that in phenomenology, chaos becomes a factor in perception when our expectations are disappointed, because we have two conflicting possible syntheses; this conflict, then, temporarily suspends the unification of the sense data. Yet, object constitution happens on the level of the passive association of the constituent appearances of the objects, on the basis of kinship relations that refer to each other.⁴⁹ Disappointment only occurs when we were wrong in our unifications. Phenomenology could not possibly mix chaos and order on this level, because the "agency" of the unification is found within the features of the appearances themselves: the tree's leaves already bear such similar features as to not require a precise analysis of each one in order to determine that they are the foliage of *one* tree. According to Husserl, we associatively identify objects through connections of *homogeneity*, and distinguish them with relations of *heterogeneity*.⁵⁰ If phenomenology took into consideration the chaotic rhythm of sensation that Deleuze describes (perhaps by giving a phenomenological analysis of sublime experiences), it would encounter the difficulty of explaining an *associative synthesis* of the *heterogeneous*.

⁴⁶ "das Erhabene ist dagegen auch an einem formlosen Gegenstande zu finden," Immanuel Kant, *Kritik der Urteilskraft*, B76.

⁴⁷ Gilles Deleuze, *Kant's Critical Philosophy*, p.50. *La philosophie critique de Kant*, p.73.

⁴⁸ *Difference & Repetition*, p.143. *Différence et répétition*, p.186.

⁴⁹ Husserl, p.175.

⁵⁰ Husserl, p.175.

Deleuze, however, is not interested in giving an account of passive synthesis. Rather, he wants to show that there is a sort of sensation that has nothing to do with synthesis and identification. And, the fact that it is chaotic presents no problem for Deleuze's theory, because raw sensations do not require any sort of organizational procedure.

Hence Deleuze's interest in the faculties: by claiming that "phenomena" come about through a tension between 1) our tendency to find order where it is *suggested*, and 2) the inherent irregularities thwarting these efforts, Deleuze can account for experiences which we are more compelled to call sensations, on account of their engaging our empirical faculties to the maximum degree.

The first modification of the doctrine of the faculties, then, is the impossibility of resolution; the second is that the organs of sensation are provisional and indeterminate, and perhaps also the faculties are too. In the very least, we can say that we find Deleuze speaking of such determinate faculties as the *imagination* and *reason* only in reference to Kant; in the other instances, he writes of *zones*, *levels*, and *provisional organs*. We will consider two possible reasons: 1) Deleuze still implies that intensity is the difference between such determinate faculties, that is, the degree to which they are disorganized and out of synchrony, or 2) the faculties are not determinate but temporary and changing. Given that intensity is the difference *between* the faculties, and that we are concerned here more with what intensity is, rather than with what faculties are, I suggest we postpone making an accurate description of the faculties, and instead examine the way Deleuze writes of intensity on the bodily level. He speaks of how certain sensations pass from one *level* to another, and how *abstract art* produces sensations that bypass the *nervous system* and go straight to the *brain*, on account of them being experienced abstractly in the mind.⁵¹ Perhaps for now, we could consider the

⁵¹ *Logic of Sensation*, p.26. *Logique de la sensation*, p.41.

Kantian faculties (namely the understanding, reason, imagination, and sensation) as being different functions of the *nervous (and cerebral) tissue*; and, when different regions or functions fall out of coordination, we could think of this as intensity. Also, because these different regions or functions need not be predetermined, we could consider them as indeterminate “faculties” whose loose boundaries move around the body according to the nature of the sensation.

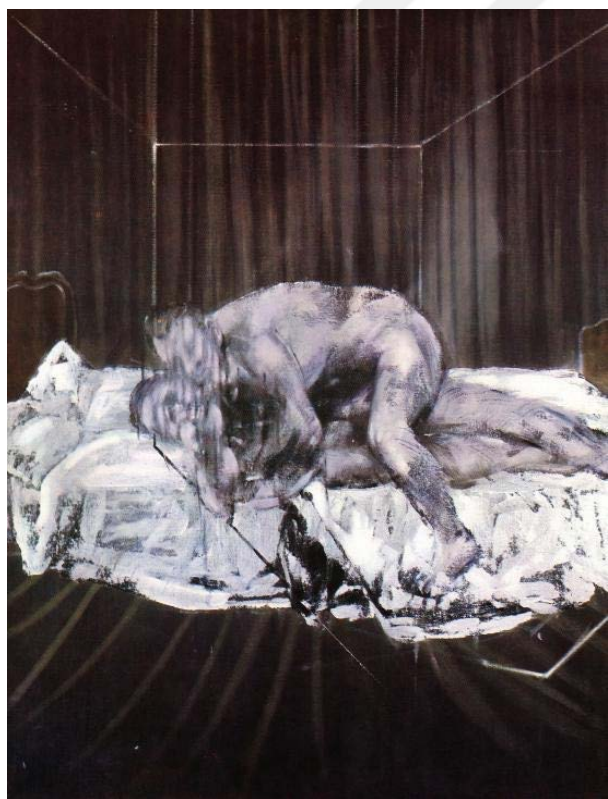
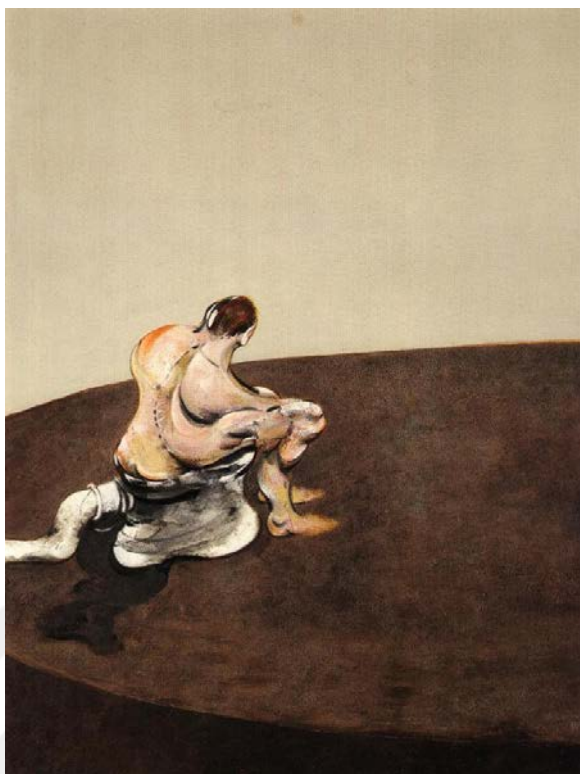
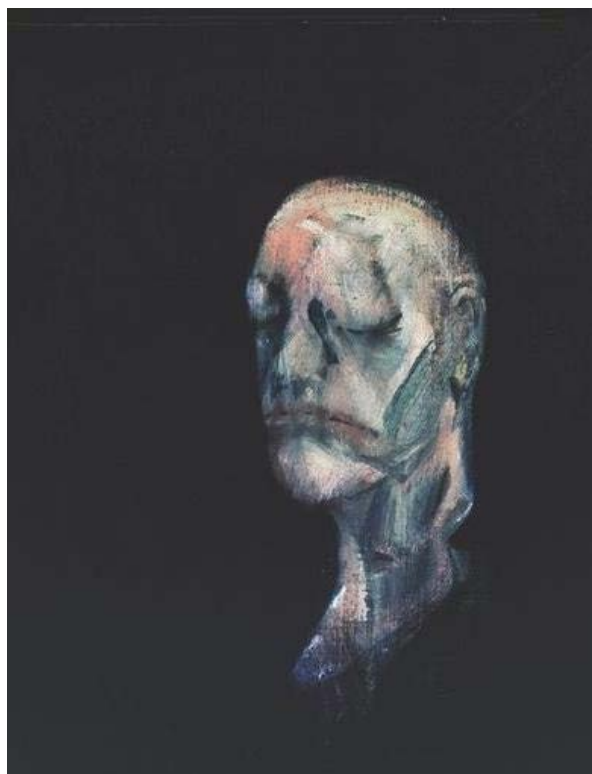
Tomas Geyskens’ paper, “Painting as Hysteria: Deleuze on Bacon,” provides further elaboration on our physiological disorganizations. Citing Josef Breuer’s work in *Studies on Hysteria*, Geyskens describes a symptom of hysteria in which the hysteric’s thoughts can cause patches of inflammation on the skin.⁵² Could it be that some disruption in the brain-tissues’ functioning sends waves of nervous energy to the flesh, disrupting its orderly operation? In fact, according to Deleuze, a “wave” of “vibration” with a “variable amplitude” is always flowing through our bodies. Geyskens draws from another passage by Breuer who claims that one’s “cerebral path of conduction” does not resemble a “telephone wire” that becomes excited only when certain circumstances call upon it to “transmit” a “signal” of nervous energy from one part of the body to another. Rather, we must instead consider this nervous “telephone line” as conducting a *constant flow* of electrical current that is prerequisite for any sensation.⁵³ Deleuze explains that this nervous energy flows-around our body’s *zones*, *oscillating* at varying degrees of *level*, which is their *valency*: their strength, power, or amplitude.⁵⁴ When it “encounters external forces at a particular level,” a sensation appears.⁵⁵ Perhaps what Deleuze means, is that when sensation occurs, the always-flowing energy wave will be at some zone of the body, which will be

⁵² Tomas Geyskens, “Painting as Hysteria: Deleuze on Bacon,” delivered at *Philosophical Criticisms of the concept of Sexuality in Psychoanalysis*, Katholieke Universiteit Leuven, 5 March, 2008, p.7.

⁵³ Geyskens, p.7.

⁵⁴ Deleuze, *Logic of Sensation*, p.28. *Logique de la sensation*, p.43.

⁵⁵ *Logic of Sensation*, p.34. *Logique de la sensation*, p.49.



stimulated by an exterior force that *adds* an additional intensive wave to the one already flowing through that region of contact. In this place where the two waves of different valencies are coupled, *forced together*, a *provisional organ* springs-up and endures for only as long as the force acts upon it. Afterwards, it recedes back into the body and springs-up again in another zone when having another sensation.⁵⁶ A body under the influence of sensations in this sense, then, is not a body working organically, as we find in the case of phenomenology's *corps vécu* (lived body); it is not the body as *la chair* (flesh) but as *la viande*: meat.⁵⁷ The body's meat hangs off the bones, as Deleuze illustrates with Bacon's *Study for Portrait III, after the Life Mask of William Blake*.

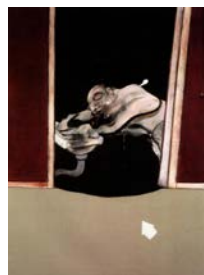


Although seemingly lacking in animation, butchered meat in a sense is still “alive;” it is able to contort under the influence of stimuli, as Luigi Galvani demonstrated in his classic experiment (1771) in which he made dead frogs’ legs twitch by applying electrical current to them. Thus, even though the body as meat is not the lived body, it is still a body alive with sensations that activate it by disorganizing its “zones” with coupled energy waves of different levels, which circulate unpredictably through different areas in a confusion of sensations. The butchered body, then, is not made-up of discrete organs working together in organic harmony; but rather, it is one big *indeterminate organ*: a disorganized body whose organs are temporary, and come about only when forces evoke even greater disorganizations, as in the case of sensation.

⁵⁶ *Logic of Sensation*, p.34. *Logique de la sensation*, p.49-50.

⁵⁷ Geyskens, p.8. Deleuze, *Logic of Sensation*, p.32; 34. *Logique de la sensation*, p.47; 49.

The body's surface zones — where sensations bring about indeterminate organs — might be related to Deleuze's account of the *erogenous zones*, which are “cut up on the surface of the body, around orifices marked by the presence of mucous membranes;” and he adds that even internal organs can be considered as erogenous zones.⁵⁸ Although it is not clear if the zones of *sensation* are erogenous zones, it helps to draw this parallel when considering the provisional organ. The examples in Bacon's artwork that Deleuze uses to illustrate such provisional organs are often erogenous zones: the mouth, anus, and genitals. Deleuze exemplifies these zones by directing our attention to such paintings as these below (*Two Figures* 1955; from *Triptych, Three Figures in a Room*, 1964; and from *Triptych*, May-June 1973. Color images found on the image-panel beside page 42).



In these paintings, an enclosure (circle or some other geometrical shape) applies *pressure* to the figure in the painting, whose interior seeks release

⁵⁸ *Logic of Sense*, p.226. *Logique du sens*, p.229.

through one of these provisional organs, serving as holes of escape; (we address this in more detail in the second part of the thesis). What is important to note is that the body's internal waves meet an exterior force of influence, creating a sensation where the two cross, which *brings about* the organ at that place of contact. What we see in the bottom painting is that "what is a mouth at one level becomes an anus at another level;"⁵⁹ that is to say, the particular circumstances of the coupling of internal and exterior forces determine the sort of sensation we have, and thus also the sort of provisional organ.

We could, then, consider intensity as the amount of disorganization in our butchered body, happening when different zones are channeling different valencies of nervous energy. This would correspond to many of our experiences of disorientation: the greater our internal disorders, the more intensity we feel in our confused sensations. From Deleuze's perspective, intensity is not the sum total of all the valencies of nervous energy; instead, it is the amount of dis-coordination between the zones channeling varying levels of energy. When disorganized to such an extent, intensities flow freely through the body, which is made-up of one *indeterminate organ*, and is thus "the body without organs," (BwO).⁶⁰ Some try to reach this experience of *pure intensity in-itself* through sensory distortion, using drugs to experience a sort of vertigo.⁶¹ Deleuze mentions Artaud's and Castaneda's use of peyote for this purpose.⁶² Although drugs are not the preferred means to attain a BwO, we might imagine these altered states for illustration. It could be that in these instances, the perceptual senses and the imagination develop some degree of autonomy and creativity, bringing to the drug user's attention the dis-coordinations among — and between — his thoughts and perceptions. In

⁵⁹ *Logic of Sensation*, p.35. *Logique de la sensation*, p.50.

⁶⁰ *Logic of Sensation*, p.34. *Logique de la sensation*, p.49-50.

⁶¹ *Difference & Repetition*, p.237. *Différence et répétition*, p.305.

⁶² Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, (London: Continuum, 1987), p.175, 179. *Capitalisme et Schizophrénie 2: Mille Plateaux*, (Paris: Les Éditions de Minuit, 1980), p.196, 199.

moments of synaesthesia, when for example sounds are seen in vision, the indeterminacy of the body's organs becomes more apparent. There is no law, apparently, that prohibits the eyes from listening. Perhaps instead, there never were such sharp distinctions between these sense organs: the illusion of their discretion might result from some regulative functioning of the body (or brain) responsible for sorting through the chaos of different sensations. Thus, we might consider 'zones' to be the indeterminate bodily regions that do not necessarily integrate organically, and thus cannot be called organs.

As we noted when discussing Kant, these irregularities in our sensations result from *heterogeneous rhythms* that are uneven and unpredictable: our internal flows of nervous energy already vary chaotically in valency, and when sensation couples them with new waves, they stand together in "rhythmic unity." Because sensations only occur when these waves are coupled, it is this sort of intensity which is the rhythm of sensation. We can only discover it by "going beyond the organism," whose faculties or zones are synchronized. It is for this reason that Deleuze considers phenomenology's "hypothetical" *lived body* to be a "paltry thing" in comparison to the "more profound and almost unlivable Power" of the rhythmically-intensed *butchered body without organs*. The unity of this rhythm is *not* the unity of *conjunction*, which requires both conjuncts to be compatible; rather, it is a *forced coincidence* or *superposing* of contrary nervous wave flows, found only where "rhythm itself plunges into chaos, into the night, at the point where the differences of level are perpetually and violently mixed;" (*le rythme lui-même plonge dans le chaos, dans la nuit, et où les différences de niveau sont perpétuellement brassées avec violence*).⁶³

With its zones and faculties so disoriented, the BwO cannot represent objects, as we saw in Kant's sublime; but more importantly, the BwO *cannot represent itself*. It cannot be a *signified* to which some name is affixed. This is

⁶³ *Logic of Sensation.*, p.32. *Logique de la sensation*, p.47.

one of the most potent implications of Deleuze's notion of intensity: the subject has a *nomadic* "identity." (We postpone giving a detailed description of Deleuze's sort of selfhood; yet, we may at least now note that it is not what philosophy has hitherto considered personal identity or subjectivity). Yet, Deleuze is not describing a post-modern erasure of subjectivity, but something far more creational. On account of the inherent tendencies of the faculties to try to come together around a common representation, the self does not disintegrate into nothing, but rather it *becomes* new things, new contrary things, although without any destination, like a nomad.⁶⁴

With this more indeterminate sense of selfhood, BwO's can better exchange intensive waves so to bring about a "conjunction of flows" that is a "continuum of intensities."⁶⁵ The BwO is always in a collectivity, in a totality of BwO's exchanging intensive waves; thus, not only is there the communication of intensity between indeterminate bodily zones (or faculties) *within* a BwO, there is also communication of intensity *between* disorganized bodies. One means of this communication of intensive rhythm is what Deleuze terms *aesthetic analogy*.

⁶⁴ *Thousand Plateaus*, p.177. *Mille Plateaux*, p.197-198.

⁶⁵ *Thousand Plateaus*, p.179. *Mille Plateaux*, p.199-200.

Chapter 4: A Shorthand of Sensation

The primary technique which allows Francis Bacon to communicate his intensity is *diagramming*: when standing before a blank canvass, he faces clichés and preformed figures that his imagination projects upon the white space, which he then begins to paint. But then, he gambles, and makes random expressive strokes overtop of these imagined and proto-formed figurations, introducing *catastrophe* and chaos into the painting. Bacon then “reads” these expressive strokes as though they were a graph or diagram, by observing the alternate dimensions into which the figuration may reach. Thus, a smile may breach its contour and extend out like a vast desert.⁶⁶ When Bacon introduces these catastrophic strokes, he disorganizes his own faculties, throwing disorder into the facultative series that had been coming together as pre-conceived images and concepts, and thus creates intensities within himself. This then deforms the figures in the painting, so that when we as viewers perceive them, we obtain a sensation in which our faculties also become violently disorganized, as they run through series that do not match with each other, thereby producing pronounced intensities. Bacon’s own intensities, then, are expressed through a medium that induces intensities in us; however, no concept was conveyed in the transaction. Rather, Bacon’s intensities and our own are each themselves like two different series, and they communicate their differences by means of forces that bring our intensities into communication: the force involved when Bacon makes his catastrophic expressive strokes, and the force of the violence of the sensations we experience when viewing his deformed figures. Our inner intensive states are not similar to Bacon’s; yet, they bear a *more profound resemblance*, because their transfer was not mediated digitally (that is, by abstractions or code), nor

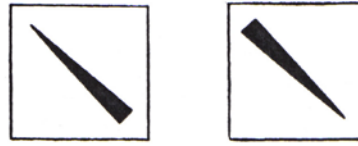
⁶⁶ Francis Bacon & David Sylvester, *The Brutality of Fact: Interviews with Francis Bacon 1962-1979*, (New York: Thames and Hudson, 1975), p.56.

analogically (through pure chaotic flux), which both bring about physical resemblances; rather, the *more profound* intensive resemblance is communicated by means of *aesthetic analogy*.

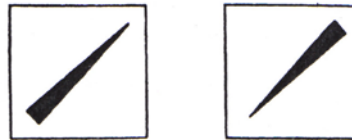
To elaborate these terms, Deleuze references animal-behavior scientist Gregory Bateson's use of "analog" and "digital" to distinguish two types of animal communication. Analogical language expresses social relations using modifications of bodily expression, so when a dog barks with increasing force, it is stressing more and more its feeling of dominance over another animal. Digital language however, uses arbitrarily determined symbols whose formal features do not bear any resemblance to what they mean, and are theoretically independent of bodily mediation. The word "small" need not be written in smaller letters to have its particular meaning. Also, digital language refers directly to objects instead of social relations. Bateson mentions that when a man tells a woman that he loves her, the woman pays more attention to his bodily expression, because it is there that his feelings about his relation to her are conveyed, not so much in the strict denotation of his words.

Deleuze also considers analog and digital as *media of replication*. In the case of abstract codes, resemblances are created by non-resembling means: the forms in *abstract art*, then, are reduced to binary relations that indicate by *reference* (and not visual similarity) the features of the figuration that the artwork reproduces. Abstract artists evoke in us these figurations when we decode or decipher the relations between the formal elements in the work, as for example with Kandinsky's grouped binary pairings, *left diagonal - unharmonic; right diagonal - harmonic*:⁶⁷

⁶⁷ Image, Wassily Kandinsky, *Kandinsky: Complete Writings on Art*, Ed. Kenneth C. Lindsay & Peter Vergo, (Boston: Da Capo Press, 1994), p.655.



Diagonal position
"unharmonic"



Diagonal position
"harmonic"

Because the pairings *stand* for certain ways the painting may affect the viewer, the resemblance is conveyed through non-resembling means, through coded abstractions. Jackson Pollock's *action painting*, however, expresses by means of *analogical flux*: Pollock does not code his expressions, but merely expresses all that moves through him, creating something with no regular form whatsoever, and the relations of the parts are not intended for a coded translation.⁶⁸



The movements of Pollock's hand when throwing the paint matches the feelings and sensations that he is channeling into his work. It is as though the painted marks are imprints of expressions, not figurations that signify them. Here, the resemblance to the expression is replicated by resembling means: the marks on the canvas mimic the movements of the artist's arms that followed the flows of sensation inspiring their movement.

⁶⁸ *Logic of Sensation*, p.82. *Logique de la sensation*, p.110.

Bacon's diagramming is a middle way between digital and analog, because it combines both the coded elements — which are the original figurations that the diagram deforms — and the analogical flux, which is expressed through the random strokes deforming the figurations and stretching them into alternate dimensions and arrangements. This technique produces *aesthetic analogies*, in which communication is mediated not just by the expressive strokes, but by the interaction of the expressive strokes with the coded figurations. However, the resemblance it creates is not a physical one, but a *more profound* one. Bacon's aesthetic analogies communicate his intensive flows to our bodies, because he disorganizes his own faculties so to deform images, which in turn cause us internal disorder.⁶⁹

For Deleuze, this more profound resemblance is one of *depth*, which is the *distance* between the faculties brought about when they fall into disorder. We experience intensity as a fall through this depth, because as our faculties disorganize, we lose the capacity to represent the spatiotemporal and qualitative features of an object, and thus we become unable to recognize things; we lose our ground and plunge into the intensive depth preventing the orderly functioning of our organism. When the faculties come more into synchrony, we then are more able to determine extensive and qualitative features of objects; in this way we *explicate* them, that is, we make *explicit* what was *implicit*, *implicated*, and *inexplicable* in the intensive confusion. What is implicit — the facultative disorder — resides in the depths, below the surface of explicated language.

Deleuze uses the distinctions between *analogical* & *digital* and *implicit* & *explicit* to explain how the deeper bodily intensities can be communicated through a medium that is just barely lingual: the *analogical language* of Antonin Artaud's scream-breaths.

⁶⁹ *Logic of Sensation*, p.83. *Logique de la sensation*, p.111-112.

Part III: Language Disorders

Chapter 5: Speaking Schizophrenically — Writing Nonsensically

Artaud explains in *For the Theater and Its Double*, that “pure theatre” replaces traditional denotative language with gestures, cries and gyrations that make “symbols” rather than signifiers, and they impress themselves upon us intuitively with such a violence as to render discursive and logical language useless.⁷⁰ This analogical language of the body is more like music than discourse, performed by making use of musical elements such as rhythm and harmony.⁷¹ Here, the actor’s speech is anterior to words, in a preverbal state.⁷² Artaud’s theatre ideas will correspond to what Deleuze considers his *schizophrenic speech*, but to better grasp this concept, we will need to examine Deleuze’s notion of *surface sense*.

Sensation occurs in the depths of the body. Language, contrarily, is found on the surface, because its series do not flow through the body without organs. It is true that our bodies make the noises of expression, and also that all language refers to bodies or objects of some sort; however, the sounds we make in language no longer inhere in our bodies, and are instead elevated to a surface level that allows them to denote the *states of affairs* of other bodies. Deleuze writes that “it is always a mouth which speaks; but the sound is no longer the noise of a body which eats,” (*c’est toujours une bouche qui parle ; mais le son a cessé d’être le bruit d’un corps qui mange*).⁷³ Bacon records the *matter of fact*, and communicates it through the analogical “language” of *aesthetic analogy*; however, language as propositions expresses a *state of affairs* by

⁷⁰ Antonin Artaud, “*For the Theater and Its Double*” in *Selected Writings*, Transl. Helen Weaver, Ed. Susan Sontag, (Berkeley: University of California Press, 1976), p.215.

⁷¹ Artaud, p.216-217.

⁷² Artaud, p.218, p.220, p.222.

⁷³ *Logic of Sense*, 208. Without the event that brings denotation and sense together in nonsense, “all of this would only be noise — and an indistinct noise,” p.209. *Logique du sens*, p.212.

conveying its event as a *sense* and by *denoting* its objects. (Although Deleuze never says so, it would seem plausible that the *matter of fact* and the *state of affairs* are both largely the same thing: *an event of becoming*. However, we are dealing more in the first case with our concrete sensation of its *matter* or *material* properties, and in the second case with its *status* or *abstract* properties). The sense of a proposition, then, is no different from the incorporeal event occurring in the *state of affairs*; it is the *expressed* of a sentence, making up the surface level.⁷⁴ The objects of the denotation, however, exist below the surface on the level of bodies. The coded element of a proposition, that is, its actual symbolic make-up, refers doubly to the surface level of sense, which is also the event of the state of affairs of objects, and as well to the deeper level of denoted bodies (objects) involved in that *state of affairs*. Between these two levels is a *line frontier* separating the two series, allowing for the divergent series of the discrete levels to come into contact.⁷⁵ However, this convergence is an affirmative synthetic disjunction, because the series do not merge; rather, they converge *around a paradoxical element*, which is a *point* that runs along the line and circulates throughout the series.⁷⁶ This point contains a paradox, because the denotation expresses a sense; but, if that sense were to be denoted, then a different sense would take its place. We might draw an analogy with the relationship between connotation and denotation. A term's definition will have an explicit description, which itself will have connotations. If we were to explicate those connotations, then we merely obtain another sentence with its own new connotations, and so on without end. This is because the implicated sense of a proposition "changes nature as it climbs to the surface" (*change de nature en*

⁷⁴ *Logic of Sense*, p.22. *Logique du sens*, p.30.

⁷⁵ *Logic of Sense*, p.209; 199. *Logique du sens*, p.203-204; 213-214.

⁷⁶ *Logic of Sense*, p.210. "The two heterogeneous series converge toward a paradoxical element, which identify their 'differentiator.' This is the principle of the emission of singularities. This element belongs to no series; or rather, it belongs to both series at once and never ceases to circulate throughout them," p.60. *Logique du sens*, p.66.

montant à la surface), as it is explicated into a denotation.⁷⁷ This paradox remains implicit in sense except in cases of overt *absurdity* and *nonsense*. An *absurdity* is an *impossible object* that nonetheless has sense; for example, ‘square circle’ contains contradictory objects, yet still has sense, because it may take a meaningful position within a context of other words, as here demonstrated in this very sentence.⁷⁸ Nonsense, however, denotes its very own sense. To explain this, Deleuze introduces the notion of the *esoteric word*, the paradoxical element or point, which is both a *thing* = *x* and a *word* = *x*,⁷⁹ a sort of empty category that is continually fulfilled by words the same way Kant’s *object* = *x* is continually fulfilled by synthesized objects. And, it is both a *thing* = *x* and a *word* = *x*, because it converges together both the denoted object and the sense of its *state of affairs*: “it is both word and object at once: esoteric word and exoteric object,” (*Il est à fois mot et objet: mot ésotérique, objet exotérique*).⁸⁰ This is the implied nonsense in all sense; for, the movement of the *something* = *x* is prerequisite for language to function. Moreover, because it causes a continual displacement (as we saw with the denoting of connotations), Deleuze characterizes it as the *empty square*, the occupant without a place,⁸¹ which he illustrates with the empty shelf story in Carroll’s *Through the Looking Glass*: Alice views a grid of divided shelves on the wall. The one she presently sees is empty, but all those in the periphery are full. As soon as she moves her eyes to a nearby shelf to see what is in it, the items it once held disappear, while the previously-empty one, now in the periphery, becomes filled.⁸²

⁷⁷ *Logic of Sense*, p.200. *Logique du sens*, p.205.

⁷⁸ *Logic of Sense*, p.41. *Logique du sens*, p.49.

⁷⁹ We explain the *something* = *x* in greater detail in the expanded 4th chapter below.

⁸⁰ *Logic of Sense*, p.78. Quote, p.60. *Logique du sens*, p.66.

⁸¹ *Logic of Sense*, p.55. *Logique du sens*, p.61.

⁸² “The shop seemed to be full of all manner of curious things — but the oddest part of it all was, that whenever she looked hard at any shelf, to make out exactly what it had on it, that particular shelf was always quite empty: though the others round it were crowded as full as they could hold. ‘Things flow about so here!’ she said at last in a plaintive tone, after she had spent a minute or so in vainly pursuing a large bright thing, that looked sometimes like a doll and sometimes like a work-box, and was always in the shelf next above the one she was looking at. ‘And this one is the most provoking of all — but I’ll

Deleuze uses this allusion to illustrate a point similar to the one we make regarding the way that denoted connotations always evermore produce new undenoted connotations. Although this esoteric function itself is not usually explicated, it can be denoted through a special variety of *portmanteau words*, which in general are single words made-up of other words shuffled together; for example, ‘mimsy’ is both ‘flimsy and miserable.’ These words denote other words which are found in separate divergent series. Yet, they do not denote the esoteric word itself, because in order to do so, they would need to denote the divergence *of* the series, and not just the terms *in* divergent series; for, the paradoxical operator is not an object but a *movement*. Deleuze quotes Lewis Carroll’s description of his portmanteau word ‘frumious’ to illustrate:

For instance, take the two words “fuming” and “furious.” Make up your mind that you will say both words, but leave it unsettled which you will say first. Now open your mouth and speak. If your thoughts incline ever so little towards “fuming,” you will say “fuming-furious;” if they turn, by even a hair’s breadth, towards “furious,” you will say “furious-fuming;” but if you have the rarest of gifts, a perfectly balanced mind, you will say “frumious.”⁸³

Where in the case of ‘mimsy,’ the denotation was only of two words in divergent series. In this example however, the disjunction of ‘frumious’ is not between ‘fuming’ and ‘furious,’ but between ‘fuming-furious’ and ‘furious-fuming.’ Thus it denotes not just two series, but also it denotes the *disjunction* of those two series, their ramification into other possibilities. In such a case,

tell you what — she added, as a sudden thought struck her, ‘I’ll follow it up to the very top shelf of all. It’ll puzzle it to go through the ceiling, I expect!’ But even this plan failed: the ‘thing’ went through the ceiling as quietly as possible, as if it were quite used to it.” Lewis Carroll, *The Annotated Alice: Alice’s Adventures in Wonderland & Through the Looking Glass*, (New York: C.N. Potter, 1960), p.253.

⁸³ Carroll, p.195.

the word denotes its own sense, it denotes the very *word* = *x* that made its sense initially possible. And, all terms in each series derive their sense through their relative position in their respective series, which is oriented according to the circulating esoteric word, the *something* = *x*. This paradoxical operator remains both in motion and in disequilibrium; hence, the terms of language-series are differential and indeterminate, in the same way as are the terms in facultative series. In other words, the terms in language series are not full self-same objects lined up in sequence, but are points or boundaries of differences, oriented by an operation that connects the differences of one series to the differences of another.⁸⁴ (Exactly how to imagine this is not evident; yet perhaps our following efforts to elaborate facultative terms will supply some clarity).

Hence, the logic of sense is not a logic of identity and contradiction, but a logic of the paradoxical and nonsensical connection between the surface and the body's depth, between expression and denotation. And in a way, the logic of sense is inspired by empiricism, namely transcendental empiricism, because both operate according to a non-sense function.⁸⁵ Deleuze claims that his empiricism is transcendental, because when the faculties are pushed to their limits in cases of extreme intensity, the differences between the faculties "exceeds" every one of them. We feel the intensity, which can come-about no other way than through disorganized empirical faculties; however, it is not found within any one of them, and hence, intensity is transcendental. In a similar way, we detect the "non-sense" of the paradoxical operator in language when the esoteric word emerges on the surface; yet, it is not found within any of the divergent series, but is rather what forces them together. But while the *logic of sensation* is based on the *irrationality* and *mad-becoming*

⁸⁴ Gilles Deleuze, *Logic of Sense*, p.82, p.60. *Logique du sens*, p.87-88; p.65-66.

⁸⁵ "The logic of sense is inspired in its entirety by empiricism. Only empiricism knows how to transcend the experiential dimensions of the visible without falling into Ideas, and how to track down, invoke, and perhaps produce a phantom at the limit of a lengthened or unfolded experience," *Logic of Sense* p.23. *Logique du sens*, p.31-32.

of rhythm in the depths of the disorganized body, the *logic of sense* is based on a different irrationality and mad-becoming of the empty square, remaining always above the body on the surface of language.⁸⁶ In both cases, the *something* = *x* is never fulfilled entirely, as the series continually proliferate.

We might also wonder if language transmits *intensity*; for, it communicates differences between series. Yet, it is not clear whether or not Deleuze considers the communicated differences between the sense and denotation series to be intensities; however, his comparison of Artaud's schizophrenic speech and Carroll's nonsense reveals that paradoxical language alone fails to communicate the disorganization of the faculties.

In a letter composed while still in the Rodez psychiatric hospital, Artaud explains to his friend that he ceased translating Lewis Carroll's gibberish poem "Jabberwocky" out of his disgust for it. Artaud thinks that real poetry is felt as anguish in the soul, heart, and body, and that it makes us smell "the caca of existence." "Jabberwocky," for him, evades the deeper bodily sensations and remains entirely on the surface.⁸⁷

For Artaud, in his schizophrenic state, there is no dividing line marking the boundary of a surface; there is no difference between things and propositions, because the schizophrenic body is without surface, it is pure depth. Anything can grow in the body; bodies can merge with other bodies. Words are not representations, but things that merge with — and enter into — the body.⁸⁸ Without surface, then, the entire world loses its meaning and its sense.⁸⁹ This schizophrenic body may become the BwO by speaking in Artaud's sort of theatre language, using "breath-words" and "howl-words" whose value resides in their non-lingual sound properties.⁹⁰ It is a *language without articulation*, a series of vocal modulations fused together into a wave,

⁸⁶ *Logic of Sense*, p.39. *Logique du sens*, p.46.

⁸⁷ Antonin Artaud, "Letter to Henri Pariscot, September 22, 1945," in *Selected Writings*, p.448-449.

⁸⁸ Gilles Deleuze, *Logic of Sense*, p.99-100. *Logique du sens*, p.106-107.

⁸⁹ *Logic of Sense*, p.100. *Logique du sens*, p.107-108.

⁹⁰ *Logic of Sense*, p.101. *Logique du sens*, p.108-109.

setting the word aflame, and melting it into a liquefied “sign of fire.” By doing so, the words instead become the actions of a BwO, rather than the passions of a “fragmented organism.”⁹¹ Artaud’s schizophrenic words lack sense, but are not Carroll’s surface nonsense; rather, they are *a-sense* or *sub-sense*, because for the schizophrenic body, there are no discrete series of senses and denotations, only the depths of the disorganized faculties.⁹²

Artaud offers an example of this form of speech in the following poem included in the letter, which “can only be read rhythmically, in a tempo which the reader himself must find,

ratara ratara ratara

atara tatara rana

otara otara katara...

but this is worthless unless it gushes out all at once; pieced together one syllable at a time.”⁹³

Hence, Artaud’s communication is more of an analogical language which directly communicates intensities by sending our faculties into disorder, as we are attacked by sensations suggestive of possible meanings that can never become explicated. Carroll’s nonsense is more like digital language which is constructed so that it disorganizes merely our cognitive faculties by introducing irregularities and meaningful paradoxes into language. On the one hand, Deleuze seems to favor Artaud’s critique, for Carroll’s nonsense does not bring about the BwO. But yet, he also says that “today’s task is to make the empty square circulate and to make pre-individual and nonpersonal singularities speak — in short, to produce sense” (*Faire circuler la case vide, et faire parler les singularités pré-individuelles et non personnelles, bref produire le*

⁹¹ *Logic of Sense*, p.101-102. *Logique du sens*, p.109.

⁹² *Logic of Sense* p.103. *Logique du sens*, p.111.

⁹³ The rest of the poem: “otara retara kana / ortura ortura konara / kokona kokona koma / kurbura kurbura kurbura / kurbata kurbata keyna / pesti anti pestantum putara / pest anti pestantum putra,” Artaud, p.449.

sens, est la tâche aujourd'hui).⁹⁴ We might wonder if there is a middle way, as with Bacon's diagramming, in this case between the analogical and digital functions of language. Does Deleuze describe a way that language can both remain on the surface while communicating intensive depth?



⁹⁴ *Logic of Sense*, p.84. *Logique du sens*, p.91.

*Chapter 6: The Marriage of Sound and Sense:
Language Born in Stuttered Script*

“So a painting of violent action, many crossed, colliding, and
broken forms, even among the stable accessories, and in a
scene of rest, mainly horizontal shapes and considerable voids.
It is the poetic ideal of a marriage of sound and sense.”⁹⁵

The answer may lie in his notion of stuttering. In “He Stuttered,” Deleuze explains that Artaud’s breath-words mark the limit that language must reach without breaching. To walk its edge is to make language *stutter*, that is, to make it affective and intensive, yet primarily by means of its denotative function.⁹⁶ Language stutters when its usual homogenous system of equilibrium is thrown off-balance into perpetual *disequilibrium* or bifurcation, which is accomplished by passing the terms through a “zone of continuous variation,” by means of a “heterogenesis and modulation” that causes language to “vibrate and stutter.”⁹⁷ Through an “incessant modulation” that bifurcates and varies the terms, stuttering makes the language “take flight.” Stuttering writers create a *minorized* use of language by remaining a foreigner in their native tongue, continually using it in partly “incorrect” or alien ways by modulating its repetitions.⁹⁸

Deleuze explains that language can be made to stutter by altering the way its terms are disjoined and combined. When a writer considers the system of language in a state of *equilibrium*, 1) the disjunctions are exclusive; thus,

⁹⁵ Meyer Shapiro, “On Perfection, Coherence, and Unity of Form and Content,” *Theory and Philosophy of Art*, (New York: Braziller, 1994), p.41.

⁹⁶ Gilles Deleuze, “He Stuttered,” in *Essays Critical and Clinical*, Transl. Daniel W. Smith & Michael A. Greco, (Minneapolis: University of Minnesota Press, 1997), p.112; p.107. *Critique et Clinique*, (Paris: Les Éditions de Minuit, 1993), p. p.141; p.135-136.

⁹⁷ *Essays Critical and Clinical*, p.108-109. *Critique et Clinique*, p.136-137.

⁹⁸ *Essays Critical and Clinical*, p.109. *Critique et Clinique*, p.137-138.

when she has a choice of words, for example, ‘*passion*’ or ‘*ration*,’ she cannot use them both at once, but must choose one or the other for each instance; and 2) the connections are progressive, with one following another, and none folding backwards onto the previous words in a “stop-start or forward-backward” jerking motion. However, when language is thought to be in *disequilibrium*, 1) the disjunctions become inclusive, as with a *portmanteau* word like “*pas-rats*,” which smuggles-in both *passions* and *rations* by disjoining a part from each and combining them into a new word; and 2) when words are combined, they join reflexively back with themselves, as with *pas-passe-passion*, which creates a retrogressive movement as it proceeds.⁹⁹ Thus, language can stutter when it stumbles either over itself (non-exclusive disjunction) or over-backward unto itself (reflexive conjunction). He further describes the stuttering of Péguy who proceeds from one word to its synonym, although adding each time a slight variation to its meaning; his technique, then, combines disjointed and decomposed terms, yielding a “superhuman stuttering.”¹⁰⁰ Roussel connects the different denotations of the same homonym by repeating a story spanning between them, so to inscribe a maximum difference between these repetitions of the same term.¹⁰¹ As well, he continually inserts parenthetical propositions within the middle of sentences, each time again in the middle of the previously parenthesized proposition, causing the writing to be so overfilled as to stutter.¹⁰²

In *Difference & Repetition*, Deleuze uses the examples of Péguy and Roussel to illustrate his explanation of asymmetrical rhythms. We might wonder then how it is that these stuttering techniques intensify language and bring it to the limits set by Artaud’s schizophrenic speech, and thus also, if there is a rhythm to stuttering that is still a rhythm of sensation while remaining on the surface of sense.

⁹⁹ *Essays Critical and Clinical*, p.110. *Critique et Clinique*, p.138-139.

¹⁰⁰ *Essays Critical and Clinical*, p.111. *Critique et Clinique*, p.140.

¹⁰¹ *Difference & Repetition*, p.22. *Différence et répétition*, p.34.

¹⁰² *Essays Critical and Clinical*, p.111-112. *Critique et Clinique*, p.140.

Part II: Elaboration of Chapter 4 of the Larger Program



Chapter 4 Expanded

A Shorthand of Sensation

"Not illustration of reality; but to catch images which are
a concentration of reality — and a shorthand of sensation."

Francis Bacon

We noted that in Deleuze's explication of Kant's sublime, the faculties were not able to synchronize, on account of the chaotic rhythm of sensation that prevents us from forming a standard homogeneous unit of measure, without which we are left with no means to comprehend the absolute magnitude of our apprehensions. We experience this unrecognizable something as deformed or formless; for, it never ceases to continue in its heterogeneous variance. Yet, it may still be understood under the idea of *absolute whole*. For Deleuze, there is no such resolution of the faculties, rather only a continuous unequal rhythm of sensation that disorganizes our faculties and brings about the Body without Organs. Deleuze describes how in painting one may communicate facultative disorder by means of *aesthetic analogy*, which 20th century painter Francis Bacon accomplishes using at least three techniques, all serving to couple Figures' movements so to create uneven rhythms: one is the complex juxtaposition of movements in his triptychs, another is the diastolic/systolic movements exchanged between Figure and background, and the other is a technique Bacon calls *graphing* but that Deleuze renames *diagramming*. This latter technique can serve not only to blend characters together into one ambiguous Figure, as well, it can intertwine alternate dimensions in one painting.

We should address firstly an important distinction Deleuze draws between *Figure* and *figuration*. Like many 20th artists, Francis Bacon faced the problem of determining the purpose of painting, since photography had taken

over the role of the documentation, representation, illustration, and narration of things and events in the world. When the characters depicted in a painting have a discernable relation to each other, then they become narrational, representational, and figurative; they are figurations sharing between them what Bacon calls “story-telling” relations.¹⁰³ Painting as an art-form would be redundant to photography, if it illustrated stories and represented people. So in the 20th century, artists developed new ways to make paintings, such as abstract art, which avoided narrational figures. Bacon’s unique solution is somewhat of a mix between photography and abstract art: he *deforms* the figurations, and confuses them with one another, so that they cannot have narrative relations with each other. As deformed, these distortions portray a convulsive movement in which contrary motions wrestle together; and, out of this confusion emerges the Figure, which is not so much the painted depiction on the canvass, but is rather the disorganizing influence that results from our beholding these painted confusions. Hence Deleuze distinguishes the *Figure*, (with a capital *F*), from the *figuration*, when discussing Bacon’s artwork.¹⁰⁴

[We first will make Deleuze’s notion of rhythm more tangible by exploring some of his visual and musical references. In *Difference & Repetition*, Deleuze speaks of the asymmetry in rhythm’s heterogeneous intervals, which we previously illustrated with the irregularly-ticking clock example. But before speaking of rhythm, Deleuze first makes his distinction between *signal* and *sign*: a *signal* is a “system” of asymmetrical levels or sets that our faculties are sensing, each one in a different way; and, a *sign* is the phenomenal event that occurs when something forces our faculties to communicate their intensive differences between one another, which produces a *phenomenal flash*: the sudden shock of sensation.¹⁰⁵ Thus, the *sign* for

¹⁰³ Bacon & Sylvester, p.63.

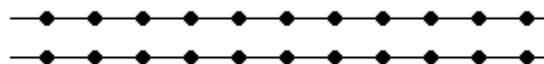
¹⁰⁴ Deleuze, *Logic of Sensation*, p.6-8. *Logique de la sensation*, p.17-18

¹⁰⁵ *Difference & Repetition*, p.20. *Différence et répétition*, p.31.

Deleuze is more a matter of phenomena than of language. He offers the poetic example, “the emerald hides in its faces a bright-eyed water-sprite” (*L'émeraude en ses facettes cache une ondine aux yeux clairs*).¹⁰⁶ That is to say, a sign or phenomena is the cross-over between series, as here when two different facultative “terms” — an emerald and a water-sprite — are forced together, as a trope of sorts. However, it is not that one term substitutes the other, or that they are both synthesized together; rather, our sensations present us with both at once, on account of our disorganized faculties, causing a phenomenal flash of intensity to be communicated between them.



In his pedagogical sketchbooks, Paul Klee provides a way to visualize how a perceptual rhythm may come about through a visual asymmetrical *signal* system. (The rhythm of vision is perhaps different than the rhythm of sensation, but these examples serve to demonstrate *heterogeneous rhythm* on the perceptual level). Basing our diagram on his depictions, we might compare rhythmic arrangements of dots, with the first set being too regular to cause our eyes to move rhythmically.



Just like the ticking clock, we notice very little. No phenomena really appear, because there is no “flashing,” no asymmetrical differences which cause confusions in our faculties.



In this second case, however, the asymmetries compel our eyes to jump from place-to-place, causing phenomena to flash before us each time we move through the dissymmetries. In other words, there is a more intense phenomenal experience of this second case, on account of the rhythm of vision that it brings about.

¹⁰⁶ *Difference & Repetition*, p.222. *Différence et répétition*, p.286. Perhaps Deleuze’s quote is a modification from Victor Hugo’s “Tout la lyre,” *L'émeraude en sa facette / Cache une ondine au front clair*.

The lack of symmetry is not a negative element, but is *positivity itself*; when symmetrical, there are no phenomenal flashes, and no profound activity of the faculties.¹⁰⁷ Thus, the asymmetry *affirms* the marks by affirming the differences between them; for, normally our eyes would not stop to see each one of them as they are.

Deleuze then distinguishes two types of repetition: 1) *static repetition*, in which a plurality is reducible to a single concept, in this case the common space between all the dots in the top set (or the shared one-second duration between the clock's ticking), and thus for this type of repetition there is no internal difference. We might hear every tick or see every dot; yet, they are no more than one same interval between one same redundant form. And, 2) *dynamic repetition*, where there is an internal repetition of a difference that carries-over from point-to-point, thereby making each one distinct from the others. In this latter type, there is no unifying concept as there was with the repeating interval in the first group; for, it is a "pure dynamism" that never stagnates in sameness.¹⁰⁸

Deleuze elaborates with another distinction between 1) *arithmetic symmetry*, which is based on ratios or simple fractions, and 2) *geometrical symmetry*, based on proportions or *irrational* ratios, such as the golden ratio or *pi*. Such ratios are "irrational" *surds*, because they cannot be represented as one integer divided by another; for, there is always a remainder no matter how precise the calculation (as in the case of the unending sequence of decimals for *pi*: 3.14159265...). When such a ratio between two values is irrational, the two are considered *incommensurable* with each other, because they share no measure in common, (thus the ratio of a circle's circumference to its diameter is irrational; for, these two parts of the circle are incommensurable).¹⁰⁹ Deleuze speaks of these surds in another way:

¹⁰⁷ *Difference & Repetition*, p.20. *Différence et répétition*, p.32.

¹⁰⁸ *Difference & Repetition*, p.20. *Différence et répétition*, p.32.

¹⁰⁹ *Difference & Repetition*, p.20. *Différence et répétition*, p.32.

God makes the world by calculating, but his calculations never work out exactly, and this inexactitude or injustice in the result, this irreducible inequality, forms the condition of the world. The world ‘happens’ while God calculates; if the calculation were exact, there would be no world. The world can be regarded as a ‘remainder,’ and the real in the world understood in terms of fractional or even incommensurable numbers.¹¹⁰

Dieu fait le monde en calculant, mais ses calculs ne tombent jamais juste, et c'est cette injustice dans le résultat, cette irréductible inégalité qui forme la condition du monde. Le monde « se fait » pendant que Dieu calcule ; il n'y aurait pas de monde si le calcul était juste. Le monde est toujours assimilable à un « reste », et le réel dans le monde ne peut être pensé qu'en termes de nombres fractionnaires ou même incommensurables.¹¹¹

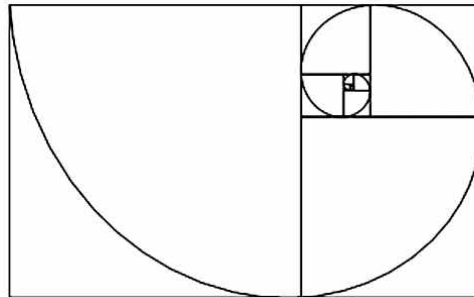
He further describes the static arithmetic symmetry as being rectilinear, and the dynamic as pentagonal and appearing in a “spiral line or in a geometrically progressing pulsation,” referring us to Matila C. Ghyka’s *Le Nombre d’Or*.¹¹² Deleuze’s purpose for distinguishing these two types of geometrical forms is to explain how certain arrangements of lines do not normally create visual rhythms (e.g. squares) and others do (e.g. pentagons), because the line angles of different shapes cause our eyes to move in different ways. A square grid does not have much rhythm, because each point directs our eyes to another point in homogeneous distribution. However, some arrangements of shapes move our eyes in less orderly ways, and in some cases have a built-in infinity of possible non-redundant movements.

¹¹⁰ *Difference & Repetition*, p.222.

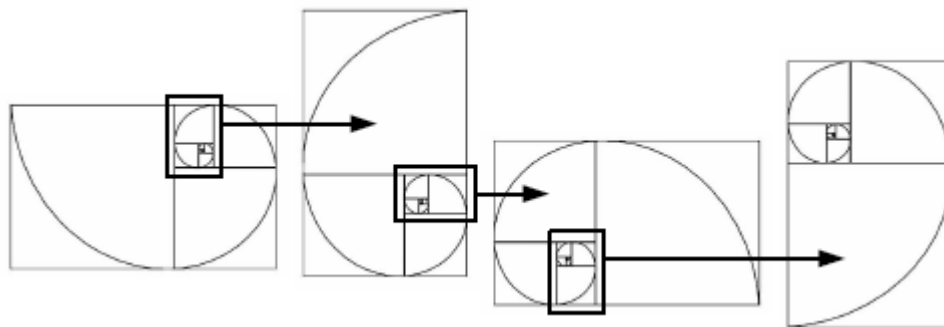
¹¹¹ *Différence et répétition*, p.286.

¹¹² *Difference & Repetition*, p.20. *Différence et répétition*, p.32.

In Ghyka's text, for example, we find that, on account of the irrationality of the golden ratio, the internal point to where the golden spiral is aimed can never be determined.



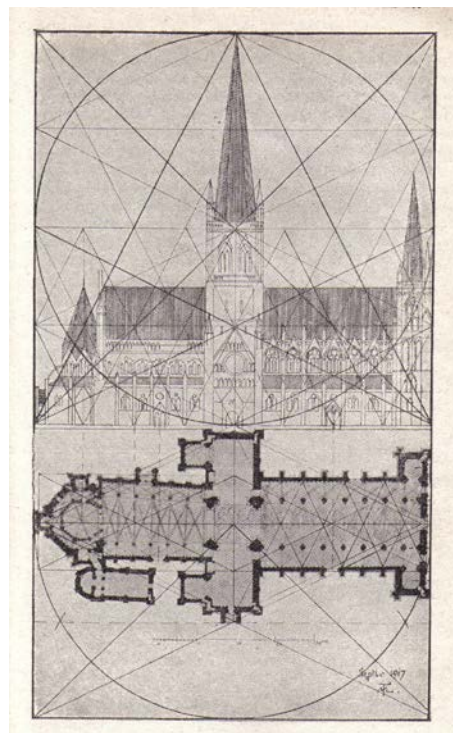
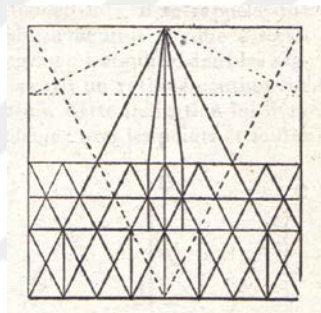
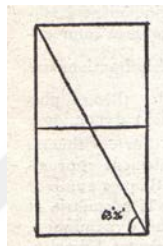
We can only carry out the repetition of the ratio over-and-over again, each time making a smaller box and a more precisely tipped spiral, but never arriving upon a determinate point. For, every new extension terminates with some space remaining between it and the theoretical "golden balance point," and can thus be made more precise. (We see below that if we enlarge the small set of boxes which lie at the top-middle of the arrangement, and which encase the internal point of the spiral, we result with the same formation as the whole. We may continue to enlarge over-and-over again, never arriving at the golden point of balance toward which the line is directed).

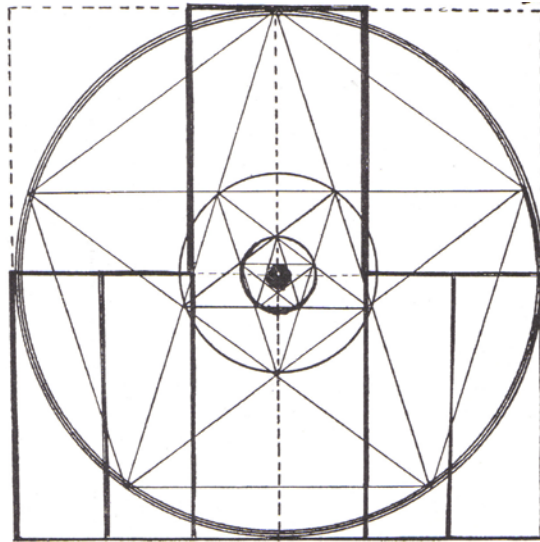


The golden ratio in this form produces a visual rhythm by causing our eyes to move in periodic steps to an unattainable point, which is suggested merely in the proportions of the shapes.

Deleuze also refers to a way that a dynamic repetition can emerge from a static one; however, it is a mathematically complex example. And yet, it is still helpful to at least see the images Deleuze references, so that we might

visually experience the rhythm of dynamic repetition, even if we do not grasp the mathematical dimensions of the example. He refers to the static repetition of a network of “double squares;” that is, squares that are paired together, but not like a grid, because the squares are of many sizes. For one reason or another, when we see Gothic cathedrals that are based on this pattern, our eyes move *diagonally* between the squares’ corners, which altogether makes pentagon and pentagram shapes.



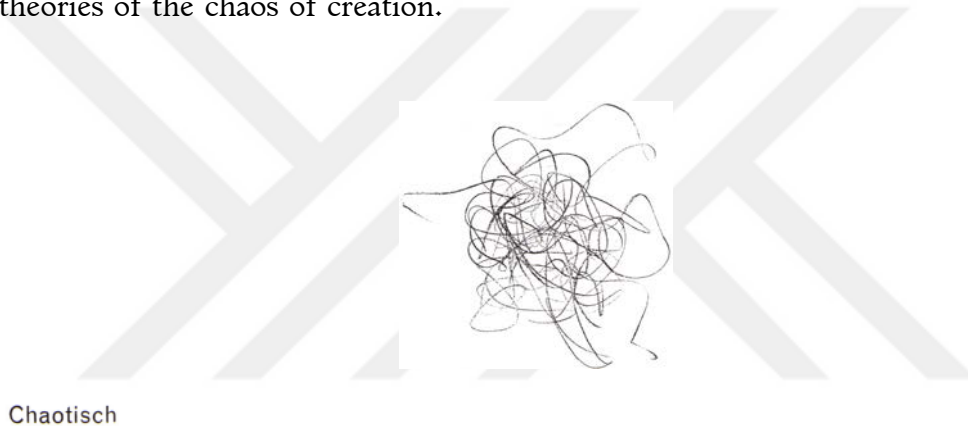


On account of the *irrational* proportions between the pentagrams and their underlying squares, a sense of imbalance is created, which our eyes rectify by looking in the opposite direction. If we view the pentagram formation (shown immediately above), which supposedly our eyes “draw” when seeing the Gothic cathedral (shown above it), we see that the diagonals of the squares suggest a large pentagon, which itself suggests a large pentagram inscribed within it, both of which point upward. Yet, these five-pointed shapes are asymmetrical with their underlying four-pointed squares, which then pulls our eyes downward. They arrive at the smaller internal pentagon of the larger pentagram, which suggests a smaller *upside-down* pentagram that is likewise out-of-balance with the squares, pushing our eyes upward again. Never is symmetry attained, and our eyes might continually find pentagrams within pentagrams when viewing a Gothic cathedral.¹¹³ This is Deleuze's remarkable point: *static* geometrical forms may bear *dynamic rhythms* if their proportions cause our eyes to move in patterns that maintain some consistency while also being irregular, all on account of a mathematical blend of chaos and order, of rationality and irrationality. Deleuze refers us to these examples, so that we

¹¹³ Matila C. Ghyka, *Le Nombre d'Or: Rites et rythmes pythagoriciens dans le développement de la civilisation occidentale*, (Paris : Gallimard, 1931), p.65-70. *Esthétique des proportions dans la nature et dans les arts*, (Paris : Gallimard, 1927), p.298-301. Deleuze, *Difference & Repetition*, p.21. *Différence et répétition*, p.32.

may *visually* experience a sort of dynamic and irregular repetition, to help us grasp how sensation itself may have a heterogeneous rhythm.

Nonetheless, as we noted before when discussing Deleuze's analysis of the rhythm of sensation in Kant's sublime, our faculties strive to homogenize the irregular ways that things are given to us, so that objects may be properly synthesized and recognized. However, as sublime experiences demonstrate, the rhythm of sensation drowns our perception in its chaos. To account for this, Deleuze refers us to Paul Klee's grey point, basing some of his observations on Henri Maldiney's description of Klee's and Cézanne's theories of the chaos of creation.



Chaotisch

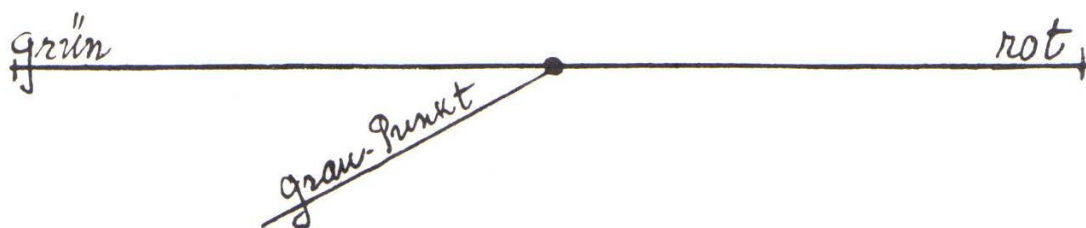
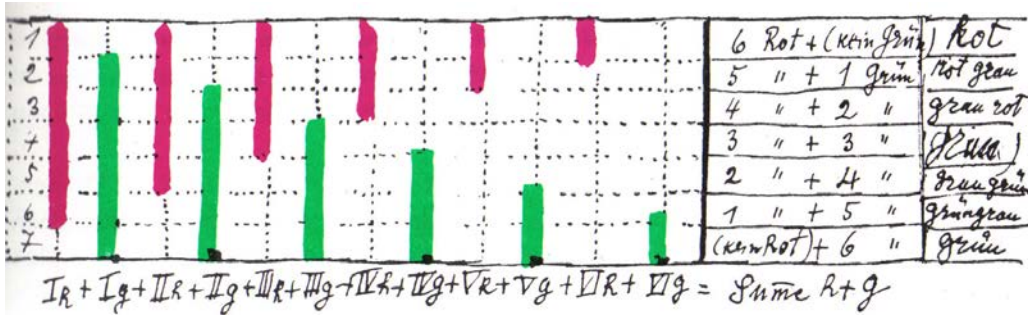
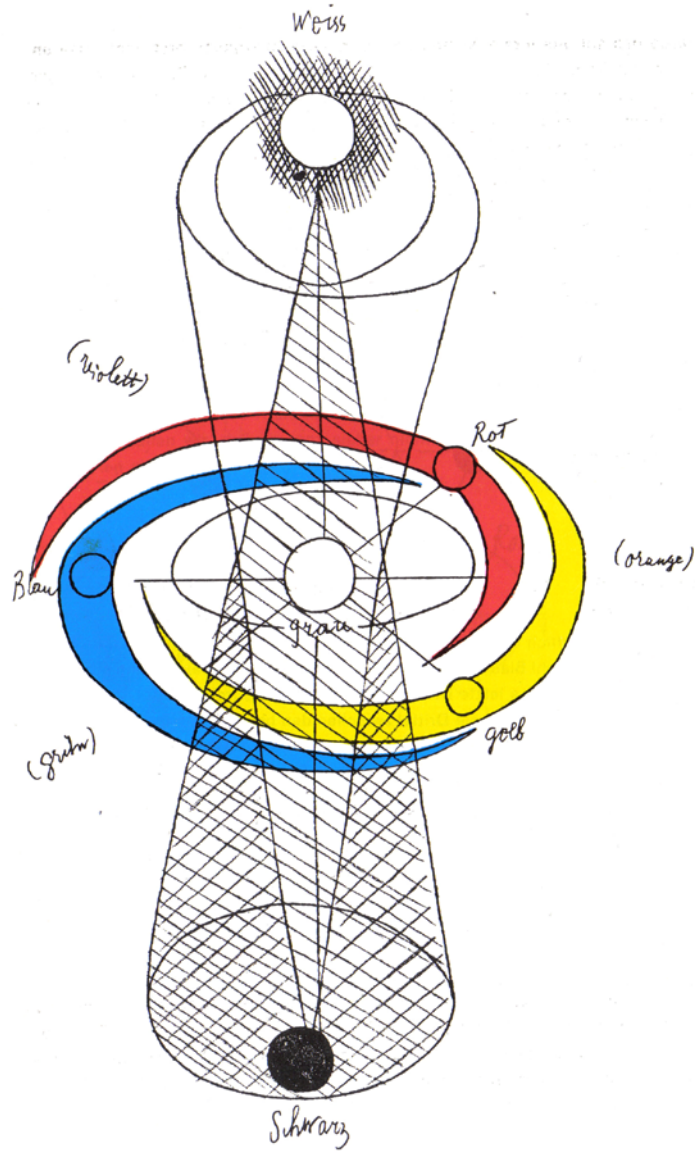


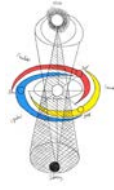
Kosmisch

For Klee, chaos does not lie in one pan of a scale, with order placed in the other; rather, order weighs against its opposite (whatever that may be), with chaos as the *center of balance* between them.¹¹⁴ True chaos cannot be weighed; for, it is *incommensurable*. It may be considered as though it were a mathematical point, extending neither in space nor time, but lying rather between all dimensions.

¹¹⁴ Images, Paul Klee, *Das bildnerische Denken*, (Basel : Schwabe, 1981), p.2.

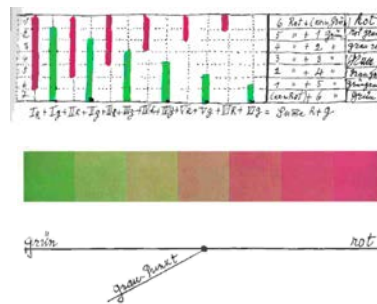
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This Nothing-being or being-nothing, the point, is something our minds cannot conceive. Klee considers it a *non-conceptual concept* of non-contradiction: it may be both itself and not itself, in one place or another, all at the same time; hence, it is not subject to the law of non-contradiction. To make this point visible, claims Klee, we must think of it as the *Graupunkt*, the *grey-point*.¹¹⁵ The grey-point in art-terminology is the place between black and white, and between one color and its opposite. When we consider color in its three dimensions, according to its hue and tone values (that is, its place along the circle of colors and its relative lightness or darkness), we may consider the grey-point as the neutral point between the tone and hue dimensions.¹¹⁶

When we mix equal parts of pure white and pure black, we then obtain a neutral grey. Likewise, when we mix equal parts of a color and its opposite, red and green for example, we also obtain grey.¹¹⁷



In cosmological terms, when we establish this grey point, the order of the universe may burst forth and radiate from it.¹¹⁸ In fact, all three spatial

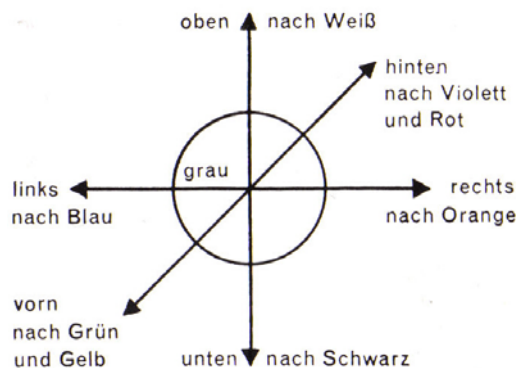
¹¹⁵ *Das bildnerische Denken*, p.3-4. "Note sur le point gris," *Théorie de l'art moderne*, (Paris : Denoël et Gonthier, 1975), p.56.

¹¹⁶ Image from *Das bildnerische Denken*, p.488.

¹¹⁷ Images from *Das bildnerische Denken*, p.484-475; Paul Klee, *Pädagogisches Skizzenbuch*, (Mainz: Florian Kupferberg Verlag, 1965), p.50.

¹¹⁸ *Théorie de l'art moderne*, p.56. *Das bildnerische Denken*, p.3-4.

dimensions will emerge from the poles that separate-out from the chaos through the grey point.¹¹⁹



Here we see that white and black split, one rising, one falling, thereby creating a dimension of height; the cool blue and the warm orange spread left and right to open the dimension of width, and the opposite lukewarm colors move in front and behind to create depth, all with grey remaining in the center.

Establishing order in this chaotic grey-point creates the cosmos. Before the organization, there were already natural laws and relations of movement: white to black and red to green, for example. However their motions were not yet structured and determined. In this chaos, the values and hues are not yet separated. Instead, they whirl about in such a flux of disorder that they have no fixed locations, and neighboring parts blur together so much as to be indistinguishable. All is intermixed; all is grey. In this tangled mess, white battles black, as do such opposite colors as red and green, and it is the artist's job to establish balances between these poles.¹²⁰

Deleuze elaborates this by drawing from Henri Maldiney's description of the *abyss* and *chaos* of Cézanne and Klee, which the artist confronts when beginning creation. For Klee, the painter is originally in a state of being *lost* within a landscape, without a reference system of orienting points.¹²¹ Cézanne gives a similar depiction of creation's opening state, according to Joachim

¹¹⁹ Image, *Pädagogisches Skizzenbuch*, p.50.

¹²⁰ *Das bildnerische Denken*, p.9-10.

¹²¹ Henri Maldiney, *Regard, parole, espace*, (Lausanne: Editions l'Age d'Homme, 1994), p.149.

Gasquet's recreation of his dialog with the painter. Maldiney, and as well Deleuze, emphasize the "iridescent chaos" initially enveloping Cézanne before he paints. Out from this abyss, the earth rises while the world obtains a measure of organization, but before long it caves in, collapsing back into a catastrophe: "a cataclysm has carried it all away, regenerated it."¹²² What Cézanne calls *abyss*, Klee calls *chaos*. The first response to it is vertigo, brought about when we confuse the near and the far, causing us to become dizzy. Citing Klee's notebooks, Maldiney then explains how the cosmos comes to be generated: the grey-point jumps over itself from its non-dimensional state into an ordered space. This occurs through rhythm, which allows for the incommensurable chaos to pass into an equalizing order; as Deleuze says, we organize a "rhythm in chaos."¹²³

For Klee, rhythm can emerge from the grey-point when the artist separates the hues and tones, and arranges them into relationships which maintain the endless movement of chaos, except in this case, the motion travels between more determinate zones demarcated within the canvass. If there is too much order, however, there is stasis, and no movement or rhythm. As well, if there is too much movement, so much that all the colors and tones mix back to grey, then all that remains is a world only colored grey, a world of nothing.¹²⁴

Before continuing with Klee's rhythmic techniques, we might note that Deleuze explains a cinematic way that rhythm can be obtained from the chaos, but without separating opposites and ordering them. He refers to American non-narrative filmmaker Stan Brakhage as having explored a "Cézannian world before man, a dawn of ourselves, by filming all the shades of green seen by a baby in the prairie," and refers us to Louis Marcorelles'

¹²² Henri Maldiney, p.150. Joachim Gasquet, *Conversations with Paul Cézanne*, Transl. Julie Lawrence Cochran, Ed. Michael Doran, (Berkeley: University of California Press, 2001), p.114.

¹²³ Maldiney, p.151-152. Gilles Deleuze, "Cours Vincennes: synthesis and time - 28/03/1978," webdeleuze.com.

¹²⁴ Klee, *Théorie de l'art moderne*, p.51. *Das bildnerische Denken*, p.499.

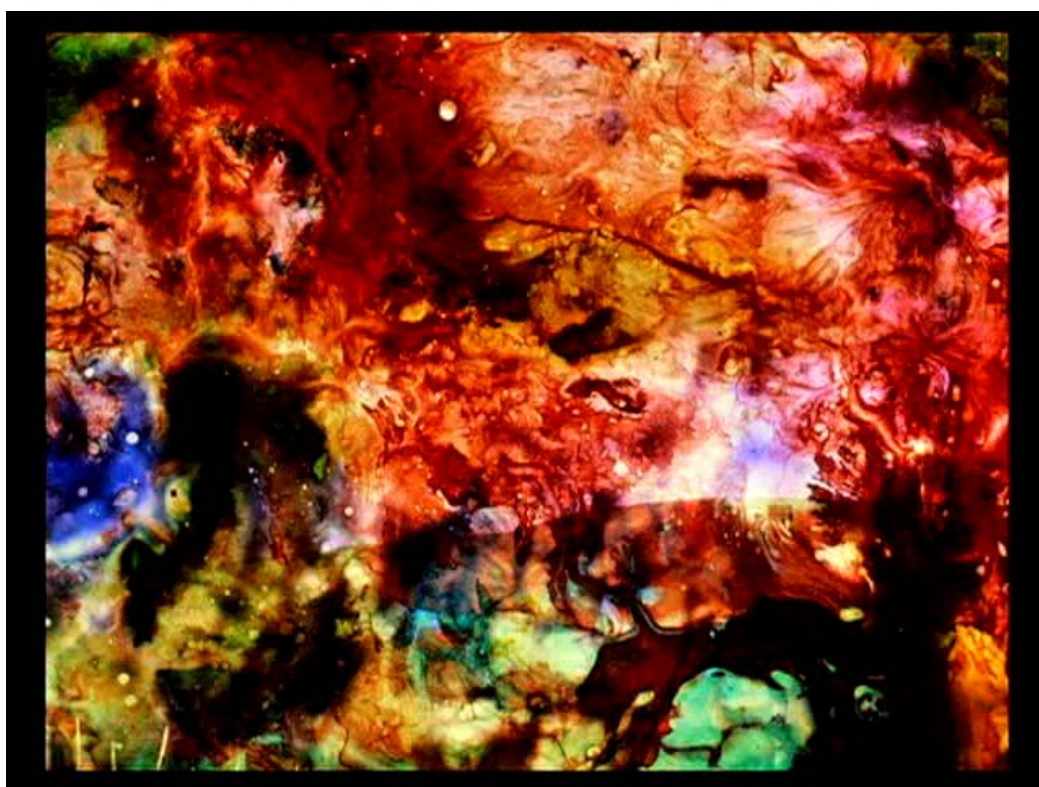
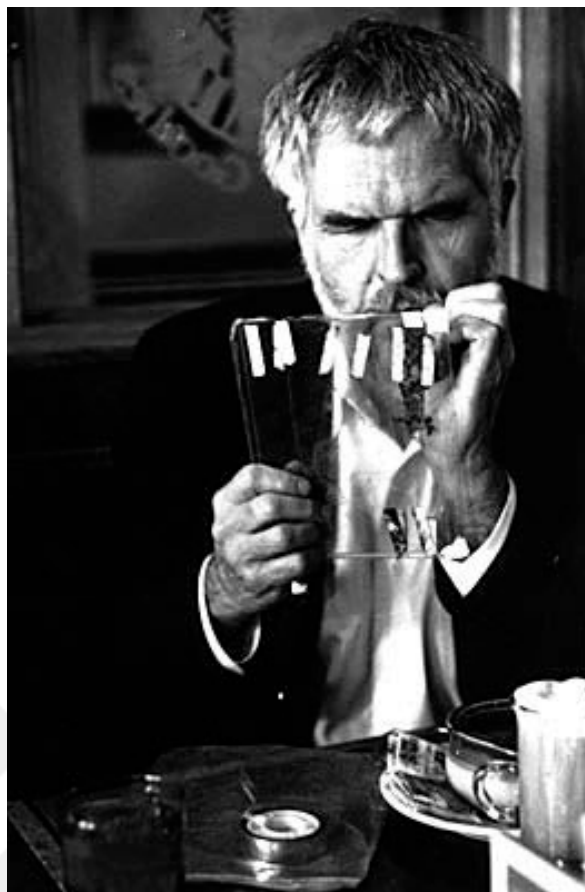
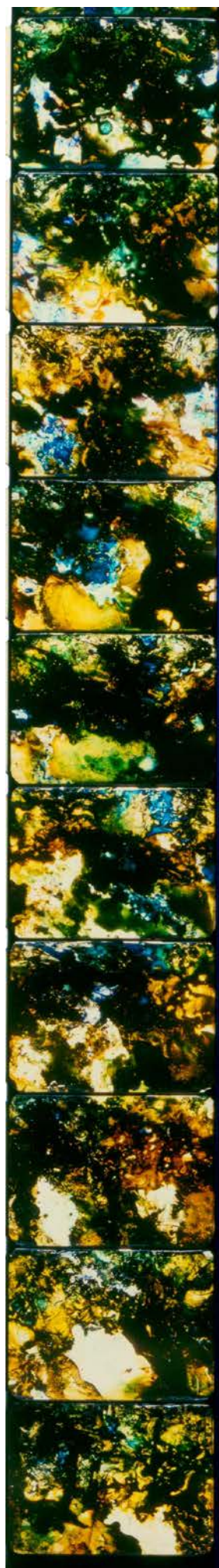
Éléments pour un nouveau cinéma.¹²⁵ In this text, Marcorelles quotes a passage from Brakhage's writing:

Imagine an eye unprejudiced by compositional logic, an eye which does not respond to the name of everything, but which must know each object encountered in life through an adventure of perception. How many colors are there in a field of grass to the crawling baby unaware of "green?" How many rainbows can light create for the untutored eye? Imagine a world alive with incomprehensible objects and shimmering with an endless variety of movement and innumerable gradations of color. Imagine a world before the "beginning was the word."¹²⁶

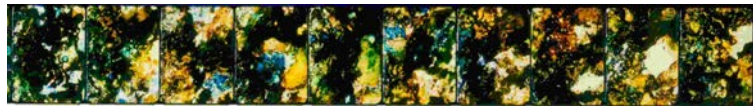
Deleuze's interest in Brakhage is the same as with Klee and Bacon; Deleuze turns to these artists with his question, what is the role of rhythm, chaos, and order in sensation? For, if he can find from these masters that sensation is at bottom a matter of disorganized perception, then we have cause to prefer his portrayal of sensation over phenomenological theories. Brakhage offers one more alternative explanation for the rhythm of sensation, to add to what Deleuze obtains from Klee and Bacon. Brakhage thinks that the colors in pre-lingual babies' eyes are a chaotic swirl of infinitely varying hues and tones, because they have not yet learned how to differentiate any of them. In fact, Brakhage painted such Cézannian realms of color directly onto his film. However, this would seem to cause all the colors to blur together into a grey; we might presume that if colors changed rapidly before our eyes, they would all synthesize together into grey. (Below we can see Brakhage hand-painting

¹²⁵ Gilles Deleuze, *Cinema 1: The Movement Image*. Transl. Hugh Tomlinson & Barbara Habberjam, (London: The Athlone Press, 1986), p.87.

¹²⁶ Louis Marcorelles, *Éléments pour un nouveau cinéma*, (Paris: Unesco, 1970), 147-148. *Living Cinema: New Directions in Contemporary Film-making*, Transl. Isabel Quigly, (London: George Allen & Unwin Ltd., 1973), p.142.143. Stan Brakhage, "Encounters," *By Brakhage — Anthology* (Criterion, 2001).



the film, and an example strip from his *Existence is Song*. We can see from this strip that we would expect a sequence of such frames moving rapidly before our eyes to blur together into a homogeneous grey field).



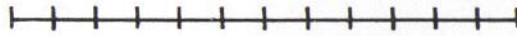
Yet for Brakhage, the rhythm of the film projector, about 24 beats a second, is what separates the colors, so long as he can accelerate our tiny eye movements to the point where they do not stare blankly at the whole screen while colors pass-by, but rather move in tiny motions around the screen almost as rapidly as the frames change. His complaint with video media is that it “looks like a pudding that is virtually un-cuttable like a gel,” rather than having “the sharp hard clarities of snapping individual frames” in film.¹²⁷

Clearly, Brakhage’s later painted-films are chaoses of color, but they are not perceived as grey, on account of the rhythm of our vision, which separates-out the differences *temporally*, rather than *spatially* as with Klee’s rhythm. Hence in this other way, our perception occurs not when passively synthesizing what we sense, but rather when we are forced to contend with a chaos that disorganizes our faculties.

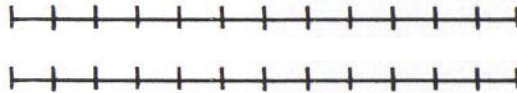
Without learning its basic mechanisms, we may be unaware of the rhythm in paintings, despite it always being a part of the way we view artwork. Rhythms can be created visually by juxtaposing the tensions between forms, values, or hues, whose pairings cause our eyes to move through a series of shifts between different places on the canvass at different speeds and angles. We might look first at some of Klee’s simplest illustrations of these

¹²⁷ Stan Brakhage, *Encounters*.

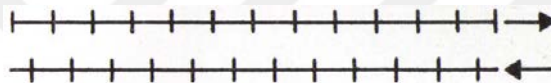
movements, beginning with ones brought about through tensions between forms.



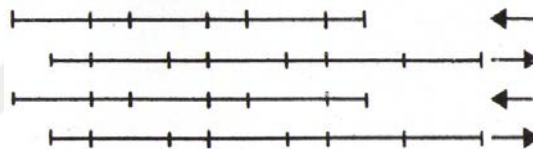
This above form has even spaces, so when it is juxtaposed with another of the same sort, there is still not enough tension to move our eyes very much within the figure.



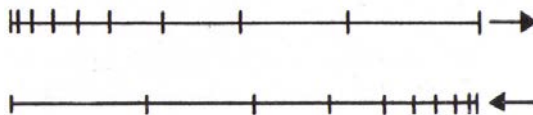
However, if they are off-set by half of an interval, already there is a tension that suggests contrary motions, which will cause our eyes to jump around the spaces a little more, in a rhythmic manner:



As the patterns become complex, so do the rhythms:



In this one below, our eyes rebound from end to end like a spring:

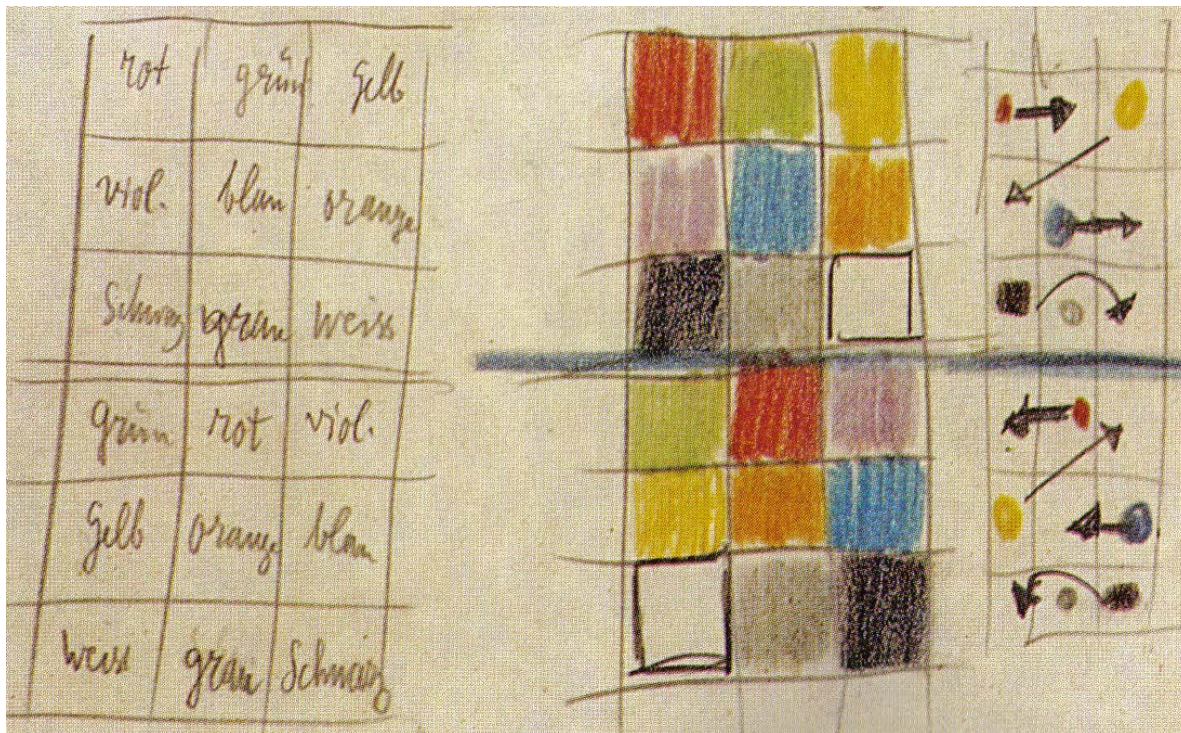


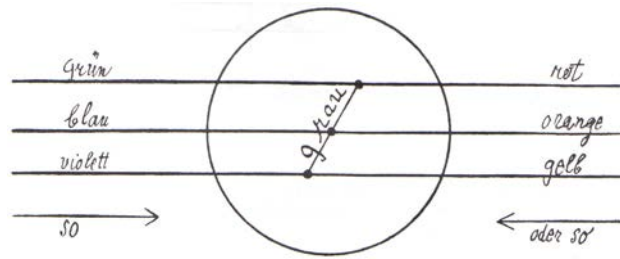
When we later examine Bacon's rhythmic pairings of movements, we should keep these diagrams in mind, because he often pairs forms in a similar manner to push and pull the motion of our eyes in two opposing directions, so to animate coupled characters, to make them "wrestle."¹²⁸

As we noted, hues and tones for Klee have gravitational movements such that if we faced a field made-up of a variety of colors, the opposites would naturally pair and be drawn to each other.¹²⁹

¹²⁸ Images from *Das bildnerische Denken*, p.245.

¹²⁹ Image below from Paul Klee, *Pädagogisches Skizzenbuch* (Mainz: Florian Kupferberg Verlag, 1965), p.50.





Thus, if green and orange were on one side of the field, and red and blue on the other, a rhythm of juxtaposed movements would result, because our eyes would be drawn dually from both ends to the other at the same time.

Klee also indicates that our eyes usually move generally first from the primary color in a complementary-pair to its secondary color companion (each primary color complements a secondary color, which is made by mixing two primary colors. In the case of red and green, the green is made by mixing the other two primaries, blue and yellow). As well, our eyes tend also to move from black to white, rather than the other way around. There is more gravity pulling our eyes to the primaries and black, so they often begin there; then afterward, most times, we jump to their complements, rather than to some other color.¹³⁰



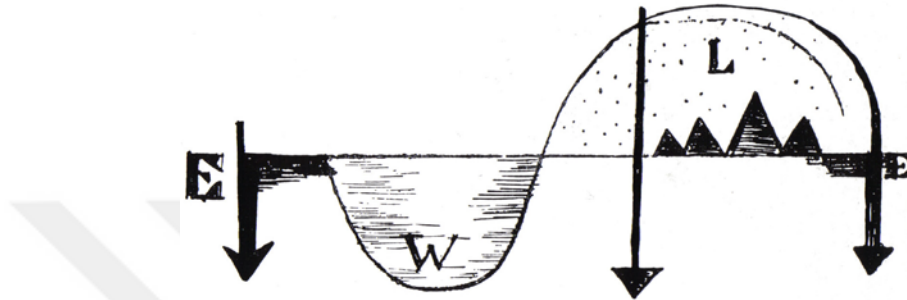
From the arrow-movements shown in the far right diagram of this image from his pedagogical sketchbooks, we can see the natural eye-jumps, which when taken altogether, create a complex rhythmic motion, perhaps better exhibited in his *Farbtafel Qu 1*:¹³¹



¹³⁰ Paul Klee, *Unendliche Naturgeschichte*, (Basel : Schwabe, 1970), p.146.

¹³¹ *Unendliche Naturgeschichte*, p.147.

Hence, the artist makes use of such natural movements between colors, by separating polarities out of the grey-point and strategically arranging their orders and positions. However, the artist still should not *mathematically* or *logically* predetermine their locations, for that would limit the painting's rhythm by homogenizing it, thus stripping the original chaos of its motive powers, and flattening all dimensions back to the grey point.



This tendency for the poles to return to the grey-point is the force of gravity that pulls them to what Klee considers *the center of the earth*.¹³² When the different color and tone poles are merely separated and positioned in a logically ordered fashion, they then pull back towards each other, inward toward the grey point, on account of the terrestrial-like “gravitational” forces; (in the case of our vision, our eyes move between them so much as to cause us to blur together opposite tones and colors into a neutral grey). The artist only accomplishes the *construction* of a work when merely determining the polar relationships. However, when she adds variations and complexities so to create rhythms, thereby preventing the collapse back to the grey point, she then has attained the work's *composition*.¹³³ Deleuze emphasizes this upward, gravity-defying force of expression and style which lifts us up in triumph over gravity, by organizing the chaotic rhythms into a more ordered cosmos.¹³⁴

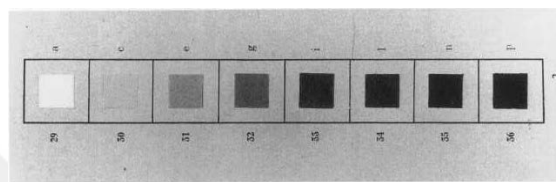
While teaching at the Bauhaus — a design institute that combined studies in crafts and fine arts — Klee was encouraged to incorporate into his works and teachings the empirical findings of a color scientist, Wilhelm

¹³² *Unendliche Naturgeschichte*, p.31.

¹³³ Paul Klee, *On Modern Art*, Transl. Paul Findlay, (London: Faber & Faber, 1987), p.43.

¹³⁴ Deleuze & Guattari, *Thousand Plateaus*, p.344. *Mille Plateaux*, p.383.

Ostwald, who devised precise laws of harmony for mixing and combining hues and tones. Klee took-up his findings, but obtained superior results by breaking Ostwald's precise and logical laws of color combinations. Although Klee adopted many of Ostwald's basic principles, he defied the rule that "harmony = obedience to law." Ostwald designed a homogenized grayscale, placing tone values at equal intervals and assigning letters to each one. He as well determined the laws of harmony dictating precisely how those tones may be combined, much like the laws of harmony for combining notes in music.¹³⁵



Likewise, Klee differentiated tone values and assigned them letters, and also created combination patterns; however, his intervals between values were asymmetric and heterogeneous, and he varied the distributions of weights, sizes, and textures, so that when combined in certain ways they produced dynamic rhythms, rather than stable balance or harmony. He demonstrated the superiority of his law-defying method in his painting, *Rhythmisches*, which is loosely based on a "magic square" pattern. Oliver Messiaen depicts one in the following diagram:¹³⁶

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

Verticalement, dans le carré ci-contre, chaque colonne donne un total de 34 :

$$\begin{array}{rclclclclcl}
 16 & + & 5 & + & 9 & + & 4 & = & 34 \\
 3 & + & 10 & + & 6 & + & 15 & = & 34 \\
 2 & + & 11 & + & 7 & + & 14 & = & 34 \\
 13 & + & 8 & + & 12 & + & 1 & = & 34
 \end{array}$$

Horizontalement, chaque ligne donne un total de 34 :

$$\begin{array}{rclclclclcl}
 16 & + & 3 & + & 2 & + & 13 & = & 34 \\
 5 & + & 10 & + & 11 & + & 8 & = & 34 \\
 9 & + & 6 & + & 7 & + & 12 & = & 34 \\
 4 & + & 15 & + & 14 & + & 1 & = & 34
 \end{array}$$

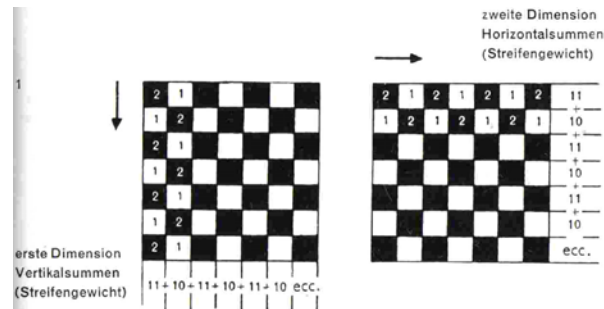
Les 2 diagonales donnent également un total de 34 :

$$\begin{array}{rclclclclcl}
 \text{De haut en bas et de gauche à droite :} & 16 & + & 10 & + & 7 & + & 1 & = & 34 \\
 \text{De haut en bas et de droite à gauche :} & 13 & + & 11 & + & 6 & + & 4 & = & 34
 \end{array}$$

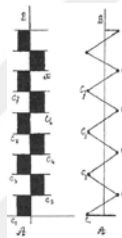
¹³⁵ K. Porter Aichele, "Paul Klee's 'Rhythmisches': A Recapitulation of the Bauhaus Years," *Zeitschrift für Kunstgeschichte*, 57 Bd., H. 1. (1994), p.79-80. Image below is Ostwald's "Practical grey series" from *Der Kleine Farbkörper*, Leipzig 1921, in Aichele p.77.

¹³⁶ Olivier Messiaen, *Traité de rythme, de couleur, et d'ornithologie (1949-1992), Tome II*, (Paris: Alphonse Leduc: 1995), p.17.

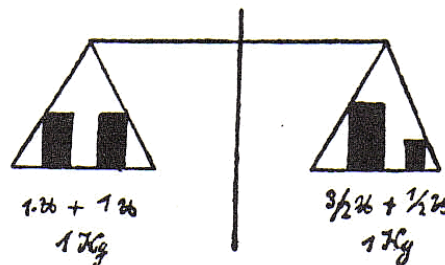
Here we see that in a magic square, the values add up to the same number whether counting the rows, columns, or diagonals. Klee likewise performed such analysis of distributions, the most basic being the checkerboard arrangement.¹³⁷



Of course these patterns cause our eyes to move in zig-zag rhythms.¹³⁸



Klee then applies to these principles one governing asymmetrical weight:¹³⁹



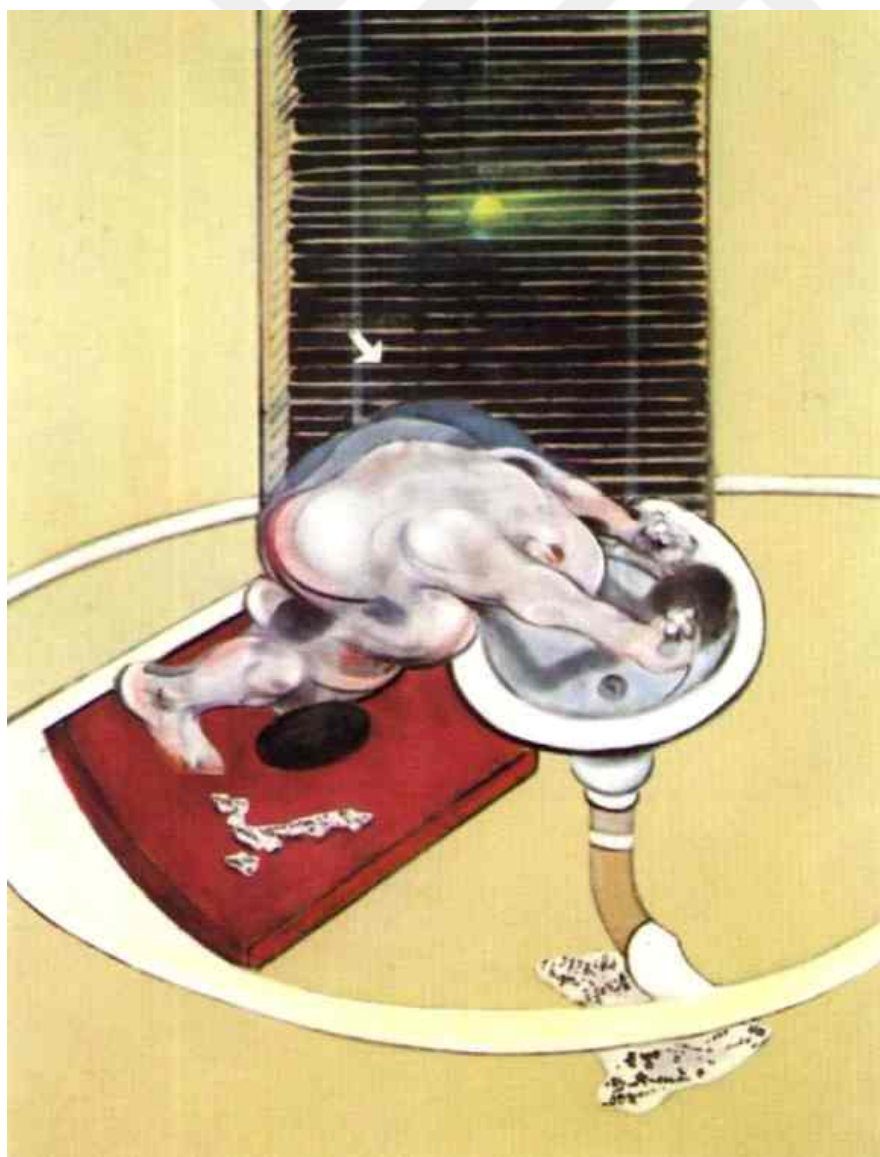
Using this principle, Klee may distribute the tonal values (weights) of squares in irregular ways, while still maintaining some degree of balance. Thus for example, a simple row of squares made up of just one white and one black can equal the tonal “weight” of a row containing two greys of medium value. With this in mind, Klee can create a *magic square* of tone values, in which a variety of tone weights are distributed throughout each line, so that the total

¹³⁷ Image, *Das bildnerische Denken*, p.223.

¹³⁸ Image, *Pädagogisches Skizzenbuch*, p.35.

¹³⁹ Image, *Pädagogisches Skizzenbuch*, p.33.

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weight of vertical, horizontal, and diagonal sequences are all equal, thereby creating a perfectly balanced yet heterogeneously distributed grid. However, when putting these principles into practice to make his *Rhythmisches*, the result was not a perfectly constructed magic square, because he considers such designs to be more “conceptual models rather than formal proto-types intended to be rigidly imposed on pictorial ideas.”¹⁴⁰ Klee believed that such theoretical calculations were only to play a secondary role in artistic creation; for, they served merely as means to help arrange the chaos of the painter’s emotions.¹⁴¹

For the most part, *Rhythmisches* is arranged like a checkerboard, but with more than the two values of white and black. Yet, he mostly maintains the same interchanging pattern, which if it were merely three values would be arranged like this.¹⁴²

	—	×
—	×	
×		—

A row following underneath another one begins a single step behind the row above. However, on account of Klee’s variations in tone values & square sizes, and their slightly asymmetrical magic box distributions, he was able to accomplish “structural rhythms he described as ‘discontinuous and differential’” in his *Rhythmisches*.¹⁴³



¹⁴⁰ Aichele, p.84.

¹⁴¹ Aichele, p.85.

¹⁴² Image, Aichele, p.85.

¹⁴³ Aichele, p.87. Image, Paul Klee, *Unendliche Naturgeschichte*, p.368.

Now having explained visual rhythm, we may now better grasp musical rhythm.

In *Difference & Repetition*, Deleuze distinguishes between two types of rhythm in music. The first is *cadence-repetition*, which is like the normal ticking of a clock: it divides time into regular intervals and is an “isochronic recurrence of identical elements;” that is, it is made of equal, homogeneous metrical lengths, (one tick every second). The other sort he calls *rhythm-repetition*, and it is like the malfunctioning clock. Its incommensurable and unequal periods create distinctive points, *privileged instants* which indicate a polyrhythm (illustrated in the appendix).¹⁴⁴ Each instant is privileged (just as each dot was seen in its individuality), because no periods of time in a heterogeneous rhythm can be reduced to such even ratios as ‘one per second.’ Instead, the rhythmic units appear chaotically and unpredictably; for, they do not follow any mechanized pattern.

Deleuze refers us to Messiaen’s and Boulez’ writings on musical rhythm for further elaboration. They likewise distinguish regular and irregular rhythms, favoring the heterogeneous sort. Composer Pierre Boulez speaks of rhythm in terms of *irregularly pulsed* music. The pulse is an inherent stress that falls on certain beats; so for example, when listening to the clock, we might hear “tick — tock” and not “tick — tick,” because we felt that every other beat was more stressed. This repeating stress is the pulse, and in music, different sorts of pulses can be brought about by grouping beats together in different patterns. Boulez’s technique was to divide time into such a nuanced pattern that only a machine could perform it with perfect precision. This causes the human performer to always fall short of precision; hence, the

¹⁴⁴ *Difference and Repetition*, p.21. *Différence et répétition*, p.33.

musician does not maintain a regular pulse, resulting in a less rigid, non-pulsed *true* rhythm.¹⁴⁵

Likewise for Messiaen: rhythm is like the movements of nature, with free and unequal durations.¹⁴⁶ He was an ornithologist, as well as a composer, who studied intently the singing of birds. He heard the individual rhythmic character of each bird's distinct calls, and he heard the overall rhythm of all the birds singing together. They were not in total rhythmic disorder, in which case their notes would be so unrelated as to not couple with one another; yet as well, the birds were not all synchronized to some metronome or ticking clock, as though a regular pulse emanated from the earth to allow them all to share a common beat. Some of Messiaen's compositions were inspired by bird calls, and the musicians — when playing the bird parts — had to likewise abandon the common pulse normally shared by the whole symphony. They needed to break their habit of keeping a common time, and to instead make the rhythmic figures according to a more natural non-mechanized beat. (Composer Scott Wollschleger recounts a rehearsal of Messiaen's *Oiseaux exotiques* in which three clarinets were to play the bird parts, but were playing them too precisely. When the conductor asked them to play more naturally, as the way birds sing, the performers complained that doing so causes them to lose their sense of time. The conductor reassured them that he would be able to bring them all back together with the orchestra when the time was right: "so he gave them that license to not interpret the figuration mechanically, and it sounded like a totally different piece all the sudden, it just came alive").¹⁴⁷

When music's pulse is made up of a sequence of equal note values, the listener might take comfort in the constancy, perhaps even become hypnotized

¹⁴⁵ "I had piled up ratios of 24:25, or 27:28, in other words, values so close together that it would be impossible to play them accurately....," Pierre Boulez and Célestin Deliège, *Pierre Boulez: Conversations with Célestin Deliège*, (London: Eulenburg Books, 1975), p.68-69.

¹⁴⁶ Olivier Messiaen and Claude Samuel, *Conversations with Olivier Messiaen*, Transl. Felix Aprahamian, (London: Stainer & Bell, 1976), p.33.

¹⁴⁷ Occurring at Carnegie Hall, *Music of Messiaen and Varèse*, February 2006, conducted by David Robertson.

as Bergson described, as though a pocket-watch swung back-and-forth before our eyes. Yet for Messiaen and Boulez, such patterns do not have the irregularity needed to truly be rhythm. Hence, the military march is *non-rhythmic* music; when instead, a *truly rhythmic* march involves an *irregular swaying*. As such, it would disrupt the listener's pulsing heart-beat and breathing patterns, clearly the opposite of Bergson's rhythmic hypnosis. Messiaen illustrates this notion of rhythm by comparing Bach to Mozart. Bach is considered to have a very regular and mathematically precise rhythm; hence, his works appear rhythmic from the Bergsonian perspective, plunging the listener "into a state of beatific satisfaction," when on the other hand, Mozart, whose rhythms are irregular, is more truly a rhythmician.¹⁴⁸ In terms of sensation, when our faculties are synchronized and harmonious, they are likewise lulled and inactive. It is only when the rhythm of sensation throws the faculties out of coordination that a sensation sends waves of intensity through our bodies.

We saw how Klee achieved this disruptive effect by imperfectly organizing visual chaos so to create a plurality of tensions and movements in the painting. The rhythm that Deleuze finds in Bacon's paintings likewise involves couplings of movements, but of different sorts. For example, Bacon accomplishes a diastolic and systolic rhythm by placing the Figure inside an enclosure of some sort, usually either a circle or another shape, which serves to create a contour between Figure and background-field: it is a surface or membrane through which movements are exchanged between the two zones of the painting. (Below we see his *Figure at a Washbasin*, 1976, in which the figure is enclosed by a white ring. Color image found on the image-panel beside page 81).

¹⁴⁸ *Conversations with Olivier Messiaen*, p.34.

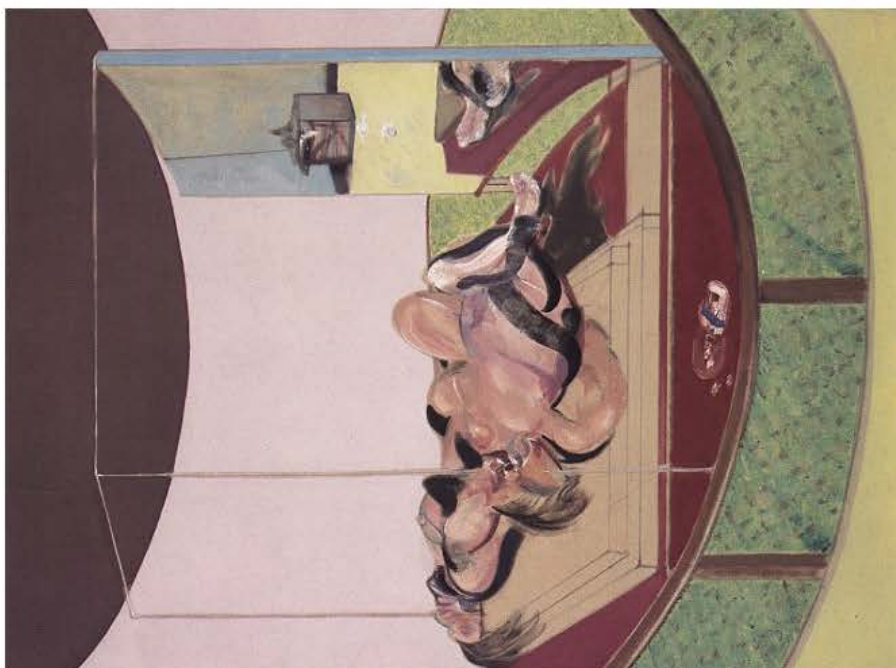
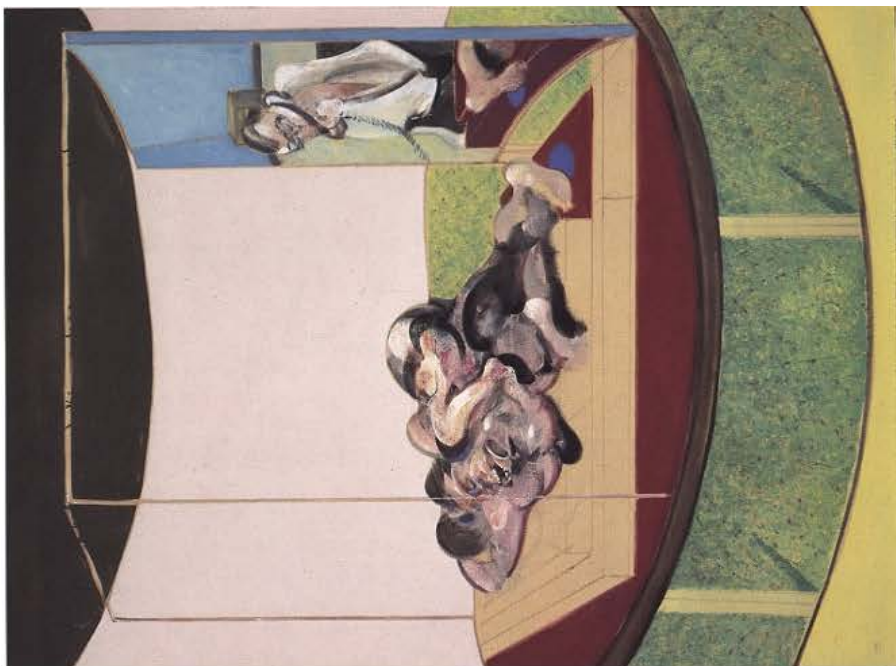


The enclosure constricts the Figure, like the systolic contraction of the heart-beat. This squeezing on the Figure applies a pressure upon it, causing its insides to push back on the contour, this movement being the diastolic.¹⁴⁹ As well, the pressurized and contorted Figure pushing back against the contour seeks for escape through some opening in its body, in this case, his mouth. We might imagine squeezing a balloon filled with water, with the valve still open. The contracting movement of our hand pairs with the escaping movement of the water, together making what Deleuze considers the diastolic/systolic rhythm. Our eyes here are drawn into the center, on account of the pressurizing ring, but once arriving there we encounter a Figure that is shaking in spasms. These movements suggest some sort of an explosion is pending, which means our eyes also *feel compelled* to move back outward, even if they remain in the center, only *anticipating* some release of tension. We examined before such tensions between motional tendencies in Paul Klee's dashed-lines, whose orientational imbalances pulled our eyes in two opposing directions at once, thereby causing us to perceive motion in static forms.

The body, then, tries to escape itself through a spasm that allows it to burst from some hole on its surface, which is often depicted in Bacon's art in acts of love, vomiting, and excretion.¹⁵⁰ This is the provisional organ, the point of sensation where the BwO's inner intensive waves encounter an external force at some zone on the body's surface, thereby exchanging intensity.

¹⁴⁹ *Logic of Sensation*, p.24. *Logique de la sensation*, p.37-38.

¹⁵⁰ *Logic of Sensation*, p.11-12. *Logique de la sensation*, p.23-24.



Another technique is the complex rhythm Bacon creates with the coupling of movements in his triptychs, which takes sensation to its highest possible level. This rhythm involves the exchange of roles that the Figures play in the triptychs: the active, passive, and attendant. Deleuze derives these notions from Messiaen's detailed analysis of Stravinsky's *Rite of Spring*. (The appendix explains one of Messiaen's analyses to give concrete examples of the rhythmic figures. It is not provided to fulfill a philosophical purpose, but rather is included for those who want to know precisely what Deleuze means by the rhythmic figures).¹⁵¹ Messiaen shows that there are different repeating patterns, each one like a bird call in its individual uniqueness and brevity. Some of these characters will repeat with longer duration, others recur in shorter form, and one stays the same each time. When we listen to these subtle changes, we receive the impression that the increasing patterns are doing violence to the decreasing ones, as though in a boxing match where one fighter is beat down by another, all while an audience watches the drama.

Deleuze explains that Bacon accomplishes the same effect by coupling Figures, so that the sensations they invoke are forced together, creating an even stronger intensive rhythm. When viewing the triptychs, certain Figures will pair-up, each taking one of the three possible roles. In the case of the witness-attendant rhythm in *Triptych inspired by the poem "Sweeney Agonistes,"* there are two character figurations, one is an intertwined figure deformed by a horizontal and flattening force, and the other is someone witnessing these deformed characters. We might begin viewing the right panel, in which a blurring technique flattens the two sleepers.¹⁵²



¹⁵¹ *Logic of Sensation*, p.50-51. *Logique de la sensation*, p.70-71.

¹⁵² *Logic of Sensation*, p.54-55. *Logique de la sensation*, p.74-75.

(The original paintings are quite large, so our vision does not automatically group the figures as they do when viewing this shrunken illustration above). Perhaps we notice next the man watching the horizontal forms, standing to the right. By grouping the flattened Figure with the observer, Bacon creates a coupling of movements that causes an unchanging level of disorganization in our faculties, but not because it is a homogeneous rhythm: Deleuze describes the attendant rhythm by evoking another term by Messiaen, *non-retrogradable rhythm*, which is a rhythmic pattern that, when played in reverse, produces the same pattern as when played forward, just as with such palindromic sentences as “fall leaves after leaves fall.” Or as Messiaen explains, “it’s as if in traversing a landscape, beginning from two opposite points, you were to meet the same things at the same times in the same positions and in the same order.” He also offers the example of the wings of a butterfly:

When butterflies are enclosed in their chrysalis, their wings are folded and stuck one against the other; the pattern on one is thus reproduced in the opposite direction on the other. Later, when the wings unfold, there will be a pattern with colours on the right wing which mirror those on the left, and the body of the butterfly, the thorax and the antennae placed between the two wings constitute the central value. These are marvelous living non-retrogradable rhythms.¹⁵³

The non-retrogradable (palindromic) rhythms of the attendant Figure, then, are not the repetition of a common unit, but rather are more internally diverse. (More specifically, Deleuze says that the attendant rhythm is non-retrogradable, because it is “retrogradable in itself;”¹⁵⁴ that is, its inverse form is implied in its forward movement, because both are the same. The appendix more thoroughly describes Messiaen’s notions of retrogradation and non-

¹⁵³ *Conversations with Olivier Messiaen*, p.43-44.

¹⁵⁴ *Logic of Sensation*, p.57. *Logique de la sensation*, p.77.

retrogradation). Thus, when viewing the attendant Figure, it could also be that we experience a rise and fall of intensity, so long as there is the non-retrogradable *mirror effect* which gives us the feeling that we have not really undergone any change in the process.

However, before we visually made this attendant coupling, the lying figures in the right panel — when viewed by themselves — could have been active or passive; that is to say, if we looked *first* at the lying figures in the left panel, which seem to be lying passively on their back, and we looked *next* at the coupling in the right panel, which seem to be animated, “almost whirling,” then the passive-function is taken up on the left and the active function on the right. In these cases, the active couple increases intensity, because the forces of deformation are greater, which causes the increasing movement, and which causes our faculties to be more in discord, making the job of recognizing and unifying the forms more difficult. However, the intertwined characters in the left panel, in relation to the right, have less deformative motion, and thus our faculties decrease in discord as we continue to view them. This causes us to have a decreasing intensity in comparison to the right panel. Hence in this case, the right panel takes-on the active rhythmic function, and the left the passive. In fact, we might look exclusively at the intertwined figures of the right panel, and notice that the buttocks points above the horizon, thereby assigning it the active role, while the head is lowered below the horizon, causing it to be passive.¹⁵⁵

What determines the pairings and the roles cannot be predetermined by analyzing the structural features of the triptychs: the placement of the Figures in the center or side panels has nothing to do with how the rhythmic-functions rotate around the paintings. There is no “conscious formula” that makes these determinations; rather, the rhythmic circulation of intensive tensions proceeds according to an *irrational logic*, a *logic of sensation*, which we

¹⁵⁵ *Logic of Sensation*, p.55. *Logique de la sensation*, p.75.

will return-to at greater length when examining Cézanne's logic of organized sensations, as opposed to Bacon's logic of disorganized sensations.¹⁵⁶

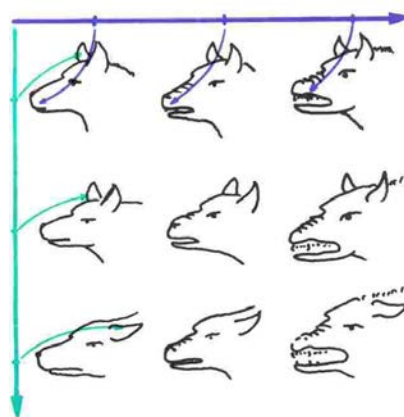
Thus, there is this irrational and unpredictable pattern of movement that changes depending on *the case at hand*, which is always complicated and unpredictable, given the changing contingent circumstances of each viewing. While sensing the painting, there is no way to pre-determine which character-functions appear in what place and at what moment. However, to experience these rhythms is to be a BwO that lets the body and faculties undergo varying levels of disarray.

Another technique that serves to couple sensations (so to produce intensive rhythms) is Bacon's diagramming technique, which mixes *analogical* and *digital* forms of expression. These two modes of communication could be clarified by associating analog with both *analogy* & chaos, and digital with both *code* & order. Deleuze refers to different applications of these terms so that he may combine some aspects of each usage; this allows him to explain a sort communication based on deformations that convey facultative disorder. Deleuze refers us to Gregory Bateson's distinction between analogical and digital *animal communication* in his *Steps to an Ecology of Mind*. As Bateson explains, the "messages" that animals convey refer not to objects but to their social relations; for example, the cat's mewling does not mean milk, but "dependence." A more compelling example is his story of a wolf-pack leader catching an inferior male who broke the code of hierarchies, and achieved coitus with a female, which involves being locked-in with her. Bateson explained previously how an adult wolf weans young puppies by crushing them down with its jaw. Then, in the case of the leader finding his subordinate infringing on his mating prerogatives, instead of attacking, the leader simply crushed the male down as though weaning him. This communicates their social relationship by analogy: 'just as a father is to a

¹⁵⁶ *Logic of Sensation*, p.59. *Logique de la sensation*, p.79.

puppy, I am to you.’¹⁵⁷ In general, most animals normally convey their interrelations by means of such an analogical language, which consists of paralinguistic and kinesic expressions (body language) that communicate magnitudes of social relations (such as being *more* or *less* dominant) by means of analogous changes of magnitudes in bodily expression. Deleuze himself defines *analogical language* as one of *relations*, which consist of “expressive movements, paralinguistic signs, breaths and screams, and so on.” We may question whether such expressions can be rightfully considered a *language* for human beings; but even so, Deleuze claims that Artaud’s theatre elevates “scream-breaths to the state of language.”¹⁵⁸

In analogical communication, the animal (or human) is said to *modulate* (vary some property of) its *physiological expression*: it might, for example, increase the tension of its vocal chords, the height of its posture, or the opening of its eyelids. (Below we see a diagram displaying two variables of canine expression: ear height and fang exposure. This image exhibits the *continuous variability* of modulation: the physiological expression varies *more* or *less*, and is not so much a matter of *either...or*).¹⁵⁹



These modulations are felt proportionally in the receiver’s body, and thus their intended meaning is discerned physiologically rather than abstractly: the

¹⁵⁷ Gregory Bateson, *Steps to an Ecology of Mind*, (New York: Ballantine, 1972), p.365-366.

¹⁵⁸ Gilles Deleuze, *Logic of Sensation*, p.79. *Logique de la Sensation*, p.107.

¹⁵⁹ Image from: Ralph Abraham and Christopher D. Shaw, *Dynamics — The Geometry of Behavior, Part 1: Periodic Behavior*, (Santa Cruz: Aerial Press, Inc., 1984), p.15.

more a wolf shows his fangs, the more *physically* intimidated I feel about its power over me.¹⁶⁰ Contrariwise, in the digital language of human beings, purely arbitrary and conventional signs “have no simple connection (e.g. correspondence of magnitude) with what they stand for.”¹⁶¹ The symbol for the number 2 need not be twice the size of the symbol for 1, in order for it to be twice the numerical value. The symbol 2 is only a *name* for a magnitude; and these names refer primarily to objects. Humans may refer to social relations still through analogical body language, but also through more subtle implications in their digital speech.¹⁶²

We might consider some other examples to clarify this distinction. Composer and ornithologist Olivier Messiaen explains that birdsongs are either 1) *free songs*, which have no social purpose and are “provoked by the beauties of dawning or dying light,” 2) *amorous songs*, sung in the springtime, “the time of love,” or (most prevalently), 3) *territorial songs*, sung when a bird wants to “defend its branch, its field of pasture, and to affirm his ownership of a female, a nest, or a branch, or a region in which he lives and feeds.”¹⁶³ Deleuze considers *territory* as “the critical distance between two beings of the same species: Mark your distance. What is mine is first of all by distance; I possess only distances. Don’t anybody touch me, I growl if anyone enters my territory, I put up placards. Critical distance is a relation based on matters of expression;” (*la distance critique entre deux êtres de même espèce : marquer ses distances. Ce qui est mien, c’est d’abord ma distance, je ne possède que des distances. Je ne veux pas qu’on me touche, je grogne si l’on entre dans mon territoire, je mets des pancartes. La distance critique est un rapport qui découle des*

¹⁶⁰ “in kinesic and paralinguistic communication, the magnitude of the gesture, the loudness of the voice, the length of the pause, the tension of the muscle, and so forth — these magnitudes commonly correspond (directly or inversely) to magnitudes in the relation that is the subject of discourse,” Bateson, p.373-374.

¹⁶¹ Bateson, p.372-373.

¹⁶² Bateson, p.373-374.

¹⁶³ Olivier Messiaen and Claude Samuel, *Conversations with Olivier Messiaen*, p.51-52.

matières d'expression).¹⁶⁴ If we consider the two sorts of bird calls with a “meaning,” a territorial call which tells other birds to stay away, and a mating call which invites them closer, we can see that this sort of communication is digital, because the particular arrangement of the call’s notes does not need to bear any resemblance to what it means; it is imaginable that hypothetically one call could have had the opposite meaning if the species happened to decode it differently. And also, the listening-bird’s reaction, either to come closer or to go away, does not result from the physical force of the sound waves, but rather from the animal decoding the meaning as a threat or invitation, which makes it something of an abstraction. However, if for example a bird does invade another’s territory, and the victim responds by singing the territory call more loudly and forcefully, then it communicates its message analogically as well, because it modulates the magnitudes of bodily expression to indicate the degree to which it is ready to fight for its space. Bateson also offers the example of a man professing his love to a woman, who pays just as much attention to the man’s bodily expression as to his words’ meaning, so to find some physically communicated indication of the *magnitude* of his love for her.¹⁶⁵ Also, before children learn the meaning of words, sometimes a parent’s impatience with a child’s behavior can only be expressed analogically by saying “No!” with greater force, so that the child feels the full extent of the parent’s disapproval. However, if a mother becomes irritated with an older child, but cannot modulate her voice louder on account of social circumstance, as perhaps when in church, she might only be able to use coding, and verbally say in a calm whisper, “I am getting very very impatient with you.” In this case the parent’s irritation was not expressed bodily; instead she coded it into a sentence, and added emphasis with extra coding: the second “very.”

¹⁶⁴ Deleuze & Guattari, *Thousand Plateaus*, p.352. *Mille Plateaux*, p.393.

¹⁶⁵ Bateson, p.374.

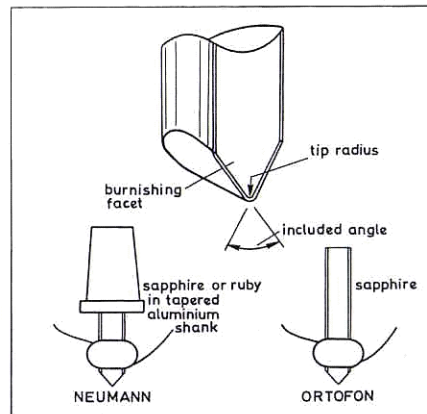
From Bateson, Deleuze derives the following notions which help him explain his philosophy of communication 1) analog communicates directly through bodily expressions, whose magnitudes of physiological modulation are analogous to the strength of the message, and which by-pass our faculties of representation and abstraction. Also, because these expressions are not under our *rational* control, Deleuze will consider them as introducing *chaos* into communication. And, 2) digital mediates indirectly through symbolic codes whose physical appearances bear no necessary relation to the information they convey. Also, their meanings are fixed and predetermined, and thus digital supplies the *orderliness* of communication.

The more widely known usage for these terms is their application in distinguishing two main types of electronic recording and communication technologies. We might already be familiar with the different ways that music sounds on an analog record turntable as compared to a digital compact disc player. By making metaphorical use of these technologies, Deleuze is able to contrast *direct material* modes of mediation with *indirect immaterial* ones. We might think of the analog record album another way, in terms of a shell making direct contact with some earthen material, which hardens and maintains the form of its contour, long after the shell itself decays. This fossilized imprint could be used as a mold to create replications of the original shell. Here the medium is a material making direct contact both with the original object and as well as with the replications of that object. In contrast, a digital medium theoretically does not take a material form, because it is constituted by some sort of code. It can be disputed whether or not a code can exist without some material storage, be that written symbols, computer circuitry, or the human brain; however, in comparison to analog, (at least superficially) digital media seem to be less dependent on material embodiments; because, as codes and symbols, they can be thought in the mind, and can be transferred so readily and easily as to suggest less

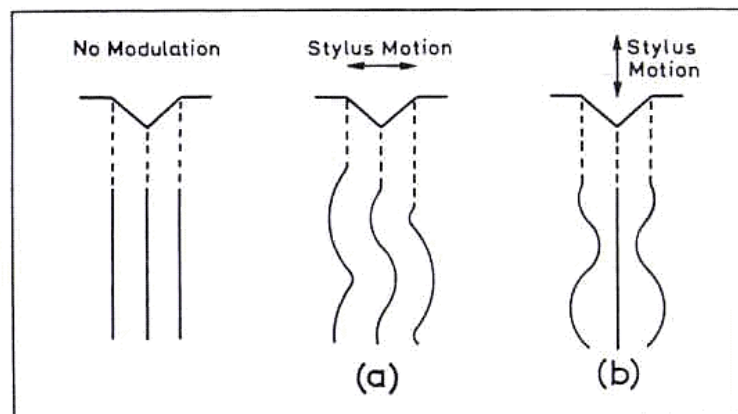
dependence on the materials that transfer them. And, unlike the case of the fossil, we would not be able to find some example of a digital medium in nature which is no more than a physical process; for, each instance involves the abstractive activities of organisms.

Deleuze derives another distinction from the technological sense of analog and digital, which is the autonomy of analog; for, it involves physical processes that largely happen on their own accord and in their own natural ways; so soft earth hardens its own way, and such natural facts as these determine the fidelity of the imprint. However, fidelity in digital is not a matter of the physical materials and properties that ‘embody’ the code; it depends rather on the complexities of the abstract code, itself: a more complex code is able to communicate more information. And, in instances where codes may be embodied in a variety of different materials — as say spoken words which can also be hand-written, expressed in sign-language, and typed mechanically or electronically — the *material medium* does not theoretically influence the meanings that we decode, because whether written or spoken, a word is intended to have the same meaning in either instance. [Although Deleuze uses the examples of analogical and digital photography, we might instead illustrate the difference between abstract and material fidelity by examining the surfaces of vinyl records and compact discs (CDs). By noting how the materials of analog are more subject to uncontrollable forces, we will better see how Deleuze connects analog with chaos, and digital with order; yet also, these examples offer a clear illustration for the *direct physical modulatory contacts* of analogical communication, and the *indirect immaterial binary-coded abstraction* of digital.

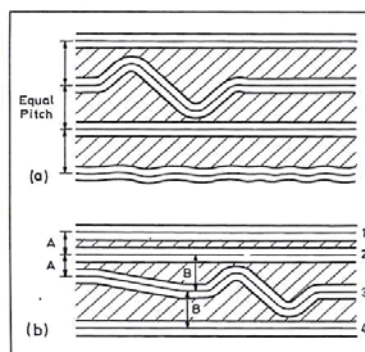
The mold for the record is produced by cutting it with a blade.



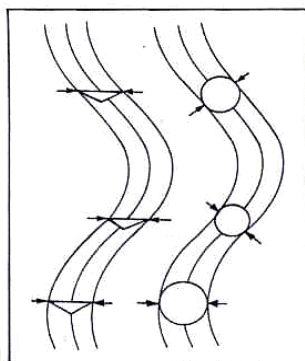
While digging down into the mold-material, the blade modulates its movement either up or down, or left-and-right, (according to variations in frequency or amplitude):



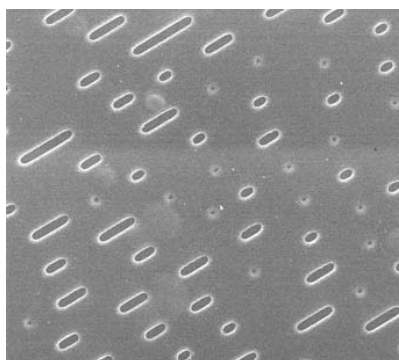
(The left image looks down upon a track resulting from no sound and hence producing no variation; the middle one displays the back-and-forth cutting movement; and, the right one is the up-and-down motion, creating lesser and greater depth). After the album is pressed from the mold, it bears a spiral of grooves:



The turntable needle then glides along the track, *analogously* to the blade's cutting motions, thereby reproducing the variations in frequency and amplitude, just as the replicated shells were produced from the fossil mold, (in the image below, the left track shows the movement of the cutting blade, the right track shows the play-back needle moving analogously):¹⁶⁶



The fidelity of the playback depends on the record-material retaining its fine structural features; yet, doing so is impossible; for, with each playback, the needle alters the groove to some degree. Hence, the original “message” might be distorted, on account of its material embodiment always undergoing a process of change. Also, we should note how the varying features of the played-back replication (the amplitude and frequency) are conveyed through *modulations*: variations in the physical imprint. A digital compact disc, in contrast, does not mediate information by such modulations; its surface does not contain fluid modulations but rather *marks* that function as symbols:



¹⁶⁶ Images from Sean Davies, “Disc Cutting,” in *Sound Recording Practice*, Ed. John Borwick, (Oxford: Oxford University Press, 1987), p.393-409.

The holes represent sequences of ones and zeros that themselves stand-for specific wave-forms. What would be important from Deleuze's perspective is that even though this surface can be destroyed, its code is not strictly dependent on the material; for, if it were written down or remembered, it could be then re-imprinted on something else, based on those written or remembered numbers; and thus it is almost as though the code "floats above" its embodiments in some Platonic realm of permanence. Eons from now, the record material will have deteriorated so much that in playback the sounds will no longer resemble the original recording; however, if the digital code were still preserved in some form, it could be played-back with its same original fidelity.

And also, whether the coded information for music is stored on a compact disc, or on a computer chip, the fidelity will be identical given the same playback system, because the medium is a code, which is exactly the same in both cases. However, the fidelity of a vinyl record is different from that of magnetic tape, even when played back through the same amplification system, despite both being analog; for, each type of analog medium, in a sense, has its own unique "personal" character.] Hence, in this case we see how Deleuze's references to analog and digital replication-technologies exemplifies one mode of communication that is *chaotic, uncontrollable, and physically direct*, and another mode that is *ordered, predictable, abstract, and indirect*. This distinction allows him to portray analogical mediation as involving uncontrollable forces *within our own bodies* that act according to their own unpredictable wills; and to characterize digital as being somehow *lifted up above our bodies to their surface*.

Yet, Deleuze notes that analog and digital are never found in pure form. We saw how analogical language communicates through modulatory "analogies" such as "the louder the voice, the greater the feeling of dominance." Hence, we might think that analog conveys meanings through

similitude or resemblance, and digital through arbitrary conventional symbols. However, Deleuze notes that a scream does not *resemble* its message but only *suggests* or *implies* it, and is thus not purely an analogy. Also, it is not merely that analog is instinctive and digital learned, because even animals must undergo an apprenticeship to acquire the analogical language (the wolf had to learn first in youth of the parent's dominance for it to translate that meaning in other situations). Likewise, digital language cannot be said to be limited just to operating "through code, convention, and combinations of conventional units," because although the symbols do not resemble what they mean (the word red need not be printed in red ink), symbols are used to *produce* resemblances:¹⁶⁷ a person telling her interior-painter that she wants her walls to be an invigorating red-color need not say the word 'red' with deep passion in order for him to paint them a hue that is analogous to the one she seeks. Thus digital produces analogies, and is somewhat analogical.

Despite there being no pure analogical or digital conveyance, Deleuze is interested in a sort of communication in which the two are *forced* together, which he explains can be done through the diagramming technique. He references C.S. Peirce's notion of the *icon*, which is something that resembles another thing, and for that reason represents it. In fact, Peirce considers a painting — before its representative functions are discerned — as being iconic in this way, because it evokes in us associations through visual resemblances, even before we interpret their representative meanings.¹⁶⁸ There is a special type of icon for Peirce, the *diagram*, which represents the relations of the parts of one thing by means of analogous relations of the parts of another thing;¹⁶⁹ for example, the machinist's scale drawing, which indicates the structural

¹⁶⁷ *Logic of Sensation*, p.80. *Logique de la Sensation*, p.108.

¹⁶⁸ C.S. Peirce, *Philosophical Writings of Peirce*, Ed. Justus Buchler, (New York: Dover Publications, Inc., 1955), p.104-105.

¹⁶⁹ Peirce, p.105.

organization of a machine's parts.¹⁷⁰ Yet, Deleuze's problem is that he is not looking for something that is recognizably analogous like a scale model, but rather something that is *unrecognizably* analogous, what he calls an *aesthetic analogy* brought about by Bacon's unique sort of diagram.¹⁷¹

To better grasp the obscure meaning for the term diagram, we may envision the painter standing before the blank canvass, just beginning to paint. His imagination is filled with clichés and preformed representations which he intends to render, knowing already their most probable location on the canvass. These images may already be in the painter's mind, or lying around him, as with the many photographs strewn about in Bacon's studio.¹⁷² Thus, the first task of the painter is not to begin filling the canvass, but rather to sweep it clean of all influences that may predetermine its form and development. If rather he were to paint the given forms, he would not communicate much intensity to his viewer, because clichés can be mindlessly imagined, rendered, and recognized; thus, there would not be much bodily-facultative disorder experienced by either painter or viewer. Rather, the painter must reverse the relation between model and copy, so that instead of the painting being a copy of a model, it rather becomes a model that cannot be copied.¹⁷³ For the painter to resist these clichés, he has two conventional options.

The first is the digital coding we find in *abstract art*. Here, figurations lose their completeness by eliminating their complexities and condensing them into simple geometrical arrangements, by "reducing all forms to the smallest number of forms of which we are capable of thinking — straight lines, some angles, arcs of the circle and the ellipse."¹⁷⁴ The internal binary relations of these abstract forms allow them to signify by means of symbolic *coding*. The

¹⁷⁰ Arthur W Burks, "Icon, Index, and Symbol," (*Philosophy and Phenomenological Research*, Vol. 9, No. 4, Jun., 1949), p. 673.

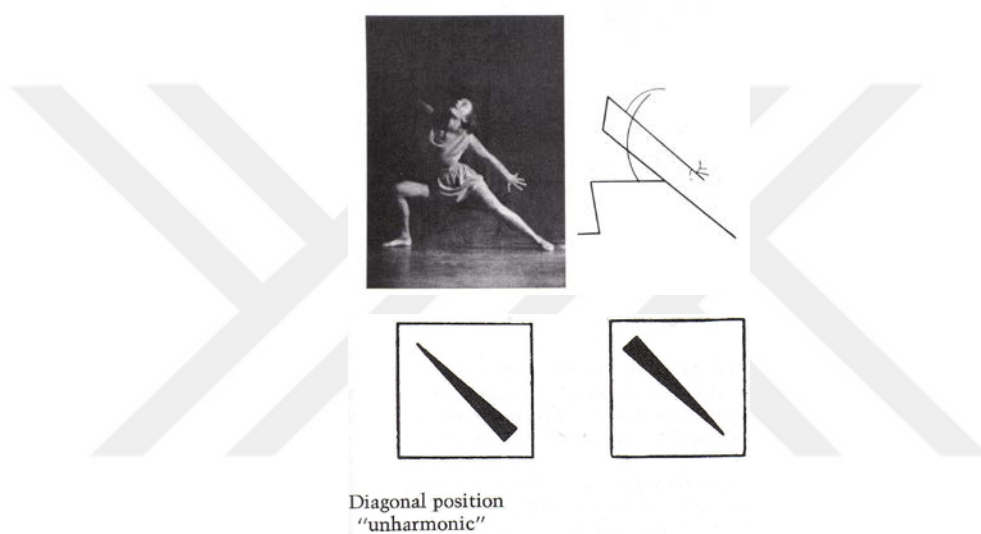
¹⁷¹ Deleuze, *Logic of Sensation*, footnote 5 p.137. Footnote 105, *Logique de la Sensation*, p.109.

¹⁷² Bacon & Sylvester, p.37.

¹⁷³ *Logic of Sensation*, p.61. *Logique de la Sensation*, p.83.

¹⁷⁴ Sérusier, qtd. in Deleuze, *Logique de la Sensation*, p.79. *Logique de la Sensation*, p.106-107.

codes are *digital* in the metaphorical sense of the fingers as digits that “count” the painting’s formal elements and group them according to formal binary oppositions.¹⁷⁵ Depending on the formalization of the elements, certain effects are produced in the viewer who “decodes” these forms according to their relationships with the other forms and with their orientation within the horizontal and vertical planes. For example, Kandinsky reduces a dancer’s posture to linear elements; and, the ways these lines are oriented toward each other code a certain effect, in this case un-harmony.¹⁷⁶



As well, Kandinsky explains how the distributions of tonal “weight” throughout the canvass can be mathematically calculated to determine how they will be decoded by the viewer. Weight is the relative amount of “tone value” or “chiaroscuro,” the amounts of shading between black and white, with more darkness bearing greater weight.¹⁷⁷

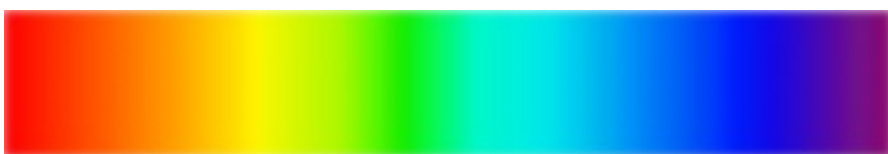
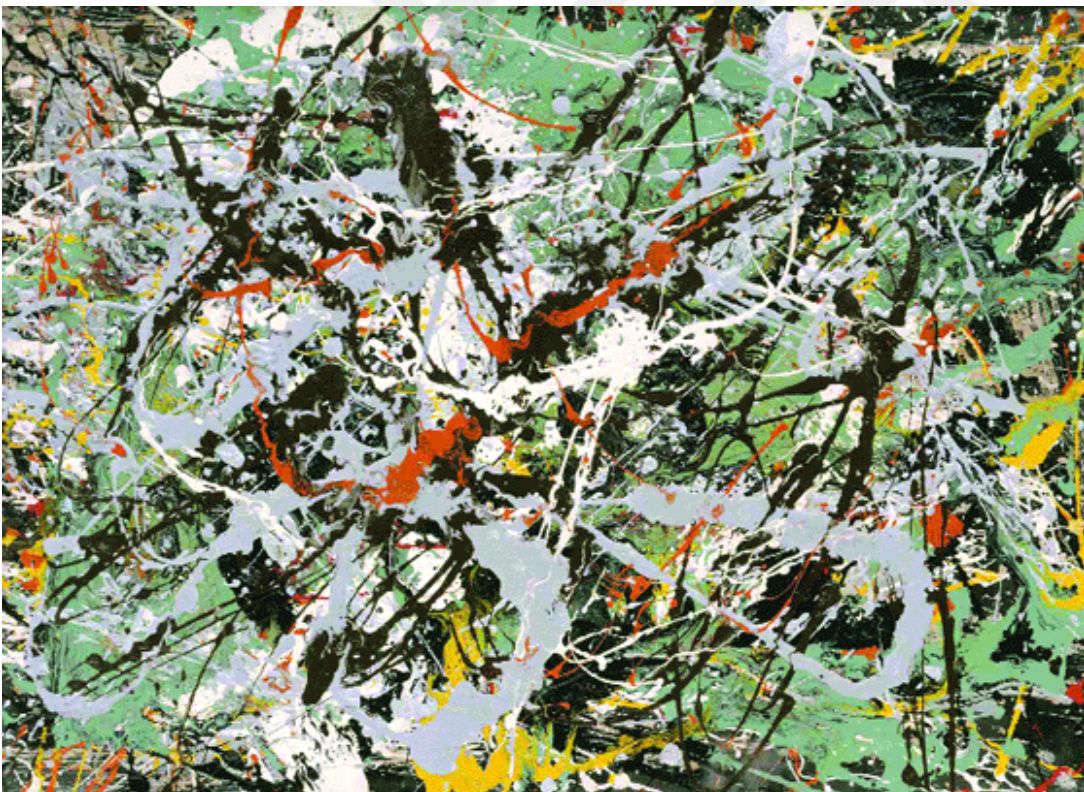
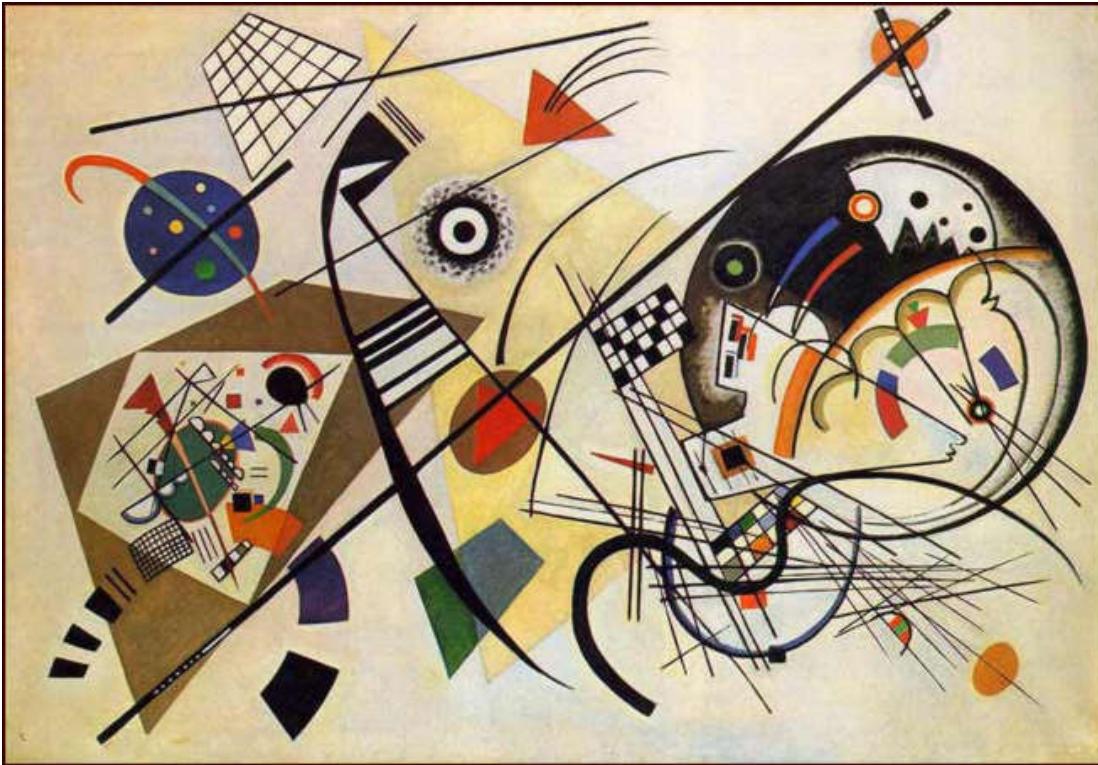
1. Instance—“dramatization”

	PP-weight	2	
above	form-weight	<u>2</u>	
		4	
			4 : 8
	PP-weight	4	
below	form-weight	<u>4</u>	
		8	

¹⁷⁵ *Logic of Sensation*, p.73. *Logique de la Sensation*, p.97.

¹⁷⁶ *Images*, Kandinsky, p.520, 655.

¹⁷⁷ Paul Klee, *On Modern Art*, p.21. Image, Wassily Kandinsky, p.641.



In this way, the artist tries to eliminate the spontaneous influence and expression of her hand with very controlled strokes that exclude chance and chaos from the painting process. Doing so places precedence on the function of the artist's eye; she may create much of the painting at a safe distance by using formal observations and manipulations conducted in her mind, thereby subordinating the hand to the eye's service. The hand becomes reduced to a "finger that presses on an internal optical keyboard" (*doigt qui appuie sur un clavier intérieur optique*) that calculates and controls precisely where the paint will be placed, as though the hand had no autonomy or personality of its own to contribute to the paint-strokes.¹⁷⁸ On account of this, the different sections of the blank canvass have unequal probabilities for what may be placed within them, because, for example, if the artist decides to have a certain decoded effect like "dramatization," then it becomes more likely for images to be placed in the bottom half of the painting. Thus, the binary coding of abstract art maximizes the cerebral interaction with the painting, and minimizes the sensuous.¹⁷⁹ What results from these techniques are works such as Kandinsky's *Transverse Line*:



The other option is an analogical expression of chaotic flux, which is found in *action painting*. Techniques of this sort include scrubbing, sweeping, and wiping the wet paint, or throwing paint on the canvas. Here the hand is free to express itself with involuntary movements that create chaos on the canvass rather than controlled forms, which reduces the whole painting to *catastrophe*.

¹⁷⁸ *Logic of Sensation*, p.73. *Logique du la sensation*, p.97.

¹⁷⁹ *Logic of Sensation*, p.76. *Logique de la Sensation*, p.102.



By letting the thrown paint fall in its own way, and by letting it splatter beyond the edges of the canvass, the action painter almost completely submits the painting's creation to chance. (Although, Stan Brakhage offers a colorful anecdote suggesting that Pollock submitted his splatters to chance far less than we might expect. It seems that even when thoroughly intoxicated, he still had sharp accuracy when throwing paint, even at exceptional distances).¹⁸⁰ In Jackson Pollock's drip paintings, for example, we see the dominant role his hand plays in creating the chaotically arranged splatters on his canvass, which is laid horizontally on the ground and in the middle of a wider distribution of drips. Here, nearly every part of the canvass has equal probabilities for what may be placed in them, because, as is especially the case with thrown paint that falls outside the borders, no section of the painting is oriented by a center and edge of the canvass.

¹⁸⁰ "This misnomered painting was essentially finished and hung stuck on the walls of Pollack's barn, and Pollack was dead drunk with a quart of whisky beside him, two-thirds down. And these New York painters . . . used the word 'chance operations,' which . . . really angered very deeply Pollack, and he said, 'don't give me any of your . . . "*chance operations*,'" he said, 'you see that doorknob?' And there was a doorknob about [15 meters] from where he was sitting, that was in fact the door that everyone was going to have to exit-by. And drunk as he was, he just with one swirl of his brush, picked up a glob of paint, hurled it, and hit that doorknob smack-on with very little paint over the edges, and then he said, 'And that's the way out.'" Stan Brakhage, *Encounters 1*.



In these paintings, there are no delimitations, and lines continually and randomly change their directions.¹⁸¹ Here is one example, Pollock's *Untitled (Green Silver)*, 1949. (Color image found on the image-panel beside page 101).



It seems in these cases that Deleuze considers the hand as though it were the artist's autonomous companion in the creative act, a notion he perhaps adopted from his reading of Focillon's "Éloge de la main," although disagreeing with him on the issue of rhythm.¹⁸² To better elaborate the role of the hand in diagramming, we will briefly look to Focillon to see which elements Deleuze may have adopted.

Focillon writes that although working in our service, hands are not anonymous servants. Hands sense for themselves; and with their free spirit and distinguished features, they exercise their unique skills and aptitudes, as

¹⁸¹ *Logic of Sensation*, p.73-75. *Logique de la sensation*, p.98-100.

¹⁸² "The relationship between the hand and the eye is infinitely richer, passing through dynamic tensions, logical reversals, and organic exchanges and substitutions (Focillon's famous text "In Praise of Hands" does not seem to me to give an account of this)," *Logic of Sensation*, p.108. *Logique de la Sensation*, p.145.

with the logician's slender fingers performing analysis. Hands are not merely receptive sensing organs, but have minds all their own.¹⁸³ Their character derives from a marvelous coordination of numerous differentiated parts, most notably the five fingers, each themselves bearing their own mind and talent. With this complex structure, the hand may shape itself around objects, and likewise be shaped by them. The long history of the hand's formative interactions with the world are evidenced in the rich topographies of our palms. Yet in rest as well as action, hands continually exhibit their own autonomy.¹⁸⁴

In our early development, human beings began shaping the characters of their hands through their creative usage. While likewise, hands have come to shape humanity, by allowing us various new contacts and relationships with the world and its unseen dimensions. Hands can feel wind and water currents invisible to the eye, and can sense the workable tactile properties of surrounding objects: their surface, volume, density, and weight. This way, our manual contact with nature has filled it with the mysterious forces and features of a dimension beyond vision.¹⁸⁵

In fact, such conceptual matters as geometry were only possible on account of the hand's measuring extensions and handling uniformly-shaped natural objects. Digital calculation has long been — and still remains — a task our fingers perform. And even language has been shaped by the ways our gestures enhance speech by adding accentuation, color, and rhythm to our voice. In all these acts of fashioning the world, the hand will leave its distinct mark in what it shapes. Even the most controlled and uniform strokes or the most simple and perfected figures still reveal the artist's touch, "that decisive contact between man and object."¹⁸⁶

¹⁸³ Henri Focillon, *The Life of Forms*, Transl. George Kubler, (New York: Zone Books, 1992), p.157.

¹⁸⁴ Focillon, p.158, p.160.

¹⁸⁵ Focillon, p.161-163.

¹⁸⁶ Focillon, p.173.

For Focillon, the hand shows best through drawing, which renders form using minimal mediation of material and technique. It is here that we may see the hand's direct intervening-contact with chaotic influences, shaping them by imposing order.¹⁸⁷ Yet the hand, for Focillon, is not a medium channeling the artist's inner uncontrolled impulses; but rather contends-with and refines a threatening wild world; that is, it controls the chaos around it.¹⁸⁸ But yet, although controlling, the hand is at liberty to experiment; for, out of its own free will it may take-up any random implement to draw a rich variety of lines; and as well, it may even introduce accident into its creations, somewhat like Bacon's diagramming. According to one anecdote Focillon shares, a Greek artist painting a horse throws a sponge — charged with paint — at the animal's head, so to naturally depict its lather. In another, Hokusai pours blue paint on paper laid below, then lets a rooster with talons dripping-red walk across the wet scroll, marking the running blue paint with red clawings. Immediately, observers recognized the familiar scene of red autumn leaves drifting along the wavy currents of a nearby stream.¹⁸⁹

Thus in Focillon, chance and accident are resources the hand provides, and which the painter gratefully receives and incorporates into his work. Yet, the hand is no passive victim of hazard; for, even though the rooster's claws substituted Hokusai's hands, the painting still resulted from an ordering of events that his hands set in motion, and thus they present themselves even without immediately contacting the materials.¹⁹⁰

And yet for Focillon, despite the free will of the hand, it is nonetheless inseparable from the mind and body. Their interrelation is complex and dynamic; for, the hand and mind dually rule each other, and thus neither solely is sovereign or servant. By means of this relation, humans multiply in

¹⁸⁷ Focillon, p.174.

¹⁸⁸ Focillon, p.179.

¹⁸⁹ Focillon, p.175-178.

¹⁹⁰ Focillon, p.178.

space and time by continually imprinting themselves in the world they fashion.¹⁹¹

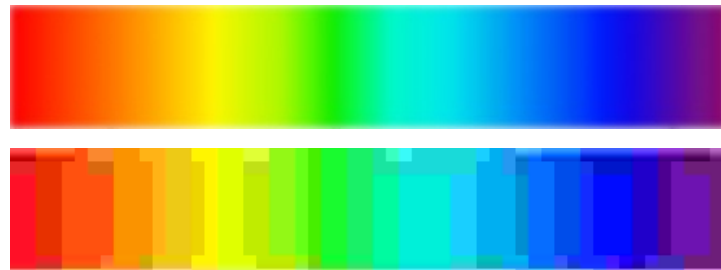
Although Deleuze's views on hands may seem almost entirely identical, he objects that Focillon does not exhaustively describe the relationship between the hand and eye, which for Deleuze involves even stronger dynamic tensions, exchanges of roles, and reversals in what we will later term "the logic of sensation." These more complex interactions between the hand and the eye will be merged in Bacon's diagramming technique, his middle way between analog & digital, between the manual & visual.

This alternative technique is needed, because the analog and digital options, according to Bacon & Deleuze, fail to escape the figuration that replicates cliché representations. Coding is cerebral and deals too much with formal relations; whereas the expression of analogical flux creates a "mess" on the canvas, which is not a deformation but a non-formation. Also, both fail, because each inevitably creates a visual resemblance, whether between the coded forms and their coded effects, or between the bodily expression and its mess. Intensive communication, however, does not convey visual resemblances, but rather *more profound* resemblances, that is, resemblances of depth, which are the magnitudes of disorder of the faculties, and are hence resemblances of difference. We may better illustrate this deeper communication by examining more thoroughly Deleuze's technological characterization of analogical and digital media.

In digital replication, the formal features of an object are reduced to their most structurally important parts and the relations between those parts, which are then represented with symbols, so that some device may use those symbols to create a replication of the original object. This is largely like Kandinsky's reduction of the dancing figures to basic line arrangements, except in the case of digital media technology, the lines would be converted to

¹⁹¹ Focillon, p.184.

numerical formulas which a computer could replicate on a screen or printing device. Deleuze gives a more formal description of the way digital media creates resemblances: it 1) renders the relations between extrinsic elements (the structural features of what it replicates) into intrinsic ones (symbols) and 2) arranges these abstract intrinsic components into concise formulaic combinations (constituting the code), so that 3) some device later produces a new set of extrinsic elements resembling the ones that were coded (thereby creating the reproduced resemblance).¹⁹² [Deleuze offers the example of “a portrait produced by a computer” which we might relate to the more familiar example of digital photography, which breaks its given image into a grid of small squares and homogenizes the visual appearance of each one, which are then given a code that can be decoded by a computer and rendered by a printing device. Although both of the following images are digital, that is, both are made up of homogeneous component squares, the second one is more *compressed*, that is, its squares are larger. (Color image found on the image-panel beside page 101).



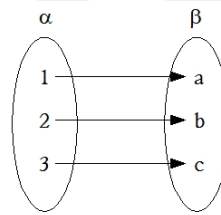
Here we can better see the process of division and homogenization.] Deleuze’s interest in digital homogenization is that it *excludes chaotic indeterminate variations* and replaces them with determinate units which may be represented unequivocally by assigning to each a unique code. (We could make red = 1, orange = 2, green = 3, and so on down the spectrum so that we may reduce, communicate, and replicate it readily, merely by conveying the numerical sequence, 1,2,3,4,5,6). For Deleuze, this coding produces similitude by

¹⁹² *Logique of Sensation*, p.80. *Logique de la Sensation*, p.108.

isomorphism, which proves to be a central notion in his philosophy of communication.¹⁹³

Isomorphism is a term with a history of usage in set theory. It was given a formal definition in Alfred Tarski's (1938) "*Der Aussagenkalkül und die Topologie*," and has since undergone a number of refinements.¹⁹⁴ Deleuze is interested in this concept, because it will allow him to account for how the resemblances of *aesthetic analogy* cannot be found in an image's appearance.

[Isomorphisms, from the very start, impose a static structure with determinate points or objects having fixed relations to each other, as with the blocks of the compressed color band above. For sets to be isomorphic to each other, each set's objects — and the relations between the objects — must bear a one-to-one correlation to those in the other set. This diagram depicts the isomorphic relation:



Here we have two isomorphic sets, α and β . Set α has three objects, numbers 1, 2, and 3. The relations between each are *numerical succession*. The objects in set β are three letters a , b , and c , and the relations between them are *alphabetical succession*. Tarski's definition requires 1) that both sets have the same number of objects, and 2) for there to be a one-to-one correspondence between the objects of both sets and also between their relations. We see in

¹⁹³ *Logic of Sensation*, p.80. *Logique de la Sensation*, p.108.

¹⁹⁴ (The follow technical definition is provided merely for reference):

Definition 2.3. Zwei Matrizen $M_1 = [W_1, A_1, \Rightarrow_1, Y_1, \wedge_1, \sim_1]$ und $M_2 = [W_2, A_2, \Rightarrow_2, Y_2, \wedge_2, \sim_2]$ heißen isomorph, wenn es eine Funktion gibt, die W_1 auf W_2 eineindeutig abbildet und dabei folgende Formeln erfüllt: $F(A_1) = A_2$, $F(X \Rightarrow_1 Y) = F(X) \Rightarrow_2 F(Y)$, $F(X Y_1 Y) = F(X) Y_2 F(Y)$, $F(X \wedge_1 Y) = F(X) \wedge_2 F(Y)$, $F(\sim_1 X) = \sim_2 F(X)$ für beliebige $X, Y \in W$.

Alfred Tarski, "Der Aussagenkalkül und die Topologie, (*Fundamenta Mathematicae*, XXXI, 1938), p. 107.

this diagram that the two requirements are fulfilled: both have equivalent and corresponding objects, and the relations between them, *succession*, are maintained in both sets. This isomorphic relation could be condensed, or *coded*, if you will, with a simple description such as “three successive variables.”] Hence, isomorphisms have the same relations between their parts, even if the parts of one isomorphism do not resemble those in the other.

In the case of Kandinsky’s art, he extracts a geometrically simplified and homogenized set of *extrinsic elements*, the lines of the dancer’s body, and combines them into the parallel elongated triangles. Together, they are the combination of abstract intrinsic elements that code the message, “unharmony.”¹⁹⁵ Our minds then decode these arrangements of lines into the forms and their effects: the disharmony of dancing lines. In a sense, what we decode is isomorphic to the original image of the dancer; for, in the photograph we may discern two primary lines that correspond to the elongated triangles; and (presumably), the relations between the lines in the dancer’s body and between the coded wedges are both the same: a relation of disharmony. Hence, Kandinsky’s coding (loosely) fulfills Tarski’s definition of isomorphism.

These coded arrangements of lines would not be able to entirely take the place of the dancers in the photographs; thus, they succeed somewhat in avoiding figuration and representation, because they create a resemblance by non-resembling means. That is to say, the coded image does not look like a dancer in an unharmonious stance, although it might seem like lines that are “dancing” inharmoniously. This introduces abstraction into the communication process by mediating with symbols instead of direct impressions. However, these same relations that we decode can be found also in the formal elements of the original picture, and thus there remains a

¹⁹⁵ “Abstract painting obviously proceeds by code and program, implying operations of homogenization and binarization that are constitutive of a digital code,” *Logic of Sensation*, p.82. *Logique de la Sensation*, p.110.

representation of them. And also, we cannot say that digital replication is devoid of analogy, because the objects and relations between isomorphisms correspond one-to-one, hence each is *analogous* to the other.¹⁹⁶

In analogical media, there is no detour through intrinsic elements, because everything is an impression of an expression, and every impression itself serves to express — in its own way — the movements that impressed themselves upon it. In this way, the media *mimics* what passes directly through it.¹⁹⁷ For example, in analogical sound replication, the air's vibratory movements are conveyed through a series of direct-impressions upon different physical media, each of which mimicking the movement patterns of the original sounds: the air's vibrations emanating from the musical instruments vibrate a microphone's diaphragm, which, by altering the electrical current accordingly, then guides the modulating movements of the record-cutting blade. In subsequent playback, a turntable needle runs along that scored groove, and its subtle quiverings are converted to an electrical signal, which is amplified so to be able to vibrate the speaker cones just as the microphone's diaphragm moved, thereby vibrating the air in our listening rooms in almost the same way it vibrated in the recording studio. In the case of Pollock's action painting, his bodily impulses are expressed through the paint, whose movement through the air mimics the movement of his arm: if he throws the paint with greater force, it moves at a faster speed, so that when it hits the canvass, it makes a larger splatter. By never creating figures of any sort, Pollock seems to avoid figuration. But yet, according to Bacon & Deleuze, the action painter has not entirely avoided figurations, because a resemblance of his bodily impulses is found all throughout his paintings, and thus also a near one-to-one representation remains: we can "translate" from the splatters the way his arms threw the paint (violently, gently, and so on), and hence also, we can sense the bodily impulses which cast the paint in those ways. In other

¹⁹⁶ *Logic of Sensation*, p.80. *Logique de la Sensation*, p.108.

¹⁹⁷ *Logic of Sensation*, p.81. *Logique de la Sensation*, p.108-109.

words, by looking at a Pollock drip-painting, we can tell the story of his internal states while he created the artwork, which renders Pollock himself as a figuration in the painting; for, he becomes the protagonist of a narrative.

The diagramming technique is a middle way between analogical and digital, and it renders the medium into an aesthetic analogy: as we noted before, when Bacon first begins to paint, his imagination sees the cliché representations on the canvas, and he begins to paint their basic formal features. This is the digital and optical component of diagramming, because Bacon “sees” on the blank canvass the preformed images that initially pervade his imagination. Yet, before progressing too far, he makes irrational, involuntary, accidental, free, and random “asignifying” marks; he throws paint over the forms, or smears some parts together before the paint dries: this is the analogical element that introduces chance and catastrophe; they are “traits” of confused sensations manually marked by hands acting on their autonomous impulses.¹⁹⁸ He then “surveys” the random markings as though they were graphs or diagrams that suggest new dimensions and images that he may superpose upon the given forms, new “possibilities of all types of fact being planted;”

for instance, if you think of a portrait, you maybe at one time have put the mouth somewhere, but you suddenly see through this graph that the mouth could go right across the face. And in a way you would love to be able in a portrait to make a Sahara of the appearance... seeming to have the distances of the Sahara.¹⁹⁹

By exploring these alternative developments, Bacon deforms his figurations and thereby evokes divergent series in our faculties by means of rhythms:²⁰⁰

¹⁹⁸ *Logic of Sensation*, p.71. *Logique de la Sensation*, p.94.

¹⁹⁹ Bacon & Sylvester, p.56.

²⁰⁰ *Logic of Sensation*, p.27. *Logique de la Sensation*, p.41.

on account of the deforming and blurring effect of the diagram, it brings together the forces of isolation and coupling, producing a “joining-together” that separates the figures, thereby creating a “matter of fact” rather than a narrative or story.²⁰¹ This notion of “fact” is central to Deleuze’s anti-phenomenological portrayal of sensation. What we sense is a chaos: a paradoxical disorder of divergent images is forced together into a confusing Figure that disorganizes our faculties, and thus cannot be synthesized, recognized, or represented. This is much unlike the phenomenological givenness of sense data which passively associate and unify according to inherent similarities.

The introduction of chance through diagramming endows the painting with rhythm;²⁰² for, it throws the formal regularities into disarrays which no mental calculation could have formulated, and thus the viewer’s faculties will never be able to synchronize and harmonize in agreement over a common recognition. For Deleuze, real artistic creation and thinking come about only when they *affirm chance*, but they do not do this by completely submitting to the random.

Deleuze distinguishes two sorts of games that make use of chance. In *games of skill*, the rules are fixed in advance; and, the element of randomness, the *dice*, is introduced in a controlled way that has no influence on those rules; it merely helps to determine a winner and loser. *Games of chance*, however, have changing rules, “each move invents its own rules;” that is to say, random events in this game change *the very way the game is played*. Deleuze illustrates by referencing the chaotic games Carroll portrays in *Alice in Wonderland*, yet he claims that a game of chance may “only exist in thought” and have “no other result than the work of art;” for, each dice-throw produces the *aleatory*

²⁰¹ *Logic of Sensation*, p.60. *Logique de la Sensation*, p.81.

²⁰² “The painting thus becomes a catastrophe-painting and a diagram-painting at one and the same time. This time, it is at the point closest to catastrophe, in absolute proximity, that modern man discovers rhythm,” *Logic of Sensation*, p.74. *Logique de la Sensation*, p.98-99.

point, which forces together incompatible series.²⁰³ This is precisely Bacon's diagramming technique: before making his involuntary marks, there is a different probability for what images can be placed into which zones of the canvass; for example, the more important figurations would more likely be placed in the center. *Action painting* equalizes those probabilities by painting past the canvass' edges and letting the splatters land by pure chance. *Abstract painting*, accomplishes the opposite by predetermining with mathematical precision how the images are to be distributed, which almost entirely eliminates the element of chance. However, when Bacon diagrams with his involuntary marks, he creates *new probabilities* for the distribution of images, and he opens *new possible dimensions and directions* to take the painting. He neither obeys the rigid pre-formed unequal probabilities, nor does he reduce the painting to a single zone of equal probability; rather, he creates entirely new sets of possibilities *and* limitations.²⁰⁴ Yet, Bacon's chance is not totally blind; he explains that although his cleaning woman could take a handful of paint and throw it upon the canvass to produce a viable diagram, she most likely would not produce a fruitful outcome, because accident for him is a *controlled chance*: he has practiced throwing paint long enough to be able to aim its trajectory somewhat.²⁰⁵ (We saw in Brakhage's account of Pollock's aimed throws that chance is not the only element of his drip paintings. Brakhage likewise does not see chance operations in John Cage's works, which he created using the "hazard of the dice;" for, Cage rejected almost all the outcomes, until arriving upon one that seemed to express his "soul." It needed to be a work that, although created by chance, was still something he could authenticate with his signature and take responsibility-for. Brakhage explains that his own chaotic color images come about much this way).²⁰⁶ It is for this reason that Bacon may enhance the force of communication; he both

²⁰³ *Logic of Sense*, p.69-71. *Logique du sens*, p.74-75.

²⁰⁴ *Logic of Sensation*, p.65-66. *Logique de la Sensation*, p.88-89.

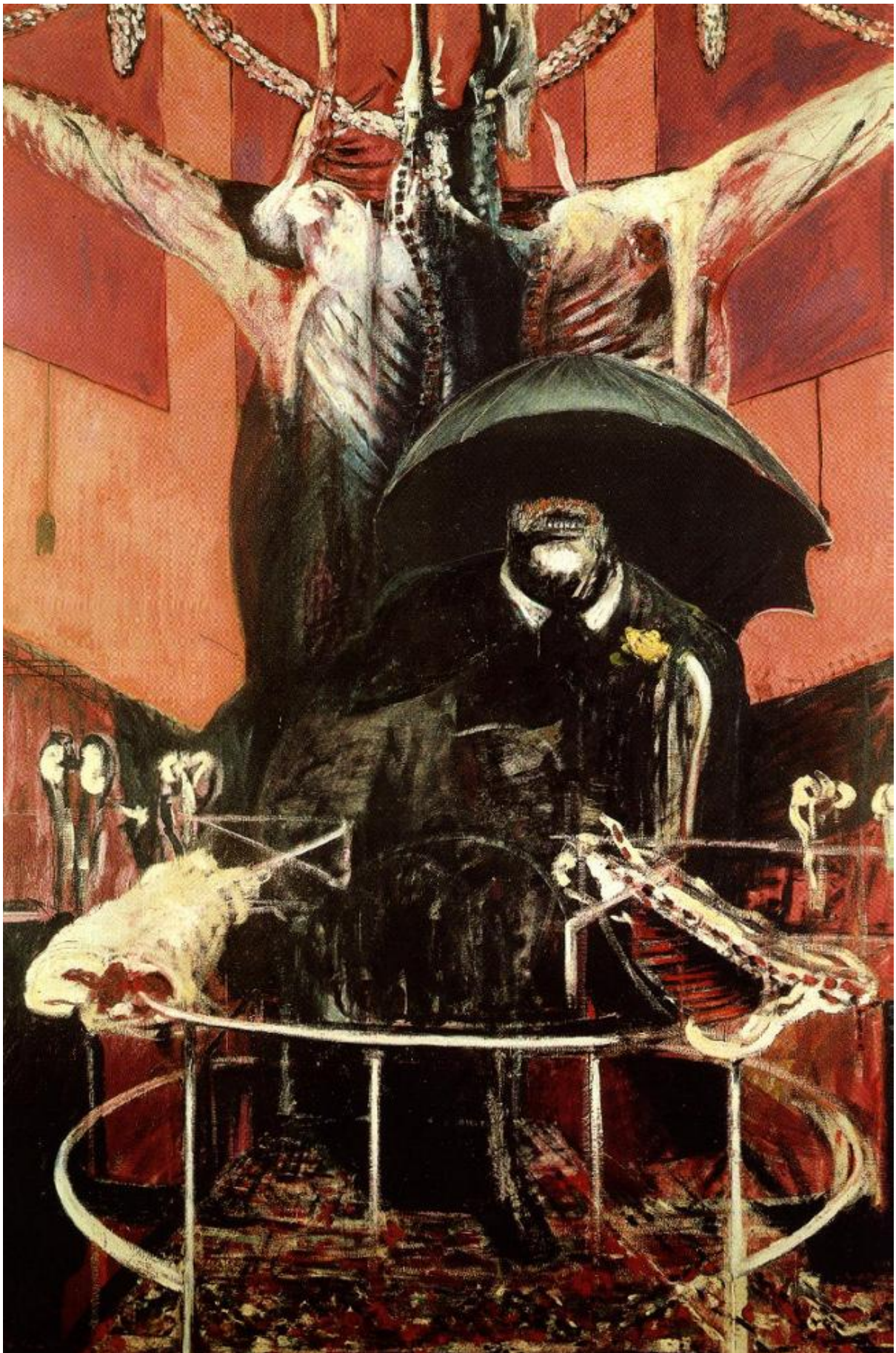
²⁰⁵ Bacon & Sylvester, p.92.

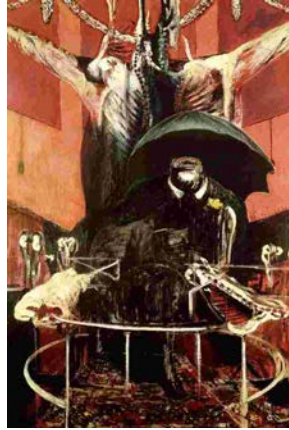
²⁰⁶ Brakhage, *Encounters*.

blends order & chaos while also maximizing the tension between them. Thus, our faculties remain farthest apart from each other, all while being under a profound pressure to try to synchronize; for, there is an element of order for them to recognize, but the diagrammed chaos keeps such a representation always at bay.

Deleuze also offers a way to characterize analog, digital, and aesthetic analogy by determining whether the communicated resemblance is the *producer* or the *product*. When it is the *producer*, the relations between the parts of one thing *pass directly* into the components of another, through *immediate impression*; this is analog replication. Resemblance, here, is produced by *resembling means*: we saw how the modulations of the record-cutting blade resembled the sound waves they mediated, by mimicking their movements. However, in coding where resemblance is the *product*, the *internal relations* of *the copy* resemble those of *the copied*; but yet, the medium itself does not bear those same relations: the compact disc surface bears no resemblance to the sound waves it produced. However, if we examined closely the record-album's grooves, we could discern the modulations of the recorded sound-wave's amplitude and frequency.

When Bacon diagrams, he introduces his chaotic analogical bodily expressions into the digitally-coded preformed image. This technique produces the deformed Figure, whose parts do not resemble those of the original, but whose *relations between its parts* do. For example, Bacon says of his 1946 *Painting* that he originally attempted to paint "a bird alighting on a field."





He began by painting the bird's basic formal features, but then "scrubbed" part of the nascent image, thereby *diagramming* it. Doing so unlocked a series of possibilities for new directions to take the work and set-off a chain of distortions throughout the whole painting: "it was like one continuous accident mounting on top of another."²⁰⁷ What resulted is a painting whose images in one way are confused, but in another way are coherent, which produces the rhythm of sensation. They are confused, because we cannot recognize the objects based on their appearances, nor can we discern how the images relate to each other. It is unclear what the skeletal figure is, how and why an umbrella hangs over it, and what sort of an animal corpse would have such an appearance, or why it would be hung in this manner. However, these indeterminate images suggest a coherence, because they are *aesthetic analogs* of the original bird image: what looks like an umbrella is the aesthetic analog of the original bird's head, the skull was previously the beak, and the hanging carcass was the wings. It is not that the umbrella resembles a head; rather, the relation between the bird's head and its beak is somehow analogous to the relation between the umbrella and the skeleton's skull, but in an indescribable way. As Deleuze says, "what is substituted for the bird is not another form, but *completely different relations*, which create the complete Figure as the aesthetic analogue of the bird," (*à l'oiseau se sont substitués, non pas une autre forme, mais des rapports tout différents, qui engendrent l'ensemble d'une Figure*

²⁰⁷ Bacon & Sylvester, p.11.

comme l'analogie esthétique de l'oiseau).²⁰⁸ On account of the seeming coherence, we are overcome by the “great temptation to weave stories,” despite none being possible.²⁰⁹

When viewing a diagrammed painting, we must contend with a *suggested form* that is forced together with a contrary *visual form*. Our faculties are compelled to recognize something in the deformed image, because we sense that there is some organization to it, but none can be found on the surface. Deleuze calls these deformed images *aesthetic analogies*, because our aesthetic experience of the deformed image is analogous to how we would have experienced the original image: if we were looking at the initial bird-form instead, our eyes might have moved around the painting much like they do when viewing the diagrammed painting; for, both versions are “organized” the same way. Thus, like digital, aesthetic analogy produces *resemblance by non-resembling means*, because our experience of the deformed images resembles that of the original, even though they each have a completely different appearance. This was also the case with Kandinsky's dancers: we experience disharmony when seeing the parallel wedges, just as we would when seeing the dancer's pose. Yet, this is accomplished by coding. Aesthetic analogies, however, affect us *directly* like analog: the deformed image causes our faculties to go into disorder, because they are unable to recognize the image; and, we thereby obtain a sensation that does not result from our being horrified by *something we see*; but rather, our nervous systems are shocked into sublime-like confusion by *something we are unable to recognize*. This is why Deleuze quotes Bacon as saying, “I wanted to paint the scream more than the horror.” Bacon wants to communicate sensation to us directly, which can only happen if our bodies are disorganized by what we see.²¹⁰ Aesthetic analogies accomplish this by acting directly on our nervous systems, by-passing our

²⁰⁸ *Logic of Sensation*, p.110. *Logique de la Sensation*, p.147.

²⁰⁹ Bacon & Sylvester, p.82.

²¹⁰ Bacon & Sylvester, p.48. *Logic of Sensation*, p.43. *Logique de la Sensation*, p.60.

brains. Because they act directly, Deleuze considers aesthetic analogies as being *analogical language*, but not exactly in Bateson's sense. For Bateson, modulations of physiology communicate magnitudes of *social relations*; for Deleuze, bodily impulses convey magnitudes of *intensity*, because Bacon must disorganize his own faculties to produce the deformed image, in order for his viewers' bodies to likewise become disorganized when sensing the work. However, like Bateson, Deleuze's analogical language communicates through *modulation*, in this case, by *varying the properties* of the original coded image so that it may *deform into something else*. Thus, as the technique bringing about aesthetic analogy, the diagram serves as an agent of *analogical language*, acting as an *analogical modulator* instead of a digital code.²¹¹

Deleuze speaks of modulations in two general senses: 1) as alterations of *modalities* that 2) sometimes proceeds through *modules* which affect those modalities. Deleuze's references to Paul Cézanne and Richard Pinhas direct us to the examples of color modulation in Cézanne's painting, to musical modulation in Wagner's compositions, and to electronic sound synthesizers.

Deleuze notes that Cézanne's modulation of color, his "principle operation," *suppresses* contrasts of light and darkness.²¹² It creates relief through changes of *hue*, and not of *tone*. (Colors, such as red and green, are *hues*, and their *tonal values* are the degrees of lightness or darkness, shifting chromatically from white to black). Through these changes, modulation serves as a "variable and continuous mold" that alters color, doing so by the *law of Analogy*:²¹³ this law for Cézanne is his logic of organized sensation, which we will explain first before addressing his use of color modulation.

Cézanne distinguishes representation from reproduction: a painter may only represent the sun's intensity, he cannot make the paint shine so

²¹¹ *Logic of Sensation*, p.84. *Logique de la Sensation*, p.113.

²¹² *Logic of Sensation*, p.82. *Logique de la Sensation*, p.111.

²¹³ *Logic of Sensation*, p.83. *Logique de la Sensation*, p.111.

brightly.²¹⁴ However, the artist can surround the depiction of the sun with an arrangement of other colors organized in such a way that they invoke in us the sensation of seeing the sun. The painter, then, is not to *copy* the object, but to *realize* the sensations we have when viewing such an object, which requires that the painter break from a visually accurate rendition, and paint instead according to a “logic of organized sensations:” when Cézanne views his scene, his eyes move slowly from place-to-place. With each subtle movement, he does not so much intend to reproduce exactly what he sees; instead, he selects a color which would invoke in his viewers *the same internal states* that he has while viewing that part of the scenery. However, any single selected color alone does not by itself produce that internal state. Rather, it is only in its relation to its *immediate* surrounding colors that it can have its unique effect. Hence in this way, Cézanne *modulates* the color, because he makes subtle and intentional variations on the local level, so that his viewers undergo *sequences of modulated internal states* resembling the ones he experienced while painting.

Thus, the colors he selects serve as a sort of coding of sensation that the viewer ‘interprets,’ but not as though they were symbols.²¹⁵ However, the interpretive process is just as much cerebral as sensual, hence its “logic.”²¹⁶ Painting, for Cézanne, involves more than mere sense impressions and instant associations: it also requires his *conscious* effort to select the right *combinations* of color alterations. Cézanne often used broad, ‘blocky’ paint strokes, carefully placing one patch at a time, progressing from one part of the painted object to the next, following color sequences that would be interpreted by the viewer so

²¹⁴ Lawrence Gowing, “Cézanne: The Logic of Organized Sensations,” in *Conversations with Cézanne*, Ed. Michael Doran, (Berkeley: University of California Press, 2001), p.197.

²¹⁵ Gowing, p.197.

²¹⁶ Gowing, p.212.

as to reproduce the experience of the painted scene or object. Hence his “vision was much more in his brain than in his eye.”²¹⁷

Deleuze explains that Cézanne creates depth by replacing the traditional use of value differences with his particular brand of color modulations.²¹⁸ Normally, depth is portrayed through *modeling*: the painter uses differences in value (lightness and darkness) to express the physical relief of the model being depicted.²¹⁹ Adding white or black to a color diminishes its *intensity*, which as a painting term means the degree of saturation or purity of color tone. When there are no contaminating inclusions of black or white to a color, it is in its purest hue, which means it is at its highest saturation and its greatest intensity (in this restricted painting sense of the term). In modeling, one would use variations in value to show *relief*: changing the amounts of shading indicates the positions of objects in reference to a light source, and creates the visual dimension of depth. Cézanne, however, uses the oppositions of warm and cool tones, in some cases, to represent light and shadow or varying distances of objects.²²⁰ Blue has no greater tone value than yellow when both are equally saturated, yet in certain contexts, when blue is painted next to yellow, it might suggest depth or volume.²²¹ To modulate the color would be for Cézanne to place a patch of one saturated color beside another, with their relation bringing about an effect determined not by some pre-set system but by the circumstances of their contextualization with the other color patches. (We can see in this Cézanne landscape below how the intense green on the horizon’s center recedes into the background. What is notable about this is that normally darkened colors seem like shadows and appear as

²¹⁷ Norman Turner, “Cézanne, Wagner, Modulation,” *The Journal of Aesthetics and Art Criticism*, (Vol. 56, No. 4, Autumn, 1998), pp. 359. Quote from: Gowing, p.189.

²¹⁸ Deleuze, *Logic of Sensation*, p.83. *Logique de la Sensation*, p.111.

²¹⁹ “‘Look well at your model’ Couture advises, ‘and ask yourself where the light is greatest. ... Establish the point at which the shadow is deepest, the black most intense. It serves as a guide, as a standard for finding the different values, of your shadows and your tints,’” Turner, p.358.

²²⁰ “One should not say model, one should say modulate” Cézanne, qtd. in Turner, p.360. “On ne devait pas dire modeler, on devrait dire *moduler*,” Turner, footnote 34, p.363.

²²¹ Gowing, p.191.

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though at a distance. Here we see that the intense green has not been darkened, and yet it colors the most distant place on the horizon).



Hence, in Cézanne's paintings we often encounter seemingly out-of-place color strokes, or unrepresentative combinations of color. In his portrait below of *Hortense Fiquet*, for example, we see odd color-blocks used for her skin, (painting is cropped for focus).



However, if we attended more to the sensuous and conceptual affects that these colors have on us, we might better detect the logic of organized sensation at work in his paintings. Lawrence Gowing explains how Cézanne's "mutations of color" were as theoretical as they were perceptual:

When one of his visitors was puzzled to find him painting a gray wall green, he explained that a sense of color was developed not only by work but by reasoning. In fact the need was both emotional and intellectual. The mutations of color with which he modulated surfaces that would have seemed to a less logical mind to require no modeling whatever were a necessity to him.²²²

²²² Gowing, p.186.

We may illustrate with the example of Cézanne's *Le cruchon vert* (The Green Pitcher), (Color image found on the image-panel beside page 120).



According to Lawrence Gowing, Cézanne began with a blank center-point of the pitcher, the *point culminant*, which is the part of the object which is closest to our eyes.²²³ He then surrounds the culminating point with blue color-patches, and proceeds by running through the color spectrum to green (indicating the actual color of the pot) then to yellow, according to a pre-conceived 'logic,' in order to evoke the sensations of seeing the pitcher.²²⁴ Norman Turner disagrees with Gowing's claim that the color order was fixed in advance, a point which will prove relevant when describing Bacon's continuously variative modulation. Turner argues that Cézanne does not select his colors according to an overarching and pre-determined organization, but rather he continues to each neighboring color-patch on the basis of how *its immediate predecessor* conditions that color change; for, each subtle transition alters the possibilities and limitations for how he may proceed. In other words, Cézanne was not so much concerned with how one color-patch associates with another one far away on the canvass, but rather more with the relation between any one patch and its *immediate neighbor*, in terms of the sensations unlocked in a transition from one to the other.²²⁵ This influences the subtle sequence of quick impressions we have when our eyes move from one part of the painting to the next.

Also, to better grasp Deleuze's notion of continuous modulation, we might follow Turner and Richard Pinhas, Deleuze's student, by comparing

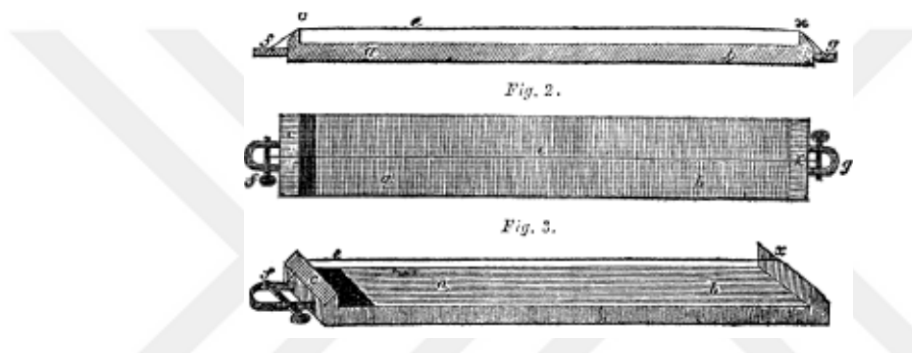
²²³ Joachim Gasquet, "What he told me..." in *Conversations with Cézanne*, p.121.

²²⁴ Gowing, p.187.

²²⁵ Turner, footnote 27, p.363.

Cézanne's color modulation to Wagner's key modulation. Each time Cézanne modulates to the next color, he creates a general feeling, and opens possibilities for the next transition, which might not have been available for a different color. In this way, Cézanne's modulation is thought to be like musical key modulation.²²⁶

[We can explain the musical technique of modulation by drawing from the work of ancient Greek philosophers. Pythagoras demonstrated harmony relations between sound frequencies, by using single-stringed instruments called *monochords*.



For example, he demonstrated that when one string is played simultaneously with another one that is half its length, the strongest harmony is produced: this is the *octave* harmony. Pythagoras divided the octave into 12 smaller units, because this particular division establishes pitches with the greatest possibilities for harmonic combinations.²²⁷ If one were to compose a song using not all twelve pitches, but instead a smaller pre-determined set, then certain harmonic relations would be excluded, and others emphasized. Different such limited sets, then, have their own feel or color to them, their own mood. Some such early Greek note patterns are called *moods* or *modes*; and both Plato and Aristotle make reference to the different sorts of emotions that these modes evoke. Both philosophers, for example, criticize the mixed

²²⁶ "Where it gives place to the juxtaposition of yellow and red and the alignment of the form appears to change, it may be that Cézanne thought of himself as passing to the next scale," Gowing, p.204.

²²⁷ Crotch, "On the Derivation of the Scale, Tuning, Temperament, the Monochord, &c," *The Musical Times and Singing Class Circular*, Vol. 10, No. 224, (Oct. 1, 1861), p115.

Lydian (mixolydian) mode for darkening people's moods.²²⁸ However, one can also change from one mood to another, that is, to *modulate* between modes.

Yet, there is a more subtle sort of modulation which we refer-to here, key modulation: of the many Greek modes, two became especially prevalent, but each of these may itself slightly vary its feeling; the note patterns may change their initial "root" note, which makes more subtle changes of mood. These different patterns are the *keys*, which can be modulated by using notes at the end of one melody (cadences) which are found in both keys, so to make a smoother transition.] Such modulating changes the key-feeling, but in a way which couples different moods at once during the transition. Likewise in painting, the artist may select certain dominating hues, which together have their own key-feeling, if you will, and modulate between them (the use of music terminology in describing painting is common, for example, *rhythm*, *tone*, *harmony*, *dissonance*; and vice versa: *texture*, *color*). The effect of Cézanne's color patches has little to do with the representation of their objects; rather, "it is the relationships between them — relationships of affinity and contrast, the progression of it tone to tone in a color scale, and the modulations of it scale to scale — that parallel the apprehension of the world."²²⁹ This is Deleuze's philosophical interest in this sort of modulation, because he would like to explain how Bacon's diagramming couples Figures' movements by *modulating* the colors between them.

A description of Wagner's modulation techniques is important for this discussion, because he advanced modulation from a more rigid sort to a smoother one, to a *modulation synthétique continue*, as Pinhas calls it; and, it is this latter sort that concerns Deleuze. [In key modulation before Wagner, a sense for the original tonal point of departure is maintained, so that the modulations may return to it for resolution. Usually in these cases, the composer uses a convenient *bridging chord* whose notes are found in both the

²²⁸ Plato, *Republic*, Book III, 398e. Aristotle, *Politics*, 1340a.

²²⁹ Gowing, p.204.

prior and the latter keys, along with ambiguous notes, to serve to smoothly transition from one key to another. We might illustrate with an example in which the words in a verse serve to make this bridging transition. Wagner compares two possible lines: 1) *Liebe gibt Lust zum Leben*, (love gives joy to living) and, 2) *die Liebe bringt Lust und Leid*, (love brings joy and sorrow). In both cases, the phonetic compatibility of the substantives groups them together, superposing them through rhyme, despite their distinct occurrences. In the first case, the feelings evoked by the terms *Liebe* (love), *Lust* (joy), and *Leben* (living) are all compatible, just as are the phonetics of their terms. However, in the second case, the final term *Leid* (sorrow) ends the phrase with a sadder tone, but is still phonetically superposed to the happier feelings preceding it and overlapping it through phonetic harmony. Hence in the second line, a musician composing the music to such words would have cause and means to move to a new key feeling, perhaps a more somber minor key, and the transition can be made because the phonetics serve to bridge the two different *key feelings*. In the case of his *Tristan und Isolde*, his composition technique gives the feeling of moving continually towards other key feelings, although without ever arriving to one, and he leaves many of the chords ambiguous as to their key. His purpose is to induce the feeling of unsatisfied desire, and does so by creating expectations for resolution by modulation into another key, but yet disappoints that expectation by leaving the keys in limbo.]²³⁰ Hence in this way, Wagner advanced the technique of modulation, so that instead of limiting developmental options by striving to give the listener a sense of orientation and resolution, Wagner's modulations progress more freely by lacking a determinate ground and finality.

A student of Deleuze, Richard Pinhas, a progressive musician and philosophy scholar, further elaborates the importance of Wagner's innovation of the *modulation synthétique continue*, which led to 20th century developments

²³⁰ Turner, "Cézanne, Wagner, Modulation," p.354.

in modulation, including the electronic modulation of synthesizers. [Pinhas explains that Wagner's key-modulation technique allows for the continuous *translation* of melodies into other modulated forms, thus serving as an *opérateur d'hétérogènes*: something that couples a series of heterogeneous elements one-after-another.²³¹ Because Wagner's modulations in some works never obtain a feeling of resolution, none of the modulated keys took a dominant role, and they all smeared into one continuous modulation. Younger contemporary of Wagner, Debussy, pushes modulation even further in this direction. In Wagner, we can follow the tonal progressions and tensions, even though they never resolve. Debussy, however, does not have this tonal tension, and his modulation is not even the tension of wandering unresolved key feelings; but rather, it remains within the sensuousness of one chord (one small group of pitches), which are gradually built up with more instruments playing the notes of that chord. This produces the *aquatic* effect: it modulates not between keys, but instead is a fluid modulation with very smooth transitions between different parts, which blurs the boundaries between them. Using this technique, Debussy continuously modulates other features of the sound, like timbre, in a *modulation synthétique continue*.²³² Yet this watery blurring does more to *deform* the sounds, to smear one into another blurry one. This function has been recently taken-over by electronic synthesizers, both digital and analog. They alter sounds, but always by degradation, taking away their fidelity from their parent sound, making them *low-fi(delity)*, deforming the sound in a sort of *perpétuelle transition*.²³³] This modulatory technique of Wagner, Debussy, and electronic synthesizers operates as a *diagramme modulaire*, bringing about *la modulation comme différence pure*;²³⁴

²³¹ Richard Pinhas, "Le rythme et la modulation synthétique: Simultanéité et compossibilité des *motives* chez Richard Wagner," in *Les Larmes de Nietzsche: Deleuze et la musique*, (Paris: Flammarion, 2001), p.165.

²³² Pinhas, p.171.

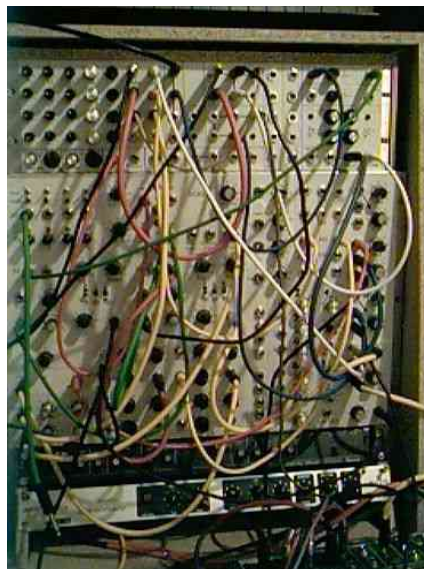
²³³ Pinhas, p.176.

²³⁴ Pinhas, p.180.

Deleuze is interested of course in these differences that are forced together through modulation, which likewise disorganize our faculties.

Wagner's innovations, then, resemble the color modulation in Cézanne's logic of organized sensations. Cézanne moves locally from one color patch to the next, without necessarily maintaining an orienting color base, moving rather through a continuous modulation from one patch to the next. Deleuze elaborates this notion of a continuous and aimless modulation, by differentiating the operations of analog and digital synthesizers, basing his distinction on an unpublished text by Pinhas.

[Deleuze notes that analogical synthesizers operate by sending the sound signal through different modules, which are discrete self-contained circuits. Each one alters the sound in its own unique way; and they may be linked and *re-linked* by "patch" cables, which allows for countless ways to route the sound signal through the different *modules* or *patches*.²³⁵ (We can see Deleuze's example in the image below of a modular analog synthesizer: features of the sound signal are modulated when sending it through different modules by means of the patch wires, with uncountable possible outcomes).



²³⁵ Deleuze, *Logic of Sensation*, p.81. *Logique de la Sensation*, p.109.

Digital synthesizers, Deleuze explains, are *integral*, that is to say, rather than the signal moving through a sequence of modules, it is instead processed by electrical circuitry whose different parts are already integrated with each other, and do not require manual connection with wires.



We see in the image above that the parts of a digital synthesizer's integrated circuit are already wired together; the signal's processing happens on a more "abstract" level through the manipulation of code.] The analog modules parallel Cézanne's use of "color patches" to modulate color: he begins with one broad stroke of uniform color, then moves to the place beside it, changing the color somewhat, thereby modulating its hue; and, he decides which change to make according the logic of organized sensations. Thus Cézanne, Wagner, and electric synthesizers are modulatory in two ways: by modulating the features of the sound or color, and doing so through a series of modules (color-patches, keys, synthesizer-patches).

Because each patch of an analog synthesizer has circuitry components that *reduce* properties of the sound signal itself (according to Deleuze), analog synthesizers modulate by means of *subtraction*, and in this way some of the fidelity to the original sound is lost. In contrast, digital synthesizers are *additive*, and Deleuze makes this distinction clearer by comparing the operations of *pass filters*; and, although this may be one of his most technical examples, it serves to explain how we are to give a positive connotation to deformation. [We might imagine a musician playing on a drum kit, using both deep drums and cymbals. The drums produce low frequencies, and the cymbals high ones. A low-pass filter, whether analog or digital, will let the

sound of the drums through, and strip away the sound of the cymbals, because a low-pass filter only lets the low frequencies *pass* through it. In the specific case of low-pass digital filters, the sound waves produced by the drums and cymbals are converted electronically into a code; and, in order to modify it, the digital filter must *perform operations on* the code. This process makes the original code more complex by adding new coded information to it, even though this new larger and more complex code will then *decode* into a diminished sound: when we play the output of the digital low-pass filter, we hear the drums perfectly, but the cymbals not at all. For analog low-pass filters, the sound waves of the drums and cymbals are converted into an electrical signal. Both the original sound waves and the converted electrical current oscillate in concord (they together move back-and-forth at the same frequencies): this is analogical mimicry. The analog low-pass filter, then, only lets the electrical signal through when it is moving at low frequencies, and blocks its passage when moving at higher frequencies. This results in a diminished signal, that when re-played, reproduces the sound waves for the drums, but not for the cymbals.]²³⁶ What Deleuze concludes from this distinction is that an *analogical* process of sound modification (modulation) enhances a sound by subtracting something from it. Whether or not that is an accurate depiction, is beside the philosophical point that this example illustrates. Deleuze calls analogical modulation an *intensive subtraction*, because he considers intensity at its greatest magnitude to equal a value of 0; and hence, its increases in intensity are actually *falls* to 0.²³⁷ (Of course, Deleuze's statement that there is no *absolute 0*, which we cited previously, refers to the intensities studied in physics — for example, temperature — and perhaps has no bearing on facultative intensities). Yet, to better grasp this notion of intensity equaling zero, we will need to explore his concepts *implication* and *explication*.

²³⁶ *Logic of Sensation*, p.81-82. *Logique de la sensation*, p.109-110.

²³⁷ *Logic of Sensation*, p.82. *Logique de la sensation*, p.109-110.

Deleuze's account of implication and explication in *Difference & Repetition* will seem abstract unless we apply these terms to his revised doctrine of the faculties. In those cases when our faculties are disordered, we would be wrong to think that the differences between them can be measured, as if there were a homogeneous scale of values that could be used to gauge their distance from one another. However, we might still say that to greater intensities corresponds more *depth*: as our faculties become more disorganized, it is as though we lose stable ground and feel ourselves in freefall. However, if our faculties were to come more into accord, stability would return, and objects would become more recognizable, as we become more able to determine their spatiotemporal features. In this way, the heterogeneous intensive rhythm of sensation is made more homogeneous and *extensive*, and thereby, more *qualitative features* may be attributed to the sensed object. Yet by doing so, the original intensity diminishes, as it comes to take the form of extensity and quality.

Thus, Deleuze speaks of intensity as being *implicated* and *inexplicable*.²³⁸ From what we have said regarding the discord of the faculties, it might seem that intensity resides implicitly in facultative disorder, and is only *transcendentally* sensed as the differences between faculties. We might illustrate this by considering Bacon's 1946 *Painting*. After a period of initial confusion regarding the meaning and coherence of the images, we might imagine instead that we eventually somehow become able to determine the "story" that it tells. We could then view the painting in its full extent, and explicate its meaning, its qualitative & extensive features, and its identity. When we were initially confused by the painting, we experienced the coupling of contraries that make up its *matters of fact*; yet, by explicating these phenomenal paradoxes into coherent descriptions, we cease to experience the painting as an event, and walk-away retaining a dull representation of it.

²³⁸ *Difference & Repetition*, p.228. *Différence et répétition*, p.293.

Thus, explication *cancels* intensive difference insofar as it becomes explicated. Such differences in extensive features as “the high and the low, the right and the left, the figure and the ground” flow from something deeper, in fact, from the intensive depth itself. In other words, before we are able to discern the extensive relations in our perceptions, our faculties must first be confused by the irregular ways that things are given to our senses (this is the rhythm of sensation). As our faculties establish artificial regularities — by finding a common measure to determine the extensive features of the things we perceive — what was once intensive depth then becomes extensive visual distances. It is by this means that we come to discern the *ground* from the *figure* it surrounds.²³⁹ This will be important in contrasting Bacon’s modulation with Cézanne’s; for, by merging figure and ground onto a common plane, Bacon better keeps depth from explicating into extensity.

Depth, then, is the magnitude of the faculties’ disorder.²⁴⁰ Moreover, Deleuze does not consider the distances in depth to be a negative relation, but rather a positive affirmation of the difference making-up the distant faculties. He offers a mathematical example of how distance can be used to *positively affirm* the value of a number. He first considers a formulation that defines equal mathematical values *negatively*; for, it claims that, if two values *cannot be different*, then they must be the same. (More accurately, ‘if $a \neq b$ is impossible, then $a = b$ ’). Thus, the sameness of value between a and b can be established by denying the possibility of their difference. Contrariwise, his second formulation *positively* establishes the sameness of two unknown values by *affirming* that they both share the *same distances* to other values. (‘If a is *distant* from every number c which is distant from b , then a equals b ’). Although, in Deleuze’s case, he is not speaking of an extensive quantitative

²³⁹ *Difference & Repetition*, p.229-230. *Différence et répétition*, p.296.

²⁴⁰ “The strangest alliance is formed between intensity and depth, which carries each faculty to its own limit and allows it to communicate only at the peak of its particular solitude,” *Difference & Repetition*, p.231. *Différence et répétition*, p.297-298.

distance value, but an intensive one which cannot be given an explicit value-measure.²⁴¹ For him, the notion of equality is a matter of *extensity*, and quality is an issue of *resemblance*. However, “extensity and quality ... cover or explicate intensity. *It is underneath quality and within extensity that Intensity appears upside down,*” (C’est sous la qualité, c’est dans l’étendue que l’intensité apparaît la tête en bas).²⁴² Hence in its depth, intensive difference is not negative, but only appears to be so when explicated.

The intensive differences between disorganized faculties precede all sensations of extension and quality, but yet none of our given empirical faculties can sense this intensity. The role of the faculties is to explicate the objects they commonly detect; thus, they cannot sense intensity; for, in order to do so, they would need to raise it from the depths, elevating it to the “surface” of extensions, thereby canceling it before they can sense it. When extensities explicate intensities, the intensities become *concealed*. Thus, intensity can only be detected by a “transcendental exercise of sensibility,”²⁴³ in which our faculties allow themselves to be pushed to their limits so to let the intensities flow through our bodies’ various zones and levels. Hence, the purpose of taking drugs for sensory distortion is to transcendently sense intensity without any extensities or qualities that might explicate it, so to feel the irregular rhythm of sensational chaos. (Although it is not quite clear what Deleuze means by sensing something transcendently, it seems that we may reference his descriptions of the way the BwO experiences its internal disorders).

Before we are able to explicate an object, we must first presume it is possible to do so. Kant explains this in terms of the *object* = *x*, which is a concept that Deleuze modifies. Kant explains that cognition is only possible by means of a *concept*, which enables us to unify our successive manifold of

²⁴¹ *Difference & Repetition*, p.234. *Différence et répétition*, p.301-302.

²⁴² *Difference & Repetition*, p.235. *Différence et répétition*, p.303.

²⁴³ *Difference & Repetition*, p.236-237. *Différence et répétition*, p.304-305.

intuitions in just one act of consciousness.²⁴⁴ Even in sublime experiences when these successive apprehensions could not be unified, still we presuppose the possibility for *any object whatever* to be unified into a concept. In other words, there is the *a priori* necessity that there be a sort of empty category or generic object to which any representation or concept could correspond; otherwise, the series of apprehensions would have no cause to unify. This generic object is the *something in general* = *x*, or *object* = *x*, which serves as the transcendental ground for “the unity of the consciousness in the synthesis of the manifold of all our intuitions, hence also of the concepts of objects in general.”²⁴⁵ And, this original and transcendental condition is *transcendental apperception*, which is the “pure, original, unchanging consciousness;” whereas *empirical apperceptions* are the sequences of sense intuitions. Because the *object* = *x* is not empirically intuited, Kant considers it as the “transcendental object.”²⁴⁶ Deleuze characterizes this *something* = *x* as a *something* = *nothing*, because it is an *empty* apperception. However, it becomes a *lion* = *x* when we synthesize all the particular empirical apperceptions that can turn the undetermined *x* into a *lion*: its “long hair in the wind, a roar in the air, a heavy step, a run of antelopes, well, I say it's a lion.” In this way, the diversity of empirical apperceptions becomes *specified* and *qualified* when the faculties enter into accord regarding the series of apprehensions; and, when that synthesized image in the imagination is matched with the concept for lion, the perceived lion becomes recognized.²⁴⁷

As the *a priori* condition for the comprehension of empirical intuitions, the *object* = *x* is a matter of transcendental apperception; and, as non-empirical, it exemplifies Kant's *transcendental idealism*. Deleuze adopts this notion of the transcendental of the inexplicable *something* = *x*; yet, because for him it is not transcendently “apperceived” in the mind — but rather is

²⁴⁴ Kant, *Critique of Pure Reason*, p.231, A103.

²⁴⁵ *Critique of Pure Reason*, p.232 A106.

²⁴⁶ *Critique of Pure Reason*, p.232, A107; p.233, A108-110.

²⁴⁷ Gilles Deleuze, “Cours Vincennes: synthesis and time. 28/03/1978”

the underlying violent motivational *force* driving each *empirical* faculty to its limits in their effort to synchronize — the *object* = *x* exemplifies Deleuze's *transcendental empiricism*.

Thus, we see that as intensity *decreases*, objects come *more* to be determined according to their extensive spatiotemporal and qualitative features, and in that way they become more explicated into extensity. Deleuze summarizes this inverse relationship with a modification of Kant's formula, *intensity* = 0, which for Deleuze means that *intensity is at its greatest magnitude* when its *numerical value* is zero. However, Kant's scale is the inverse of Deleuze's; for Kant, the *negation of intensity* has the value of zero. Uncovering the difference between their formulations will explain how intensity is a *fall* for Deleuze, and thus why modulation produces this intensive drop.

For Kant, sensations have an intensive magnitude, which is the degree of influence on our senses, and it may diminish to 0.²⁴⁸ As it rises-up from 0, its degree of intensity matches the extensive magnitudes of those objects causing its increase, so that an illuminated surface of some extensive measure causes as great a sensation as would the combination of a certain number of smaller such surfaces, themselves each of equal luminosity.²⁴⁹ In other words, greater intensities correspond to greater extensities, which for Kant, provides a way to quantify them.

However, for Deleuze there is an inverse relationship between intensity's magnitude and its measure: when its numerical measure is high, its actual magnitude (of facultative disorder) is low, and *vice versa*. Deleuze does not want us to take this formulation too literally, because we really have no way to quantify our intensities, not even inversely by assigning them higher numerical values. Rather, what he wants to emphasize is that the more our faculties disorganize, the more we are able to experience intensity without it being cancelled by extensive explication. This is his way to counter the

²⁴⁸ *Critique of Pure Reason*, p.291, B209, A168.

²⁴⁹ *Critique of Pure Reason*, p.295, A176, B217.

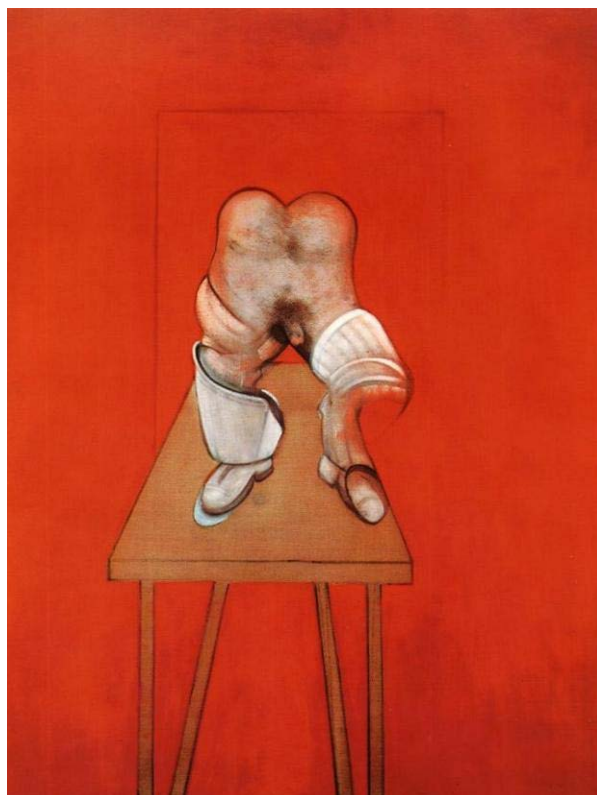
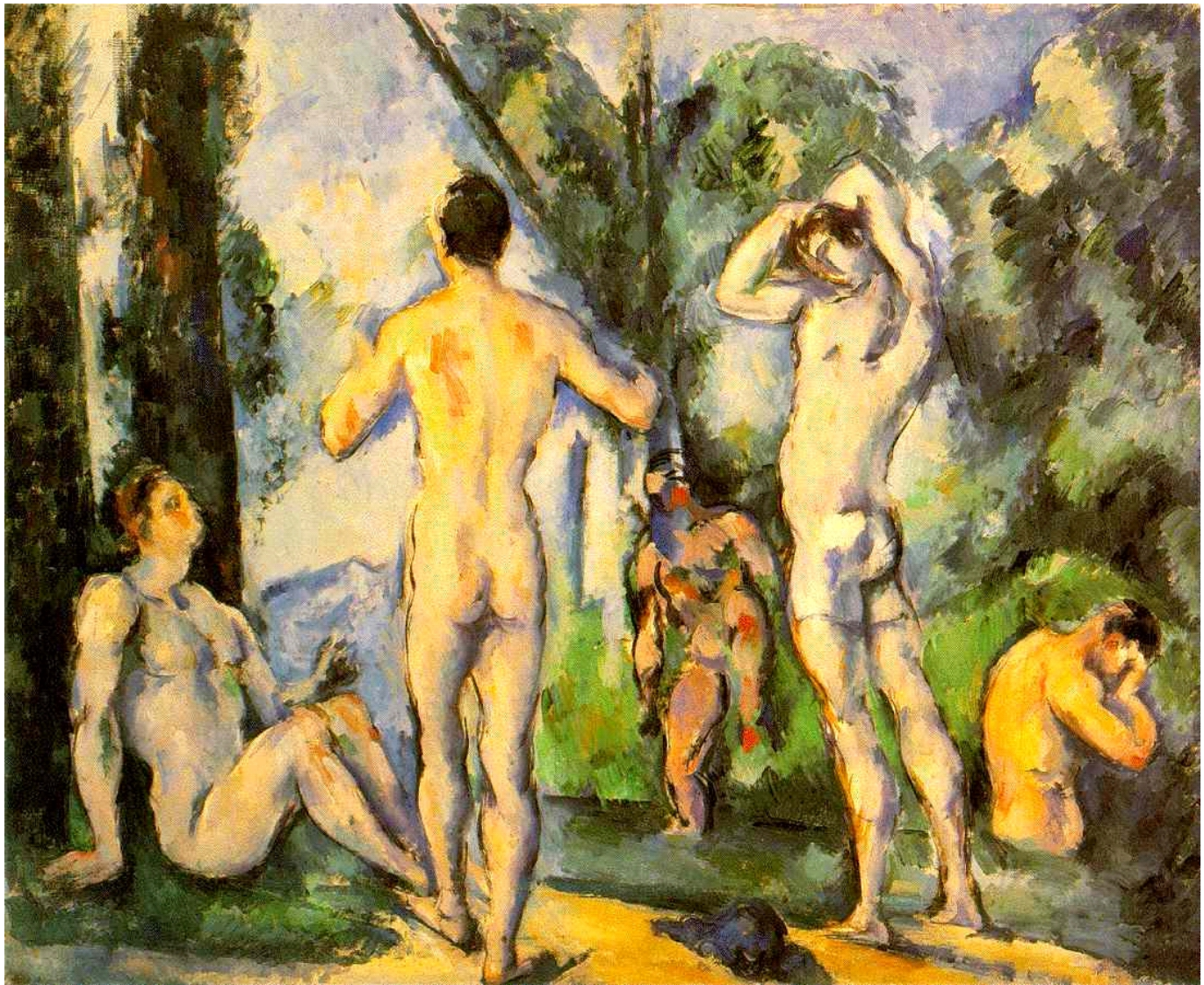
Kantian notion of perception, because for Kant, when there is no phenomenal reality, intensity equals zero;²⁵⁰ but for Deleuze, phenomena “appear” (*flash*) when intensity is at its greatest, which occurs when its numerical value equals 0; for, that happens when extensive numerical values are least a factor in sensation. Thus, we experience an increase of intensity as a *fall* to zero, and as a fall from stable ground.²⁵¹

Hence, we may return finally to the falling intensive subtractions of modulation, which Deleuze exemplified with the analog synthesizer. We might also recall that, for Pinhas, electronic-synthesizer modulation causes sounds to become *low-fi*: by decreasing fidelity, we experience a sort of confusion as we come less to recognize the sound. Bacon’s diagramming acts as a modulator, then, in the ‘synthesizer’ sense of the term, because it is a scrambled distortion that bends an image into alternate dimensions and formations. Deleuze differentiates Bacon from Cézanne in terms of Bacon’s deformation of bodies, but also in terms of the *depth* these painters create. Cézanne’s modulations — which use color alterations to create *visual depth* relations — cause in the viewer’s perception the sense that objects in the background are moving away, and those in the foreground are moving forward. (Below, in Cézanne’s *The Bathers*, we see both a slight deformation of bodies; and, we may also notice how the modulation from the skin colors to the green causes the plants to recede into the background as the bodies seem to lift forward).

²⁵⁰ *Critique of Pure Reason*, p.291, B209, A168.

²⁵¹ Gilles Deleuze, *Logic of Sensation*, p.58. *Logique de la sensation*, p.78-79.

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Bacon's diagramming, on the other hand, superposes incompatible spatial dimensions so to confuse extensions of visual depth; and, the vast expanses surrounding the deformed figures are often a monochromatic flat background rather than a three-dimensional space fading-off into the horizon. Bacon's visual depth, then, is more *shallow* and *superficial* in the sense of extensity, and thus *deeper* in the sense of intensive facultative depth.²⁵² (Below, in Bacon's 1982 *Studies of the Human Body*, we see the flat expanse which places the background at the same level of depth as the figure).



Deleuze, then, differentiates Bacon's and Cézanne's modulation techniques. When Cézanne modulates from one color patch to the next, he chooses each variation according to which color will replicate the experience of seeing the actual scene being painted, that is to say, according to a *logic of organized sensation*. Bacon's technique, however, instead involves a *logic of disorganized sensation*: his diagrammed modulations are not determined

²⁵² Deleuze, *Logic of Sensation*, p.83. *Logique de la sensation*, p.112.

rationally, but come-about through the irrational influence of chance. Also, Cézanne's modulation would seem more like Wagner's, where there is somewhat of a sense of key feeling for each color patch, even if they never resolve. Bacon, however, modulates color in a similar manner, yet for him, there is more deformation of bodies, which in terms of the colors in the diagrammed areas would mean something like the fidelity-lowering effect of continuous modular synthesis that Pinhas describes. Bacon's diagram, then, deforms bodies through continuous modulation, as though it were a carnival mirror that not only altered the proportions of the figures, but their *entire appearances* as well. So, by means of diagramming's modulation, Bacon creates aesthetic analogies that *force* our faculties to try to organize while at the same time barring them from doing so. To witness Bacon's paintings, it seems, would be to have an unresolving sublime experience.

Hence, we see that the importance of Bacon's diagramming technique in Deleuze's thinking is that it exemplifies concretely the way that chaos and order interact so to produce fuller sensations, by means of the internal dissonance of our faculties and our disharmony with the world around us. It is in this way that Deleuze's theory of sensation runs counter to the phenomenological account of the organicism and harmony of perception.

Conclusion:
Differentiating Logic

We can see in the fine detail of Deleuze's aesthetics not merely the grounds for his novel theory of sensation, but also for his portrayal of language. When our faculties are provoked to come together — but cannot on account of fundamental irregularities of our sensations — we encounter the *fact* or *state of affairs*, which likewise is what we express in language. In other words, *paradox* is the underlying reality of our fullest experiences and of the truth in language; for, we cannot deny the paradoxical truth of *becoming*: when Alice drinks from the tiny bottle and grows to grotesque proportions, she is in a process of becoming in which she is arriving-to a future state and departing-from a previous one. Deleuze says that she is becoming larger than she is; yet, so long as she is still in process of changing, she is also becoming smaller than she will finally end-up in her ultimate state. In a way, she is becoming both larger and smaller at the same time.²⁵³ This is more than a play on words, because it is a classical philosophical problem that when something changes, it is both itself and not-itself at the same time.

Deleuze's insight here is that classical logic is neither the logic of sense nor the logic of sensation; nor can it explain thought or our personal identities. Deleuze makes one small change in logic with far-reaching consequences to his philosophy: he introduces the notion of *force* as a logical *operator*. Although we might be tempted to ignore Deleuze's more abstract explanations of his logic, it is essential that we learn just one basic generic principle which can account for a large portion of his ideas. Force, like conjunction ("both A and B"), is a coupling operation; yet, conjunction *unites terms which cannot contradict each other*, while force *makes incompatible terms*

²⁵³ Deleuze, *Logic of Sense*, p.3. *Logique du sens*, p.9.

coincide. So, when we say, “either A or B, but not both,” we are making an *exclusive disjunction*, which normally means that if we affirm A, we must negate B; for, only one in the pair can be true: a *state of affairs* in classical logic cannot contain two logically-contrary terms. Yet, Deleuze's *force* operator keeps the disjuncts exclusive while also making them coincide, such that when we affirm one, we do not thereby deny the other. This is what he calls his *affirmative disjunction*,²⁵⁴ and we saw how this makes his theory of sensation anti-phenomenological by making the *fact* of perception a paradox that leads to internal disorganization rather than to harmony; and, this is also what makes Deleuze's philosophy of communication anti-post-structuralist: language does not suffer from weaknesses in its structure; it boasts enough surplus strength to force contrary terms to coincide without negation (or deconstruction), which expresses the true *state of our affairs*, while also assisting language's creative becoming and development, helping it thrive so that it does not stagnate and decay.

Hence Deleuze's stuttering. This is one of his least developed and most easily dismissible notions; yet, our project here has shown that it might lie at the core of his *thinking & writing*, and it may explain his philosophical *technique*. Deleuze does not howl and growl at us in an incomprehensible animal language, nor does he present an argument that is structured perfectly according to the principles of classical logic; that is to say, his writing is neither strictly analogical nor digital. It could be that he makes philosophy stutter by using writing and thinking techniques which force together such seemingly incompatible philosophical notions as affirmation & difference, disjunction & coupling, chaos & disorder, thought & confusion, sense & non-sense, lived body & butchered meat, and identity & self-contradiction. Moreover, even if pursuing his notion of stuttering proves fruitless, we nonetheless have laid the groundwork to fully elaborate his anti-

²⁵⁴ Deleuze, *Logic of Sense*, p.199. *Logique du sens*, p.204.

phenomenological and anti-post-structuralist philosophies of sensation and communication.



Technical Appendix:
*Messiaen's Heterogeneous Rhythms,
Retrograde Rhythms, and Rhythmic Characters*



Rhythm Appendix

To grasp Bacon's triptych rhythm, which will help us understand what Deleuze means by the rhythm of sensation, we have three notions to clarify, a) the rhythm as unequal or heterogeneous, b) retrograde rhythm, and c) the three rhythmic characters.

Messiaen illustrates rhythms of *unequal durations* in his *polyrhythm* lessons, what he calls the *superposition of rhythms of unequal length*. He offers this example,²⁵⁵

which I will represent using boxes whose lengths correspond to the durations of the notes. The grey-tone values of the boxes serve merely to indicate the note groupings:



[The box-lines join the top and bottom sets together in an unbroken row. The smallest unit of time is 1/16 of beat (in the staff the notes with the double beams), this would be the smallest box-size. The next size is the 1/8 note (single beam), and the largest is the 3/16 (dotted single beam, dotted eighth note).] In the box rendition, we see that there is an uneven remainder, but

²⁵⁵ Olivier Messiaen, *The Technique of My Musical Language, Textes*, Transl. John Satterfield, Paris: Alphonse Leduc, originally published 1944, p.4.

the pattern repeats from the beginning, with the top line picking up at its beginning where it previously left off at its last cycle's end. The bottom line does the same as well, thus off-setting the next sequence by 1/16 of a beat.

Thus the next cycle, beginning with the leftover of the previous is:



The remainder after this second repetition being,



when previously it was:



It will take nine repetitions of the top one before they both line up again as they do at the sequence's beginning.²⁵⁶ This technique allows for rhythms to be coupled without strictly chaining them to one another. In the case of Bacon's triptychs, this is what Deleuze considers the doubled forces of isolation and coupling.²⁵⁷

Another of Messiaen's techniques that Deleuze references in order to describe Bacon's rhythms is the use of *retrogradable* and *non-retrogradable rhythms*, whose application to Bacon's artwork allows Deleuze to differentiate (in some cases) the active and passive Figures in his paintings. Retrogradation is the structural capacity for a rhythmic figure's notes to be played in reverse-order without that replay constituting the same pattern. Thus a non-retrogradable rhythm is one that plays the same in reverse, and a retrogradable rhythm plays back something different.²⁵⁸ When both sorts are used together in a piece, different motion effects may be accomplished. For example, when both are interchanged, the non-retrogradable stable rhythms serve well as attendant rhythms; they create a constant movement against

²⁵⁶ *The Technique of My Musical Language*, p.22.

²⁵⁷ Gilles Deleuze, *Logic of Sensation*, p.60.

²⁵⁸ *Conversations with Olivier Messiaen*, p.43-44.

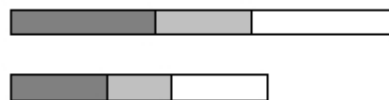
In “classic” augmentation, for example, the rhythmic values of notes are added upon themselves:²⁶¹

d) augmentation classique : | ♩ ♩ ♩ | ♩ ♩ ♩ ||
(ou ajout des valeurs
à elles-mêmes)



And diminution of a ‘point’ reduces the rhythm by a third:

c) retrait du point : | ♩· ♩· ♩· | ♩ ♩ ♩ ||
(ou retrait du
tiers des valeurs)



According to his student Pierre Boulez, we may credit Messiaen’s rhythmic discoveries to his studies on Stravinsky.²⁶² In his classes, Messiaen performed detailed analyses of Stravinsky’s *Le Sacre du Printemps*, discovering the above notions, as well as the rhythmic characters, which he came to employ in his own compositions. In his general descriptions of the characters, the *personnages rythmiques*, Messiaen has us imagine a scene in a play involving three characters: *a)* the first one brutalizes *b)* his victim, all while *c)* a spectator watches, but remains inactive.²⁶³ In Stravinsky’s rhythmic characters, the note values of the active figures become augmented, while those of the passive diminish; and, the inactive immobile one’s values remain

²⁶¹ Olivier Messiaen, *Traité de rythme, de couleur, et d’ornithologie (1949-1992), Tome II*, (Paris: Alphonse Leduc: 1995), p.49.

²⁶² Pierre Boulez, *Notes of an Apprenticeship*, Transl. Herbert Weinstock, (New York: Alfred A. Knopf, 1968), p.173.

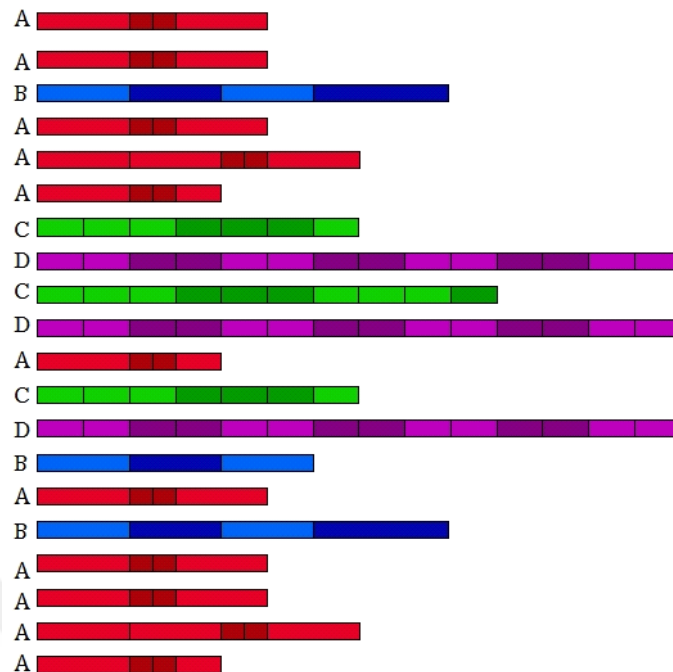
²⁶³ “In this system of rhythmic characters you have, in principle, several characters present. Let’s imagine a scene in a play between three characters: the first acts in a brutal manner by hitting the second; the second character suffers this act, since his actions are dominated by those of the first; lastly, the third character is present at the conflict but remains inactive. If we transpose this parable into the field of rhythm, we have three rhythmic groups: the first, whose note-values are always increasing, is the character who attacks; the second, whose note-values decrease, is the character who is attacked; and the third, whose note-values never change, is the character who remains immobile,” *Conversations with Olivier Messiaen*, p.37.

the same throughout, and are often non-retrogradable, that is, they remain the same whether played forward or backward. The result is a sort of boxing match, with two contenders each taking his toll on the other, all before the observing audience.

Yet, Messiaen discovers a complexity in Stravinsky's *personnages rythmiques*, which Deleuze finds as well in Bacon's Figures: the roles of the figures change between active and passive frequently, almost like wrestlers interchanging positions of dominance as they struggle with one another.

We will first look at a part Messiaen's analysis of Stravinsky's *Le Sacre du Printemps*, "Glorification De l'Elue," where he differentiates the *personnages rythmiques* and describes their combat. Generally speaking, what Messiaen discovers in this section is that there are 4 small unique repeating series of notes, which he considers the rhythmic characters, and he names them A, B, C, and D. Figures A and B increase and decrease in size as they repeat, which gives us the impression that they are battling each other, with one or the other taking the lead at certain times. All the while, D remains the same, and is thus the witness or attendant figure. Figure C changes only once, and does not seem to fit into any of the three roles.

In the diagram below, we can see the series of changes for each figure:



[In the following, we detail Messiaen's analysis. It is only worthwhile to read this highly technical material if one wants to study it close enough to be able to hear the figures when listening to the music piece.

Messiaen reduces the more complex notation down to eighth note patterns so that the characters may be identified. To better recognize them in our listening, we will use box diagrams to represent the sonic qualities of figures. (The vertical axis displays pitch, and the horizontal, like before, is duration. Pitch will sometimes be reduced and approximated).

His first figure is character A, who varies between active and passive, and is played by the English horns along with the flute and piccolo, which begin the movement:



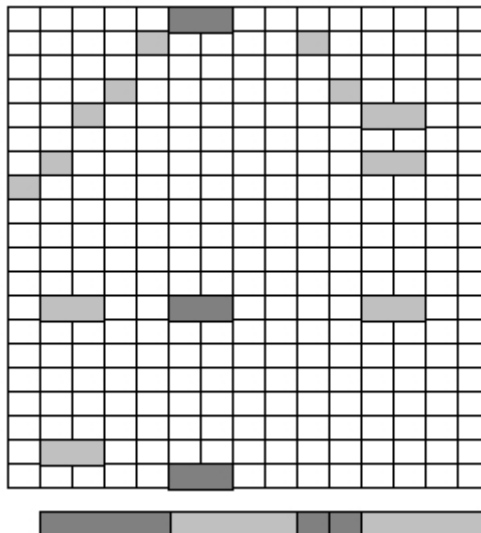
which Messiaen symbolically condenses to:

which has a value of 5 eighth notes. (He ignores the initial grace notes and counts silence with the previous note). This figure repeats again, remaining the same length. The figure appearing after that second instance of A is the B character, played by the stringed instruments:

Which Messiaen reduces to:



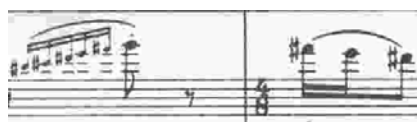
The A pattern returns again repeating three times, first at the same rhythmic value as before, 5 eighth notes, following with an augmentation to 7 notes:

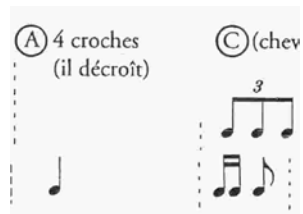
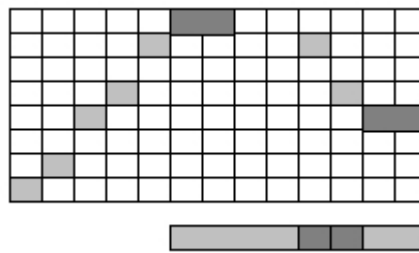


Ⓐ 7 croches
(il croît)

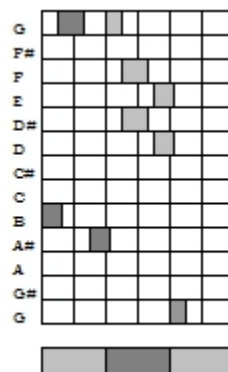


Then it reduces to a value of 4 eighth notes, and is overlapped by C:

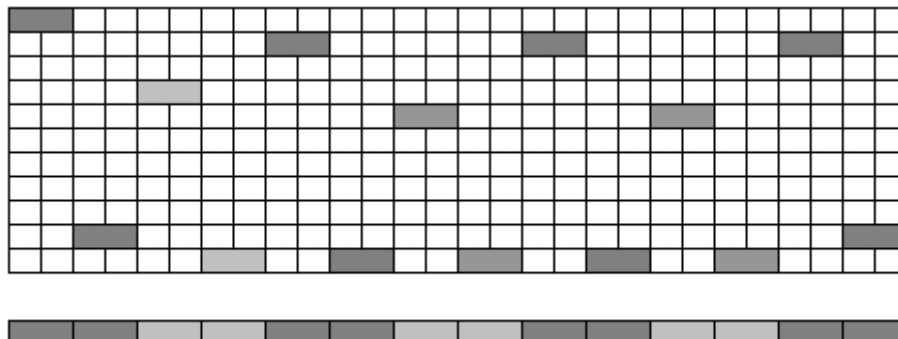




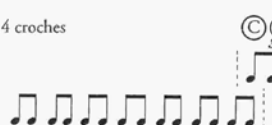
The next figure, C, overlapping A and played by the trombones, is always made up of triplets building with a strong crescendo (box rendition is simplification):



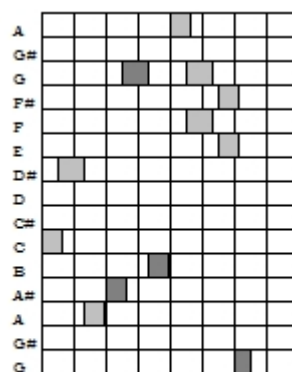
This is followed by character D, the immobile rhythm, played by the tympani:



Ⓓ 14 croches



Then C returns with an extra triplet (box diagram is simplified):



Ⓒ (un triole de plus)



Then the immobile D returns, followed by A again in its decreased 4 eighth-note form, overlapped by C in its own former shorter form, followed again by the immobile D:

Diagram illustrating the sequence of notes and their durations:

- ① 14 croches (immobile): A sequence of 14 eighth notes.
- ② 4 croches: A sequence of 4 eighth notes.
- ③ (chevauchement): A sequence of 3 eighth notes, overlapping with the previous sequence.
- ④ 14 croches (immobile): A sequence of 14 eighth notes.

But when B returns, it has diminished from its previous 9 note value to 6:

Diagram illustrating the sequence of notes and their durations:

- ① 9 croches: A sequence of 9 eighth notes.
- ② 4 croches: A sequence of 4 eighth notes.
- ③ (chevauchement): A sequence of 3 eighth notes, overlapping with the previous sequence.
- ④ 6 croches: A sequence of 6 eighth notes.

Diagram illustrating the sequence of notes and their durations using a grid:

- The grid shows the sequence of notes: G#, G, F#, F, E, D#, D, C#, C, B, A#, A, G#, G, F#.
- The durations are indicated by the number of croches (eighth notes) for each note: 14, 4, 3, 14, 9, 4, 3, 6.
- The sequence of durations is: 14, 4, 3, 14, 9, 4, 3, 6.
- The sequence of notes is: D, A, C, D, B, A, C, B.

Character A then returns to its original 5 eighth-note value, following with B returning to its 9 eighth-note value, and the A occurs again twice both times still at a value of 5, but follows again increasing to its 7 value form, then ending this section of the movement with its 4 value form.] Messiaen's

analysis of Stravinsky, then, will suffice to illustrate the rhythmic principles that Deleuze finds in Bacon: 1) active, passive, and attendant rhythms, 2) the indeterminacy of their roles and of a rhythmic pulse, and 3) retrogradable and non-retrogradable rhythms which can serve to render an active rhythm into a passive movement.



Bibliography

- Abraham, Ralph, and Christopher D. Shaw. *Dynamics — The Geometry of Behavior, Part 1: Periodic Behavior*. Santa Cruz: Aerial Press, Inc., 1984.
- Aichele, K. Porter. "Paul Klee's 'Rhythmisches': A Recapitulation of the Bauhaus Years. (*Zeitschrift für Kunstgeschichte*, 57 Bd., H. 1., 1994).
- Artaud, Antonin. *Selected Writings* Transl. Helen Weaver. Ed. Susan Sontag. Berkeley: University of California Press, 1976.
- Bacon, Francis, and David Sylvester. *The Brutality of Fact: Interviews with Francis Bacon 1962-1979*. New York: Thames and Hudson, 1975.
- Bateson, Gregory. *Steps to an Ecology of Mind*. New York: Ballantine, 1972.
- Bergson, Henri. *Time and Free Will: An Essay on the Immediate Data of Consciousness*. Transl. F. L. Pogson. New York: Dover Publications, Inc., 2001.
- Boulez, Pierre. *Notes of an Apprenticeship*. Transl. Herbert Weinstock. New York: Alfred A. Knopf, 1968.
- Boulez, Pierre, and Célestin Deliège. *Pierre Boulez: Conversations with Célestin Deliège*. London: Eulenburg Books, 1975.
- Brakhage, Stan. "Encounters." *By Brakhage — Anthology*. DVD. Criterion, 2001.
- Burks, Arthur W. "Icon, Index, and Symbol." *Philosophy and Phenomenological Research*, Vol. 9, No. 4. (Jun., 1949), pp.673-689.
- Carroll, Lewis. *The Annotated Alice: Alice's Adventures in Wonderland & Through the Looking Glass*. New York: C.N. Potter, 1960.
- Crotch. "On the Derivation of the Scale, Tuning, Temperament, the Monochord, &c." *The Musical Times and Singing Class Circular*, Vol. 10, No. 224, (Oct. 1, 1861), pp.115-118.

- Davies, Sean. "Disc Cutting." in *Sound Recording Practice*. Ed. John Borwick. Oxford: Oxford University Press, 1987.
- Deleuze, Gilles. *Cinema 1: The Movement Image*. Transl. Hugh Tomlinson & Barbara Habberjam. London: The Athlone Press, 1986.
- Deleuze, Gilles. "Cours Vincennes: synthesis and time - 14/03/1978." webdeleuze.com.
- Deleuze, Gilles. "Cours Vincennes: synthesis and time - 28/03/1978." webdeleuze.com.
- Deleuze, Gilles. *Critique et Clinique*. Paris : Les Éditions de Minuit, 1993.
- Deleuze, Gilles. *Difference & Repetition*. Transl. Paul Patton. New York: Columbia University Press, 1994.
- Deleuze, Gilles. *Différence et répétition*. Paris: Presses Universitaires de France, 1968.
- Deleuze, Gilles. *Essays Critical and Clinical*. Transl. Daniel W. Smith & Michael A. Greco. Minneapolis: University of Minnesota Press, 1997.
- Deleuze, Gilles. *Francis Bacon: Logic of Sensation*. Transl. Daniel W. Smith. London: Continuum Books, 2003.
- Deleuze, Gilles. *Francis Bacon : Logique du la sensation*. Paris : Les Éditions du Seuil, 2002.
- Deleuze, Gilles. *Kant's Critical Philosophy: The Doctrine of the Faculties*. Transl. Hugh Tomlinson & Barbara Habberjam. London: The Athlone Press, 1984.
- Deleuze, Gilles. *Logic of Sense*. Transl. Mark Lester. London: Columbia University Press, 1990, reprinted by Continuum, 2001.
- Deleuze, Gilles. *Logique de sens*. Paris: Les Éditions de Minuit, 1969.
- Deleuze, Gilles. *La philosophie critique de Kant : doctrines des facultés*. Paris: Presses Universitaires de France, 2004.
- Deleuze, Gilles, and Félix Guattari. *Capitalisme et Schizophrénie 2: Mille Plateaux*. Paris: Les Éditions de Minuit, 1980.

- Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Continuum, 1987.
- Derrida, Jacques. "Différance." *Margins of Philosophy*. Transl. Alan Bass. Chicago: University of Chicago Press, 1982.
- Derrida, Jacques. "Differance." *Speech and Phenomena And Other Essays on Husserl's Theory of Signs*. Transl. David B. Allison. Evanston: Northwestern University Press, 1973.
- Derrida, Jacques. *Dissemination*. Transl. Barbara Johnson. Chicago: University of Chicago Press, 1981.
- Derrida, Jacques. *Limited Inc.* Transl. Samuel Weber and Jeffrey Mehlman. Evanston: Northwestern University Press, 1988.
- Derrida, Jacques. *Positions*. Transl. Alan Bass. Chicago: University of Chicago Press, 1981.
- Focillon, Henri. *The Life of Forms*. Transl. George Kubler. New York: Zone Books, 1992.
- Gasquet, Joachim. *Conversations with Paul Cézanne*. Transl. Julie Lawrence Cochran. Ed. Michael Doran. Berkeley: University of California Press, 2001.
- Geyskens, Tomas. "Painting as Hysteria: Deleuze on Bacon." Delivered at *Philosophical Criticisms of the concept of Sexuality in Psychoanalysis*. Katholieke Universiteit Leuven, 5 March, 2008.
- Ghyka, Matila C. *Esthétique des proportions dans la nature et dans les arts*. Paris : Gallimard, 1927.
- Ghyka, Matila C. *Le Nombre d'Or: Rites et rythmes pythagoriciens dans le développement de la civilisation occidentale*. Paris : Gallimard, 1931.
- Gowing, Lawrence. "Cézanne: The Logic of Organized Sensations." in *Conversations with Cézanne*. Ed. Michael Doran. Berkeley: University of California Press, 2001.

- Husserl, Edmund. *Analyses Concerning Passive and Active Synthesis*. Ed. Rudolf Bernet. Transl. Anthony J. Steinbock. Dordrecht: Kluwer Academic Publishers, 2001.
- Kandinsky, Wassily. *Kandinsky: Complete Writings on Art*, Ed. Kenneth C. Lindsay & Peter Vergo. Boston: Da Capo Press, 1994.
- Kant, Immanuel. *Critique of the Power of Judgment*. Transl. & Eds. Paul Guyer & Eric Matthews. Cambridge: Cambridge University Press, 2000.
- Kant, Immanuel. *Critique of Pure Reason*. Transl. & Eds. Paul Guyer & Allen W. Wood. Cambridge: Cambridge University Press, 1998.
- Kant, Immanuel. *Kritik der Reinen Vernunft*. Frankfurt: Suhrkamp Verlag Frankfurt, 1956.
- Kant, Immanuel. *Kritik der Urteilkraft*. Frankfurt: Suhrkamp Verlag Frankfurt, 1957.
- Klee, Paul. *Das bildnerische Denken*. Basel : Schwabe, 1981.
- Klee, Paul. *On Modern Art*. Transl. Paul Findlay. London: Faber & Faber, 1987.
- Klee, Paul. "Note sur le point gris." *Théorie de l'art moderne*. Paris : Denoël et Gonthier, 1975.
- Klee, Paul. *Pädagogisches Skizzenbuch*. Mainz: Florian Kupferberg Verlag, 1965.
- Klee, Paul. *Unendliche Naturgeschichte*. Basel : Schwabe, 1970.
- Maldiney, Henri. *Regard, parole, espace*. Lausanne: Editions l'Age d'Homme, 1994.
- Marcorelles, Louis. *Éléments pour un nouveau cinéma*. Paris: Unesco, 1970.
- Marcorelles, Louis. *Living Cinema: New Directions in Contemporary Film-making*. Transl. Isabel Quigly. London: George Allen & Unwin Ltd., 1973.

- Messiaen, Olivier, and Claude Samuel. *Conversations with Olivier Messiaen*.
Transl. Felix Aprahamian. London: Stainer & Bell, 1976.
- Messiaen, Olivier. *The Technique of My Musical Language, Textes*. Transl. John Satterfield. Paris: Alphonse Leduc, originally published 1944.
- Messiaen, Olivier. *Traité de rythme, de couleur, et d'ornithologie (1949-1992), Tome II*. Paris: Alphonse Leduc: 1995.
- Peirce, C.S. *Philosophical Writings of Peirce*. Ed. Justus Buchler. New York: Dover Publications, Inc., 1955.
- Pinhas, Richard. "Le rythme et la modulation synthétique: Simultanéité et compossibilité des *motives* chez Richard Wagner." in *Les Larmes de Nietzsche: Deleuze et la musique*. Paris: Flammarion, 2001.
- J.H. Rosny, *Les sciences et le pluralisme*, Paris: Alcan, 1922.
- Saussure, Ferdinand de. *Cours de linguistique générale*. Paris: Payot, 1967.
- Shapiro, Meyer. *Theory and Philosophy of Art*. New York: Braziller, 1994.
- Sutherland, Daniel. "Kant's Philosophy of Mathematics and the Greek Mathematical Tradition." *The Philosophical Review*, Vol. 113, No. 2, (April, 2004), pp.157-201.
- Tarski, Alfred. "Der Aussagenkalkül und die Topologie." *Fundamenta Mathematicae*, XXXI, 1938.
- Turner, Norman. "Cézanne, Wagner, Modulation." *The Journal of Aesthetics and Art Criticism*. Vol. 56, No. 4, (Autumn, 1998), pp.353-364.