Toward Misreading: assembling (k)new meaning

by

Nolan Oswald Dennis

BAS, Bachelor of Architecture Studies
University of the Witwatersrand, 2012

Submitted to the Department of Architecture in Partial Fulfillment of the Requirements for the Degree of Master of Science in Art, Culture and Technology at the Massachusetts Institute of Technology.

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ABSTRACT

This thesis explores meaning-making strategies in art practices through an entangled reading of the material and discursive forms through which that meaning is made. This thesis proposes that a necessarily material-discursive approach distinguishes art practices from other forms of meaning-making and, therefore, views art making as a significant mode of knowledge-making, with particular relevance to decolonial practices of knowledge. This thesis suggests that art-making practices employ specific strategies to rearrange material and discursive contexts, as well as mobilize material and discursive gestures, in order to produce urgent political meaning. This thesis proposes that through (mis)reading these strategies, new assemblages of meaning and material may emerge. This thesis employs critical theory, assemblage theory and modeling theory to improvise a method of apprehending these strategies, and re-articulating them for other ends.

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Introduction

This thesis approaches art-making as a critical mode of decolonial meaning-making. Art practices as modes of meaning-making, can be distinguished from other forms of meaning and knowledge-making by their necessary use of material discursive strategies of knowing. Material discursive strategies are methods of dealing with knowledge from within its material constitutive parts, such that discourse, knowledge, and meaning are inseparable from the material world of bodies at all scales (molecular, sociological, ecological, geological, cosmological, etc.) This thesis proposes that art-making occupies a fertile zone in relation to this kind of materially constituted discourse, precisely because art-practices engage discourse at the level of its material immanence. Here material immanence refers to those points of difference articulated by the interaction (intra-action) of "language, forms of social organization and interaction, techniques of production, skills." ¹

This fertile position is not an exclusive zone, but rather an ontologically shared space within which all people and things (human and non-human) are absorbed in a relation of becoming.² A material discursive ontology requires that we see all discourse (knowledge, politics, technology, social organization etc.) as inseparably entangled with its constitutive material parts. However, beyond ontological claims for the nature of being, there lies the possibility of material-discursive strategies, strategic approaches that aim for ways of being, and, critically for this thesis, ways of making (here a material discursive understanding of making, implies that all making is necessarily making meaning). Art practices, like holistic approaches in Indigenous knowledge,³ and practices in experimental

¹ Wartofsky, Models, xiii.


³ Cajete, interview
This thesis proposes that inseparability is a generative condition of art practices so far as artists are those who arrange conditions, especially the conditions for their own praxis. This thesis calls art-makers’ capacity to structure the conditions of their own practice the assembled-apparatus, their apparatus of practice. However the principle of inseparability implies that these conditions are not, and cannot be, detached from the conditions of society itself. Indeed the conditions arranged by artists are both derived from, and form part of, the general conditions of society. This entanglement highlights both the promise and the hazards of art praxes: on one hand there is the indication of transformation in the world (the autonomy of art), and on the other hand, the reproduction, re-inscription of the conditions the world (the heteronomy of art). These two positions correspond, respectively, to art-making’s decolonial and neocolonial capacities. The assembled-apparatus therefore has the potential to operate as an analog for, and a strategy for recognizing, what la paperson (K. Wayne Yang) calls decolonizing machines.

This entanglement also suggests that in order to make sense of (as in, make sensible) specific art practices meaning-making operations, it is necessary to look for the ways in which these practices operate beyond the boundaries of the art object, in order to fold those areas of practice back into the art object. The sense of going beyond the art object is based on a notion of entanglement which supposes that whatever is happening outside of the object boundaries is in fact a constitutive part of the object and must be attended to materially (not just as context, or on the level of discourse). An adequate attending to this entanglement requires us to rethink how and what determines boundaries.


5 paperson, *A Third University Is Possible*, xxiv.
in general, such that what is considered outside the art object can be differently engaged as an inseparable and constitutive part of its inside. This principle of inseparability underscores the critical operation of misreading.

This thesis suggests that art-making as a form of meaning-making is a crucial decolonial instrument due to the capacity of art-makers (artists, and non-artists) to structure the conditions of their own practice. This capacity to determine local (micro) conditions allows art-makers to operate beyond the discursive and material limits determined by power-relations in society. However the material from which these autonomous conditions are assembled are paradoxically determined by power-relations in society. Therefore art-makers must produce difference on the basis of sameness, new conditions from within the very conditional limits they must exceed. This thesis ascribes the capacity to produce difference on the level of meaning partly to the agency of art-makers to use things and the connections between things differently. An important corollary, developed later through the notion of (k)new things, is that the agency to approach things differently is that, despite the force of (colonial) power-relations, things are in fact different. This thesis is interested in the strategies art-makers employ to produce specific assemblies of general conditions, and importantly where these assemblies become operations of difference, decolonial possibilities, critical points of slippage, acts of misreadings.

This thesis uses art-making, meaning-making, and knowledge-making as terms that emphasize these as active processes, in which their participants do not initiate, discover or observe processes in the world but are implicated as producers of that world, whether willing or unwilling. Karan Barad describes this position: "We do not obtain knowledge by standing outside the world; we know because “we” are of the world. We are part of the world in its differential becoming." The term making is used press against the idea of

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6 Barad, Meeting the Universe Halfway, 185.
knowledge as an institutional privilege, a space of production outside the circulation of general society, but that knowledge is made from relations of knowing. Knowing is a capacity of the relations between all things, human and non-human, and the academy is only one (treacherous) configuration of the ways in which knowledge can, and should be made.

This thesis is therefore generally interested in the ways in which meaning-making is possible through the material-discourse of art-making practices. The opening section i) Matter and Meaning, will explore the relationship between matter (materiality) and meaning (language, discourse), through theory around power, discourse and materiality from Michel Foucault, Judith Butler, Karen Barad and others. This will form the material-discursive ground work for the rest of the thesis.

The section section ii) A (K)New Thing, will develop ideas about decolonial relations to knowledge, art-making as knowledge-making, and introduce the notion of the assembled-apparatus as the vehicle through which this thesis proposes to explore the agency of art-makers in processes of making meaning.

The third section iii) Model and Diagram, will reflect on the model and the diagram as fertile structures for exploring the mechanism through which meaning-making and the assembled-apparatus might operate. This section will refer to model theory as well as assemblage theory of Deleuze and Guattari, Manuel Delanda, Brian Massumi, and others.

The fourth section iv) Model Schema will be a critical examination the specific mechanisms of model theory and model-epistemology in the philosophy of science of Rom Harré and Marx Wartofsky and others.

7 Ingold, Making, 5.
The fifth section v) Diagram/Tactic, will look at the writing and work of South African photographer Santu Mofokeng, and American artist and educator Charles Gaines. These art-makers' practices will be examined through their material-discursive strategies of pulling what is often seen as outside the practice (teaching, writing, etc) into the centre of their practices. These relation building strategies will be explored through a (mis)reading of their work as tactical diagrams. These artists are purposefully selected on the basis of their investment in language, seriality, and notions of the everyday, an attitude I approach as a strategic form of material entanglement, a manner of entering from the other side.

The sixth section vi) Power-Moves, will reflect on the pressure various forms of political, disciplinary, colonial power relation place on the decolonial possibilities of this thesis. This short section will explore the implications Foucault's theory of the apparatus to the proposition of an assembled-apparatus, through the theoretical work of Giorgio Agamben, Linda Tuwihai Smith, Mabogo P More, Walter Mignolo, Lewis Gordon, Fred Moten and Stefano Harney, and others.

The final section vii) End, will reflect on the implications of this thesis for my own practice. This thesis will be explored as a module of the assembled-apparatus in which my own art-making occurs. This thesis will be assessed as an intellectual instrumentation through which my practice might intervene in the immanent flow of power and make its own meaning.

This thesis is a product of my experiences at MIT over two academic years and three calendar years 2016-18, it is a reflection what was learnt and what was lost in this process. This thesis is an actualization of what was possible and what done, but it is also an alignment of forces and a calling of those ancestors whose presence is both behind and ahead of the work that is yet to be done.
i) Matter and Meaning

a) Performativity

The foundational assumption of this thesis is the understanding that meaning is made in material practice. Meaning is not a priori, waiting to be stumbled upon, or an abstract reflection, nor is meaning an imaginary object of the mind which is arbitrarily applied to, denoted in, extracted from or represented in the world of things. While language forms part of how meaningcirculates, meaningful content “is neither intralinguistically conferred nor extralinguistically referenced.” 8 This thesis looks at how meaning emerges from what Foucault calls discursive practices. Discursive practices are the local socio-historical material conditions that enable and constrain disciplinary (and in-disciplinary) knowledge practices. 9

Furthermore, this thesis approaches meaning as an entangled encounter with power, akin to Ian Hacking’s notion of manipulability wherein “to see, one must intervene.” 10 This relationship to power implies that the material conditions that produce discursive practices are themselves necessarily produced by the process of making meaning, such that, in principle, making meaning is a process of making or unmaking the material world: working with, or against a current of power. This idea of intervention begins to describe the kind of entanglement through which this thesis approaches decolonial meaning-making. Making meaning here corresponds to what Linda Tuhiai Smith calls the “actual material redefinition of our world.” 11


10 Barad, Meeting the Universe Halfway, 50.

11 Smith, Decolonising Methodologies, 33.
There is a complimentary relation of scale between Ian Hacking’s and Linda Tuhiwai Smith’s interventions. Ian Hacking refers specifically to the philosophical implications of scanning tunneling microscopes (STM). STM are a set of instruments that produce atomic scale images though measuring quantum tunneling current between the microscope tip and the surface of the specimen. This process of moving electrons between the microscope tip and the surface of the specimen is comparable to touching the specimen at an atomic level and leads to Hacking’s claim that experimental processes must interfere with their object of study in order to perceive it. Hacking makes the case for an entanglement of meaning and material at the atomic scale, examining how our definition of what it means to ‘see’ atoms must be expanded to include the ways in which seeing is in fact an act of changing the material world.

Linda Tuhiwai Smith on the other hand traces how, under colonialism, socio-historical knowledge functions according to a similar schema. Smith traces how colonial schooling practices “redefined the world and where indigenous peoples were positioned within the world”. Smith makes the point that Western school curricula shifted cosmologies within which Indigenous people made meaningful lives in the world by changing place names, imposing colonial symbols, delegitimizing oral and other histories in favor of colonial history. However Smith is careful to note that these changes on the order of meaning are not abstracted from the material world but are entangled, as an operational necessity, with “the breaking in of the land, the alienation and fragmentation of lands through legislation, the forced movement of people off their lands . . . which resulted in high sickness and mortality rates.”

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12 Barad, Meeting the Universe Halfway, 52-53.
13 Smith, Decolonising Methodologies, 33.
14 Smith, Decolonising Methodologies, 33.
This tracing of the colonial entanglement of material and meaning has critical implications when put in relation to Hacking's notion of manipulability as a grounding for this exploration of making-meaning. The first aspect is that the entanglement of meaning and material at the socio-historical scale indicates that making-meaning is always a deeply material practice regardless of the scale or site at which this meaning is being made. The second, related, aspect is that the ability to intervene in, and redefine, the material world, which is the ground work of making meaning, is a feature of power. Crucially this material-discursive power is the basis upon which worlds are made and unmade. From Hacking we understand that the ability to see is a function of possessing the power to intervene, and from Smith we understand that this power to intervene is a particular quality of colonial (dis)possession, but also decolonial resistance.

This entanglement can also be read as an extension of Judith Butler's performative materialization of bodies in which "speaking is never simply a statement of fact, but an action that effects some change. So in naming a body we effect a change in the body, and thus work to (trans)form that body." The performance in this case refers to the act of constituting a body, producing meaning by materializing a boundary between one body and the next. However performative materialization operates within Foucault's notion of practices of discourse, which are the material conditions of speech. Which is to say the ability to speak is not equally distributed, rather it is dependent on an apparatus that grants this power.

16 Robinson, The Ontological Status of Sexual Difference, 2.
17 Agamben, What is an Apparatus, 3.
The kind of apparatuses this thesis is concerned with combine the techno-scientific devices that Hacking refers to, the socio-epistemic apparatus that Butler is concerned with, as well as the colonial historical infrastructure and the massive land-engineering power that Smith identifies. The term apparatus is used both for the individual mechanisms necessary for the emergence of meaningful scientific statements, as well as for the socio-political mechanisms in which these individual mechanisms function. Furthermore, this thesis approaches art practice as the subset of meaning-making practices that are uniquely self-conscious, and therefore strategic about the possibility of operating across the breadth of meaning-making apparatuses. The strategic capacity of art-making means this mode of meaning-making is critical in producing a decolonial and decolonized world.

In this entangled account of knowledge practices, it is important to emphasize the materiality of these apparatuses. These are not just semantic arrangements or virtual apparatuses of thought, but actual arrangements of matter in the world. The performative entanglement of meaning and matter depends on unstable and shiftable boundaries between objects and subjects, meaning and material. In order for this relationship between meaning and matter to be performative, and for meaning and matter to constitute each other in this way, then the definition of any material must itself be indeterminate. Both meaning and matter must be contestable.

b) Representation

One way to approach this entanglement is through Derrida's notion of the forces of différance and deconstruction, which are respectively, that difference that the same contains, and the same that contains difference\(^\text{18}\). In other words, these two forces reveal the fundamental tension between the materiality of the world and its representations or discourse. This tension indicates the linguistic predicament in which arbitrary symbolic

\(^{18}\) Stocker, Routledge Philosophy Guidebook to Derrida on Deconstruction, 178.
relations demand a continuity of meaning, while simultaneously denying that continuity. The implication of this is that no discourse, no idea, and indeed no material is a stable object. As one approaches an idealized representation, the stability of its existence, its truth value, is destabilized by the complexities of its material existence, and vice versa for material objects. Indeed, Derrida identified this ontic-semantic indeterminism as the impossible object of deconstruction.

However, what deconstruction proposes as a critique of dialectics and the contradictory relationship being text and meaning, can be approached differently as a performative entanglement. By approaching this relationship as an entanglement rather than a contradiction, art practices are able to operate from within this seemingly impossible realm of meaning-making. Semiotics encounters this realm as the epistemological rift between signifier and signified, between the representation and the object, between discourse and material. However, an entangled approach enables both an occupation of, as well as an intervention within this realm. This agency depends on an expanded understanding of both material and discourse.

Achille Mbembe explores the entanglement of representation and the material world in post-colonial Cameroon. Mbembe identifies this context as a culture that “retained its oral character,” and one where the scriptural process, is not carried out exclusively through writing but also through the spoken word. In this context speech is the legitimate form of knowledge, and it is through speech acts that the critical tradition is constituted. These speech acts exceed language and include music, dance, sculpture and drawing such that speech refers to those gestures which affect “the very rules governing the production of knowledge and learning.” The primary function of these speech acts is not to express

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19 Mbembe, *On the Postcolony*, 144.
20 Mbembe, *On the Postcolony*, 144.
individual or human agency but rather to make *everything* speak. In this account speech acts become the means by which the entanglement of all things is performed, and made meaningful as knowledge.

The rules that are affected by speech acts, which include, dance, carving, building etc., are comparable to a kind of apparatus in the sense that they constitute the material conditions for the production knowledge. However since these speech acts, as acts that make the world speak, are already necessarily entangled in the material world, the critical conditions of what we can call its apparatus are inversely the material conditions of its negation. Mbembe highlights that this condition is not the negotiation between what was seen and what was read “but between what was seen (*the visible*) and what was not seen (*the occult*), between what was heard, spoken, and memorized and what was concealed (*the secret,*”21 In these conditions, keeping in mind that the apparatus is in any case a set of local socio-historical material conditions, the apparatus must consist of elements from the material world of being and the immaterial world of non-being. However, Mbembe explains that here the immaterial is not in opposition to the material but that they are entangled *according to the wholly autochthonous principle of *simultaneous multiplicities.*”22 This connection to the immaterial is not a matter of entangling material and discourse but rather akin to entangling the virtual world with the actual world.23

Mbembe insists that what provides the “basis for, and [states] the inseparability of, the being and the nonbeing of persons and things” is the strength of the entangled image, meaning the image that is “the image of the thing and the imagined thing, at the same

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21 Mbembe, *On the Postcolony,* 144.
time”.24 By reinforcing this entanglement of meaning, material, and the immaterial through the image, Mbembe suggests that the image is not a representational form but the territorialization of some virtual capacities of the image itself.

c) Entanglement

Matter is not a synonym for things, and discourse is not a synonym for language. Meaning is more than the arrangement of individual words or groups of words that point to things.25 A performative account of meaning depends on an understanding of material as always becoming. It is not just in the rearrangement of material that meaning is produced but material itself is always in a process of rearranging itself and the world. In a material-discursive performative account of meaning, matter is an active and dynamic agent exerting its own pressures of definition and redefinition on the world. Karan Barad describes this material agency as post-human performativity.26 This is the ways in which the material world constitutes itself through processes of differentiation, which themselves produce meaningful boundaries between one body and the next. Physical science has long understood matter and energy as two alternative modes of a self-active physical reality.27 These self-active processes account for the agency and meaning that the material world possesses outside of human processes. Barad proposes, however, that the agency of material cannot be conceived separately from meaning and, as such, matter is “not a thing but a doing, a congealing of agency.”28 Barad calls the iterative interaction of phenomena that drive this process of materialization intra-action, a term that reflects the necessary co-

24 Mbembe, On the Postcolony, 145.
26 Barad, Meeting the Universe Halfway, 136.
27 Wartofsky, Models, 92.
constitution of bodies engaged in this process of materialization. However, matter is also the substance of human bodies and human agency, and so this congealing of agency is an essential part of the iterative constitution of our own practices of discourse.

Since each apparatus is a collection of material bodies, it is a manifold entangled entity. There is entanglement at the level of interaction between the various mechanisms and agencies that constitute an apparatus as well as entanglement at the level of the unstable material agencies that constitute those mechanisms. Therefore, the possibility of the apparatus, in the Foucauldian sense, to function as a diagram of power only as far as it does not represent a static arrangement of parts but models a shifting arrangement of forces and agencies. The apparatus is therefore both a real relation of material forces as well as an attempt to make meaning out of the complexities of how meaning is made in relation to power. The concept of the apparatus itself must be read as a product of “local socio-historical material conditions.”

This thesis resists making ontological claims about the nature of matter (and non-matter,) in favor of a strategic orientation toward the entanglement of material, the immaterial, and meaning. This, resistance to ontological claims is also a commitment to the interconnectedness of material and meaning such that any ontological claim should itself be contingent on the forces that enable it. The Zapatista’s demand, of a world in which many worlds exists, further undermines any universal ontological claim. There can be no universal zero-point in this program; rather the notion of entanglement presents a strategic avenue to engage in the production of meaning as an option among other options, a

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29 Barad, *Meeting the Universe Halfway*, 151.
method by which heterogenous practices of meaning can be considered, combined and put into relative operation.\textsuperscript{32}

\textsuperscript{32}Mignolo, "Epistemic Disobedience, Independent Thought and De-Colonial Freedom", 4.
ii) A (K)New Thing

a) Assembled-Apparatus

Approaching art-making as a decolonial mode of knowledge-making is to make the
claim that art-making produces a distinctive type of knowledge. Art-making as a research
activity, even in its inter-disciplinary guise, produces something different to the various
modes of knowledge-making that it encounters in the world. This thesis looks to the
material-discursive entanglement through which art-making produces meaning as a critical
zone for understanding this difference. This thesis relies on the notion of the apparatus for
exploring the ways in which socio-political power forms the conditions for the material and
discursive intra-action to produce meaning and further the ways in which artists
strategically arrange material and discourse to produce meaning in relation to colonial
power.

This thesis is particularly interested in the ways in which art-making produces new
knowledge. Where relations of knowledge are fixed by relations of power, whatever is
produced as knowledge is either old news, in that it reinforces those relations of power, or
new news, in that it must transgress the boundaries set by those relations of power to do
something other. The neologism (k)new is a useful way of understanding the seemingly
contradictory position that, particularly under colonial relations power, what must be
produced anew is often that which is already known, but relegated to the status of non-
knowledge. New knowledge in this thesis, therefore, refers to whatever knowledge must be
produced in violation of the colonial status-quo.

The entanglement of new and knew in this schema (where the new thing is what is
precisely that which is already known) determines decolonial aesthetic practice as a
manifold act: a breaking with the past, and, simultaneously, a joining with the past. The
past, here, are the historical conditions which form the limits of meaning and meaning-making. This act is the entanglement of the aesthetic autonomy: the self-determined conditions of art practice, with aesthetic heteronomy: the externally-determined conditions. A decolonial entanglement of meaning-making works generatively from within this opposition without privileging one position over the other. In the context of colonial relations-of-meaning the new is necessarily a break with the current conditions of meaning-making, but the new is also a rejoining with conditions of meaning-making already present in the current regime, the deep presence of indigenous, non-western, non-aligned ways of understanding and making the world meaningful. The notion of (k)new knowledge therefore functions as the “constant renegotiation of autonomy and heteronomy.”

The strategic factor of this thesis resides in the different ways that art-makers assemble their own (local) apparatuses toward the possibility of producing (k)new knowledge. The assembled-apparatus is a part of, yet different from, the wider socio-historical apparatus. The assembled-apparatus is not just the material conditions that enable knowledge practices. The assembled-apparatus is a knowledge practice itself.

This thesis will engage with the assembled-apparatus as a meaning-making practice through certain discourses and practices in experimental science that account for the relationship between experimental procedures, laboratory equipment, and the production of knowledge. The use of these discourses and practices is based on a strategic correspondence with the material-discursive nature of art-making and the conception of an assembled-apparatus, however there are important caveats to this engagement.

33 Lütticken, “Autonomy as Aesthetic Practice”, 83.
This thesis does not propose the assembled-apparatus as an attempt to define art-making practices as experimental scientific practices, but, rather, to assemble a set of practices with which to model the material-discursive strategies and tactics employed by various art-making practices in their knowledge-making modes. It is crucial to note that even with a few shared conceptual tools this thesis is proposing that there is a fundamental epistemological difference between the knowledge produced through art-making and that produced through other modes of knowledge production. Critically, there is a colonial relation of power embedded in scientific knowledge practices which is a form of psychic, spiritual, and actual violence against the lives of those bodies historically deemed outside of the white, colonial center. This reality casts this thesis as a strategic act in "the ruptural and enraptured disclosure of the commons." 34 This thesis takes a criminal attitude to knowledge in the sciences and attempts to hijack it in as much, and as far, as it is useful for the project of decolonisation.

**b) Ambiguity-Apparatus**

In the face of disciplinary and academic knowledge conventions, this thesis proposes that art-making operates within a zone of difference and ambiguity. Art-making, without being iconoclastic, engages any epistemic zero-point through a hermeneutics of suspicion. 35 This thesis claims that all truth values in art-making are necessarily parenthetical, 36 while mainstream science still operates (politically and academically) from the "illusion of [an] essential, fixed position." 37 This necessity for contingent truths is a strategy for working against a colonial imposition of universal truths and for working self-consciously from within a zone of dynamic immaterial/material-discursive agencies.

34 Moten and Harvey, *The Undercommons*, 28.
35 Gadamer, "**THE HERMENEUTICS OF SUSPICION**", 314.
36 Gaztambide-Fernández, "Decolonial options and artistic/aesthetic entanglements", 198.
37 Barad, *Meeting the Universe Halfway*, 29.
One way of exploring the contingency of the assembled-apparatus is through Niels Bohr's definition of the concept. In response to the challenges of measurement revealed by experiments in quantum physics, Bohr proposed the principle of complementarity as the basis for the inability of scientists to measure certain properties of phenomena simultaneously. This principle determines that precise knowledge of a certain property of an object necessarily denies knowledge of another, complementary property of that same object: that we cannot have full access to two complementary properties simultaneously. Since the measurement of one of these properties determines which property is knowable and which is excluded, the nature of these concepts depends on how they are measured, for example: position and momentum, or entanglement and coherence. Measurement itself is a product of particular tools, instruments and apparatuses which are not neutral quantitative objects but produced through social and material histories which determine not only the methodological and qualitative translations of measurement but the very definition quantities. The instrument of measurement is not just a physical arrangement of parts, but the historical and theoretical philosophies through which which methods of measurement operate, crudely represented by the as yet unresolved use of imperial or metric units (for an expanded view on this see Philosophical Problems of Measurement in Karel Berka's Measurement, Its Concepts, theories and Problems.) The critical implication of Bohr's theory is that concepts are in fact the outcome of a specific experimental apparatuses of measurement. For Bohr "theoretical concepts... are not ideational in character but rather specific physical arrangements." Moreover these apparatuses are inseparable from the phenomena they measure, such that, for example, the concept of position is an entanglement of the measuring apparatus, the theoretical concept, the experimental

38 Barad, Meeting the Universe Halfway, 19.
40 Barad, Meeting the Universe Halfway, 139.
procedure as well as whatever material conditions enable the performance of the experiment. We could say that whatever knowledge is made in this arrangement is itself an inseparable part of this apparatus, which implies that an understanding of knowledge thus produced must necessarily include an understanding of the apparatus through which it is produced, simply, an understanding of its material-discursive conditions.

In light of Bohr’s notion of the experimental apparatus, the assembled-apparatus in art-making is therefore understood as inseparable from the knowledge that is produced through art-making. The assembled-apparatus forms the local conditions through which art is produced, and, through the manipulation of those local conditions, the assembled-apparatus forms the site from which the negotiation between autonomy and heteronomy is instigated. With the entanglement of knowledge and object/discourse and material in mind, art-making can be approached as a matter of strategically assembling apparatuses that, in their arrangement of parts, form unique (and fragile) conditions under which meaning-making can be reconfigured as an element of a decolonial becoming. A becoming which is a product of general conditions (of colonial relations of power) as well as an act of surpassing those conditions.
iii) Model and Diagram

a) Actual/Virtual

The assembled-apparatus is simultaneously an actual concrete arrangement of physical elements as well as a virtual device, an arrangement of potentialities, capacities, and tendencies. Following Gilles Deleuze, I address the actual and the virtual both as entangled parts of the real. These aspects are not separate categories, but (after Bohr) complementary properties of the assembled-apparatus, what Mbembe describes as simultaneous multiplicity, a relationship of "one and the same."  

The virtual shadows the actual as "the structure [of] the space of [the] possible," while simultaneously functioning as the force that breaks up the continuous space of what is possible into the discrete space of what actuality occurs. Manuel DeLanda suggests that what connects the purely virtual to the concrete, is the diagram. The diagram can be understood as the mechanism through which variation (in the sense of possibilities) is mapped, where the possible and the actual are negotiated in terms of structure, if not delimited in actual practice. The diagram operates within the model as the collection of boundaries, thresholds, critical points and limits which structure the tendency of what is to come.

The diagrammatic structure between the virtual and actual is commonly illustrated through the map and territory relation of nation states. Here the map stands as a diagram of the virtual notion of national territorial boundaries which might determine, but do not

42 Mbembe, On the Postcolony, 145.
necessarily reflect, the actual boundaries in any given territory. The deterministic aspect of
the map, which is its claim to mark territorial boundaries, exposes the relationship between
the virtual and actual as a function of power. These political boundaries are primarily virtual,
but through the diagrammatic function of cartography, are actualized as geographical
boundaries. However even the diagrammatic actualization of boundaries does not mean
that there exist boundaries in actual space. Rather the diagram (in this case a geographical
map) functions as the force of a single possibility pressing against actual conditions in
space. The fact of diagrammatic force implies that the virtual is not a single continuous
space of possibilities (although colonial virtual space might contain this universalization as
a possibility) but, rather, that the virtual is a series of potentials, or variable virtuality’s,
competing for actualization.

These variable virtuality’s suggest that for every diagram there should be a counter-
diagram. In the case of the national territorial map, we could suppose a diagram of
customary relations, or a diagram of nomadic, itinerant or migratory relations, zoological or
geological relations. Each counter-diagram demands its own form to express the logic of its
virtual conditions, such that the form of any diagram can be understood as constitutive of
its diagrammatic force, its position in relations of power. While the diagram and its the
counter-diagram(s) might not reflect actual conditions, it does not function as a fictional, or
speculative proposal. In order to structure relations between virtual and actual conditions,
diagrams must function as structural forces asserting what Brain Massumi calls “the power
to be, pressing, passing, eventuating into ever new forms, in a cavalcade of emergence.”

The virtuality of the assembled-apparatus is a product of its entanglement with those
things that it is not yet, or those things that it might yet become. The virtual mode of the
assembled-apparatus is entangled with its actual mode through a relation of potentiality.

Massumi designates the virtual as “a force of existence: the press of the next, coming to pass,” suggesting that the virtual is not a transcendent structure but an immanent relation of potential and appearance. This immanence is a temporal relation characterized by untimeliness or imprecision in which the virtual and the actual are always out of sync. Massumi describes this as “always [coming] too early or too late (perhaps even both at once). As a function of this untimeliness, it will always also come across as too little or too much: in excess of or superfluous to the being of the actual.” Massumi’s conception of the virtual pairs with the status of the diagram in the act of meaning-making in art-making. The diagram is less a statement of intention than a mapping of the possibility space in which the assembled-apparatus floats, a-putting-into-relation of the structure of a given possibility space. However, the diagram is not a purely virtual object. The diagram is the actualization of a virtual structure and therefore a collapsing of possibility into the actual. Even where the diagram functions as a map of variation, presenting a multiplicity of possibilities, it still fixes the limits of that multiplicitous possibility and therefore is itself predisposed to superfluousness, to totally missing the point.

We can look at meaning-making as the actualization of the virtual capacities of the assembled-apparatus. However this actualization is not realization of the virtual (making the virtual real) since the virtual is itself already real. Deleuze cautions us “The reality of the virtual is structure. We must avoid giving the elements and relations that form a structure an actuality which they do not have, and withdrawing from them a reality which they have.”

The assembled-apparatus, as a meaning-making strategy, is a virtual device in terms of those aspects of its becoming which are not yet stabilized. In Mbembe’s terms we

could call this "the inseparability of the being and the nonbeing of persons and things," so that the virtual are those parts of the assembled-apparatus which structure its becoming, without themselves becoming.\textsuperscript{49} If, in Baradian terms, matter is the congealing of agency, the virtual aspect of the assembled-apparatus are those agencies that have not yet congealed their potentialities. The diagram is a form of structuring these potentialities with their maximum (but not total) potential kept uncongealed. The diagram as an actual structure is, however, always a limited expression of possibility space. The diagram is always partial, ambivalent and open to misreading.

In certain aspects the virtual aspect of the assembled-apparatus is also the unconscious of the assembled-apparatus, that part of what is brought together in the art-making process which exceeds rationality. While the psycho-spiritual aspect of the virtuality of the assembled apparatus demands a deeper exploration than is possible here. It is important to acknowledge that in the configuring of art-making as a critical mode of decolonial meaning-making, the assembled-apparatus is also putting-things-into-relation with the unconscious. Indeed if artists’ capacity to structure the conditions of their own practice is the critical means by which (k)new meaning's are possible, then it is necessary to acknowledge D.W. Winnicott’s counsel: “Thinking is a snare and a delusion unless the unconscious is taken into account.”\textsuperscript{50}

In the schema of this thesis, the unconscious is cast as a part of virtual, such that Sharon Sliwinski’s notion of dream-life as “one of the key points of contact with [the] unconscious”\textsuperscript{51} offers a useful mechanism for a tentative sense of what is diagrammatic in the realm of the unconscious. Sliwinski (after Freud and Levi-Strauss) casts the dream as “a

\textsuperscript{49} Mbel, \textit{On the Postcolony}, 145.

\textsuperscript{50} Sliwinski, \textit{Mandela's Dark Years: A Political Theory of Dreaming}, 15.

\textsuperscript{51} Sliwinski, \textit{Mandela's Dark Years: A Political Theory of Dreaming}, 8.
particular form of thinking“, characterized by “mental bricolage: a particular form of thinking that reuses and recombines bits and pieces of from the dreamer’s diurnal perceptions and vast storehouse of memory traces.”52 Through a definition of dreams as those experiences which put the conscious into relation with the unconscious, we can suppose that dreams have a diagrammatic function by bringing the virtual potentialities of the unconscious into consciousness. In keeping with the diagram’s function of expressing maximum (but not total) potential, dreams make unconscious structures apparent but ambivalent.

In the assembled-apparatus, the function of the diagram is to put-into-relation the virtual and actual as conditions of possibility. The diagram is therefore the actualizing of the virtual as an ambivalent space, an actual space of possibility (however limited). The diagram is a form of dreaming,

The actuality of the assembled-apparatus is not simply an aspect of its physical mattering, but the entanglement of material-discursive agency. The assembled-apparatus is entangled in complex relations with itself at its local resolution and its macro-resolution. We could say that the assembled-apparatus is entangled with multiple apparatuses (which are part of itself) at various scales, projections, and resolutions. Therefore, the assembled-apparatus can be thought of a set of material relations ranging from the metaphysical to the quantum, from the political to technological, the geographical to the customary, the artisanal to the conceptual. These material conditions are understood as real conditions in that they are the congealing of actual and virtual differences. The assembly of these relationships into an assembled-apparatus is the process through which this thesis will explore art-making as a knowledge-making process. This process will consider the assembly of virtual/actual relationships as the assembled-apparatus in it its model form.

52 Sliwinski, Mandela’s Dark Years: A Political Theory of Dreaming, 6.
b) In Aporia

Following the framework of art-making as a path to (k)new knowledge, this thesis will rely on Rom Harré's definition of knowledge-making as those techniques, apparatuses, and methodologies for "disclosing things and events that lie beyond the senses." This thesis expands Harré's phrase 'beyond the senses' to refer to all those things that lie beyond the things that we already know and the means by which we know. What lies beyond the senses includes: knowledge about invisible phenomena (in the realm of scientific explanation,) different knowledge about what lies in front of the senses (in the sense of complementary properties,) knowledge about what is not (in Mbembe's notion of non-being) and knowledge about what is not-yet (in the sense of projection/speculation/divination.)

This notion of making known (to the senses,) that which lies beyond (the senses), which is to produce the inaccessible through the very means that deny its access, reveals the central leap into impossibility that marks art practice as an essential mode of knowledge-making. How is it possible for art-making to produce (k)new knowledge through assembling an apparatus from parts (and as part of) the very apparatus that already sets the limits of what can be known?

This disjunctive leap into the unknown, in which (k)new knowledge is performatively produced through the form of the all-too-well known, is the contradictory impasse that grounds the transformative work of making things known and making things knowable. This impasse is contradictory in the sense that it is an impasse that will be passed. The impossibility lies in that the assembled-apparatus must affirm both positions. As a material-discursive phenomena it must be a specific arrangement of material that already are, while simultaneously being a specific material arrangement of a wholly new thing. We could call

53 Rothbart, "Introduction", vii.
this relationship a state of aporia where "the impossible [is] no longer . . . the opposite of the possible but, on the contrary, [that which] "haunts the possible." 54

To perform this leap is an act of redefinition without erasure. This transformative work is the labour of making meaning in the world, of entangling the known and the unknown, things and thoughts, the material and meaningful. This process is performative in that meaning is understood to be a dynamic relational process that is enacted between multiple competing, and often contradictory forms of agency. 55 In a material-discursive account, this meaning-making agency is shared between material, discourse, human and non-human agents. However, since it is precisely the nature of aporia to function as "constitutive of what they interrupt," the apparent contradiction of revealing unknown things through known things, in fact marks the critical site for the mode of knowledge-making this thesis is interested in. 56

Art-making must operate from within that zone of being both a part of the world and apart from the world, in order to perform as a mode of knowledge-making. Assembled-apparatuses simultaneously function as a description of, and an aspect of, the world. This mode of critical practice must make do without critical distance. In Baradian terms, this is a zone of difference but not separateness. 57 Indeed, it is this capacity to transgress without abandoning the very thing that they constitute (and from which they are constituted,) that places these practices in the realm of a particular kind of knowledge-making. What grants these art practices this capacity to act within this apparent contradiction is precisely their strategic assembling of material-discursive apparatuses.

56 Raffoul, "Derrida and the Ethics of the Im-Possible", 272.
57 Barad, Meeting the Universe Halfway, 136.
iv) Model Schema

One way to unpack this strategic relation of impossibility and knowability, or possibility and unknowability, is through the modeling methodology of experimental science. Harré proposes that scientific theories fill gaps in our knowledge of the structure of things by conceiving of models of unknown mechanisms. These models can be considered as hypothetical mechanisms, but they are, importantly, "modeled on things and materials and processes that we do understand," what we can call the familiar.58

It is on the basis of the relationship between the hypothetical and the familiar that this thesis will use the model-form as a way to conceptualize the impossible relationships that constitute an assembled-apparatus. These impossible relations generate vectors between the currently known and understood, and the unknown and misunderstood. The model-form is both the description of (in the sense of a representation) and the process through which the unknown is produced from out of the substance of what is already known. This relationship of representing a system and being that system in action corresponds to Mbembe’s notion of simultaneous multiplicity, a relation of “one and the same.”59 The model-form proposes an inseparability between these two positions of knowing.

When considering models there are three interconnected qualities that are critical to how this thesis approaches modeling as a form of knowledge-making: artifact, discourse, and contingency.

58 Harré, Modeling, Gateway to the Unknown, 3.
59 Mbembe, On the Postcolony, 145.
1) Artifact: the first quality is the production of artifacts. Modeling relies on those artifacts, imagined or physical, that are made by conscious agents. Marx Wartofsky describes these artifacts as anything created "by the transformation of nature and of themselves: thus, also language, forms of social organization and interaction, techniques of production, skills." While Wartofsky privileges human action in the production of artifacts, it is reasonable to consider artifacts as resulting from non-human transformations as well. Indeed, with this expanded sense of what artifacts are we can see that artifacts are produced out other artifacts, and, further, that artifacts are the result of the interaction of multiple modes of artifact production. This quality of entangled-being marks the materiality of the model.

2) Discourse: the second quality is that of relating this produced artifact to some other structure. This relational quality has been described by Rom Harré as a form of double analogy, where the model is itself modeled analogously on "things and materials and processes which we do understand" while simultaneously being an analogous model of an unknown mechanism. This relation is also described by Wartofsky as a form of representation and by Christian Hubert as a form of simulation. This aspect of the model has historically been understood as a relationship of signification, although this mode of signification is troubled by what Harré calls the projective convention of models. The projective convention is the understanding that models make direct use of their source in the act of constructing themselves, which is to say that since models are produced from artifacts (physical or imaginary,) these artifacts form the basis by which the model performs as a model. The way that any model models is through the conventional projection of its

60 Wartofsky, Models, xiii.

61 Harré, Modeling, Gateway to the Unknown, 3.

62 Wartofsky, Models, xiii.

63 Christian Hubert, "The Ruins of Representation", 19.
source into another structure. The distinction between what a model is and what it is referring to are often inseparable. Rather, in models, things relate through entanglement such that the relationship between what it is, where it comes from, what it is made from, and what it refers to inter-relate at the level of both material and meaning. It is this quality of being both itself and something else, both an artifact and hypothesis, both object and enunciation that marks models as discursive.

3) Contingency: the third quality is related to the temporal property of models and their status as processes, rather than objects, engaged in a critical exchange. Models are not static objects but always entangled in “certain relationships to other things.” Entanglement is therefore a quality of both the model to itself as well as the model to the world. These entanglements configure each model as a dynamic co-production involving multiple agencies such that Wartofsky describes the model as “a putative mode of action, a representation of prospective practice, or of acquired modes of action.” In this way models reflect Karen Barad’s notion of material-discursivity, “materiality is not a separate or static entity, but dynamically produced-in-practice: ‘not a thing but a doing.’” This entanglement of action is a complex relational contingency.

64 Elliasen, "Models are Real", 19.
65 Harré, Modeling, Gateway to the Unknown, 6.
66 Wartofsky, Models, xv.
67 Barad, Meeting the Universe Halfway, 151.
a) Artifact

... one was not creating a mere illusion of existence, an unreal space against which speech constantly broke and dispersed. By summoning up the world of shade in a context where there was no forced correspondence between what was seen, heard, and said—or between what was and what was not, what was apparent and what partook of the spectre and the phantom—one was appealing to a particular ontology of violence and the marvelous.68

— Achille Mbembe

This thesis approaches artifacts as a specific material arrangements, not things in themselves but relational objects which are constituted differentially.69 The boundaries of artifacts are articulated by ongoing processes of materialization — processes that include human and non-human activity — as well as processes of meaning making (discourse). The artifact is therefore mutually articulated with its meaning, there is no hierarchy to their articulation. In describing this entanglement, Wortofsky says "artifacts not only have a use, but also are understood as representing the mode of activity in which they are used."70 In Wortofsky’s description the artifact is not only an object of practice (use) but through that practice, the artifact articulates both the material actuality of the artifact and a representation of the artifact.

However the model, through its double analogy, troubles the distinction that Wortofsky draws. In model-form, what Wortofsky identifies as the representation is not a separate function of the artifact but a necessary part of the practical life of the artifact. The

68 Mbembe, On the Postcolony, 145.
69 Barad, Meeting the Universe Halfway, 136.
70 Wortofsky, Models, xiii.
relationship between these phenomena corresponds to Achille Mbembe's principle of simultaneous multiplicities. The artifact and its representation are one and the same.

A model operates on the basis of a representation through negating the representational possibility of its artifactual components. In the model-form, the artifact must simultaneously be itself and perform itself as something else. Mbembe explains “the invisible was in the visible, and vice versa, not as a matter of artifice, but as one and the same and as external reality simultaneously—as the image of the thing and the imagined thing, at the same time.”\(^{71}\) Critically, in a material-discursive reading, the artifact is not an atomized object but entangled with its immediate context in the form of a scientific experimental apparatus; as well as in its socio-historical context, again the form of an apparatus of knowledge production.

Mbembe further elaborates that through the principle of simultaneous multiplicity, the power of images derives from their “capacity to provide a basis for, and to state the inseparability of, the being and the nonbeing of persons and things.”\(^{72}\) Representation, in this sense then, is not a relationship of signifier to signified but rather a means of entanglement. The artifact in model-form is therefore, a condition for assembling aspects of the interconnected world; the artifact is the means by which the model performs its entanglement.

Artifacts are not only entanglements of meaning and material but also of agency. An artifact is a made thing, and as such a product of social interaction. In a material-discursive understanding of agency, artifacts are products of a society that must include, as associates, the land, the air, the water, the dead, the yet to be living. Artifacts are, therefore,

\(^{71}\) Mbembe, *On the Postcolony*, 145.

\(^{72}\) Mbembe, *On the Postcolony*, 145.
also what Santu Mofokeng describes in SeSotho as Seriti (a difficult word inaccurately translated as shadow) societies of “aura, presence, dignity, confidence, spirit, essence, status, wellbeing and power.”\textsuperscript{73}

The artifact as specific material arrangement is therefore caught between multiple modes of being, at once a text, an object, a performance, a thing, and its own double. As artifacts enter the realm of model they intersect with what Harré describes as the creative process and the heuristic process. Harré also insists that models themselves are not things but processes, such that creative processes are those which model unknown mechanisms, the mechanisms Wartofsky calls “our technological equipment whose specific function it is to create the future.”\textsuperscript{74} While heuristic processes are those that model known things, and produce models which “suggest how we should proceed in structuring our understanding of the world and of ourselves”\textsuperscript{75}. Heuristic models are, therefore, those models which help us to explain what we already know, differently.

\textsuperscript{73} Mofokeng, \textit{Chasing Shadows}, 7.

\textsuperscript{74} Wartofsky, \textit{Models}, 141.

\textsuperscript{75} Wartofsky, \textit{Models}, xv.
b) Discourse

Still in terms of consciousness, black consciousness is immanent in its own eyes. I am not a potentiality of something, I am wholly what I am. I do not have to look for the universal... My Negro consciousness does not hold itself out as a lack. It is. It is its own follower. 76

—Frantz Fanon

Discourses are conditions that set the boundaries of meaning-making. In the schema of this thesis, modeling is a strategic form of meaning-making in which discourses become the conditions for exceeding their own boundaries.

In the material-discursive tradition, discourse is not an aspect of signification or representation. Rather discourses are those things which set the limits of possibility. Discourse is not what is said about the world but what enables what can be said. 77 In Foucauldian terms discourse is a set of practices that form the local socio-historical material conditions that constrain knowledge practices. In these terms discourse is the means by which power-relations are imposed onto practices of making and knowing meaning.

In this role of setting the conditions for the making of meaning, discourse mobilizes not only signifying systems, political grammars, structures of disciplinary-technical expertise but especially actual material infrastructures, landscapes, technological devices, ecological redefinitions. The idea of mobilizing these phenomena into a set of discursive practices highlights the performativity of any discourse, as well as its contingency, which is

76 Fanon, Black Skin White Masks, 103.

to say discourse is a set of contested practices, or perhaps, in an account of the material agencies that constitute phenomena, the discursive whole is both a stabilizing and destabilizing of its own conditions.

Modeling offers a strategy to operate with the power-relations inscribed by discourse while simultaneously exceeding those relations. This capacity is a product of the mechanics of what Harré calls the projective convention. This projective convention is based on a relation of double analogy wherein a model is a mechanism for producing an unknown, with the unknown here referring to whatever lies beyond the limits set by any discourse, and at the same time a mechanism necessarily produced out of (modelled on) things that are already understood, with what is already understood referring to things that are already part and parcel of the prevailing structure of discourse.
Harré analyses this process in terms of source, subject, and structure. Source refers to whatever the model is based on, those parts of the model that we are within the structure of the prevailing discourse. Subject refers to whatever unknown mechanism the model is working to produce, the part of the model that is outside the limits of discourse. Structure then refers to the relations by which these two parts are put into action, the model is the actualization of this structure of relations. While this relationship can take the form of representation, Harré distinguishes the projective convention of modelling from the arbitrary conventions of symbols and language. This structure is explained by Harré as "The reason why A is a model of, or for, B [is because] A was constructed out of B, so that A and B have certain likenesses... But because A and B must be unlike in certain ways... and how unlike and in what respects is at the will, and under the guide of the purpose of the model-builder, I call the projection of B into A, a convention." 78

\[ A = B \land B \neq A \]

Where B is the source and A is the subject (see fig. 01)

The structure of the projective convention is the strategic mechanism by which an impossible zone of meaning-making (aporia) is occupied. The model, however, also takes one step further into manipulating this aporia, through what Harré calls the hypothetical mechanism. The hypothetical mechanism is what Harré uses to describe the creative process in science where a model takes the double analogous structure of projecting itself into an unknown. Therefore in the schema \( A = B \land B \neq A \), there is an unknown X value that becomes associated with B; and through this association the unknown X becomes knowable. In a model this association between B and X is a relationship of entanglement, these values are not equal but locked in an interaction in which neither X nor B can be described independently of one another.

78 Harré, Modeling, Gateway to the Unknown, 5.
A=B & X=B & B=X, but B≠A & A=X & X≠A

Where A is the source and B is the subject, and X is the subject (see fig.02)

The model is caught up in the aporia of this creative process. It is from this aporic site that this thesis understands the character of discourse. Models, as processes that manipulate the structural limits of discourse, operate in a mode of discursive excess. If discourse is the local socio-historical material conditions that delimit relations of knowledge, models use those same material conditions to exceed the limits of those relations.
While Foucault suggests that “discourse arises out of the silence of undifferentiated existence,” models suggest that this relationship can be reversed such that silence, or that which lies outside of discourse can arise out of discourse, and, paradoxically, in the form of discourse. The thing can be itself and something else, while still being itself. "It is its own follower."  

The kind of discursive relationship being proposed here is not metaphorical or based on structural similarities where difference is unified. Rather, the likeness and unlikeness referred to by Harré are on the basis of meaning, and depend on active correspondences mediated by material structure. This material structure is itself a performance of differentiation, not unification. Importantly, correspondence within a model is based on material relations such that “what makes things, unlike words, models is a projective convention, that is, what characteristics are read off the object as the model serve their function through physical similarity to the characteristics of the object modeled.”

Meaning and material are entangled through the conditions of the apparatus within which they circulate, the network which delimits their practices of discourse. Harré points out that when these discursive relations are used as metaphorical analogies, they move out of active processes of meaning-making and into the space of arbitrary symbolic conventions of language. Metaphors, Harré states, are the “terminological debris of a dead model”

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80 Fanon, Black Skins White Masks, 103.
81 Harré, Modeling, Gateway to the Unknown, 10.
82 Harré, Modeling, Gateway to the Unknown, 11.
fig.03 - model and assembled-apparatus
c) Contingency

Contingency, is the process by which the entanglement of artifact and discourse is strategically performed. What distinguishes this process is its indeterminacy, or rather that certain qualities of this process only become determinate through the apparatus interactions. The apparatus is therefore the network that enables determination, the capacity to move in a fixed direction. This determination is not a static quality but a differentiation in the order of what Barad describes as the congealing of agency.83

Contingency is therefore the process by which artifacts and discourses interact to form distinct positions, movements, fields or networks. Contingency is often thought of as chance but its meaning here is closer to circumstance or happening. Contingency is the incident of emergence in which a whole is constituted through the interactions of its parts.84 These interactions are performative becomings, which, as acts of differentiation, distinguish one thing from another thing, and crucially one time from another time. Contingency is therefore that aspect of the modeling process where time enters the frame, and with time enters possibility.

Contingency is the possibility of an interrelated, heterogenous whole, but also the possibility of transformation. The contingent whole however is an emergent whole whose “only unity is that of a co-functioning”85. The idea of co-functioning points to an important aspect in recognizing models as knowledge-making apparatuses, which is the notion of utility. Models are not static constructs, objects or things, but hypothetical mechanisms caught in dynamic processes of simultaneously making meaning and matter. Wartofsky

84 DeLanda, Assemblage Theory, 9.
85 DeLanda, Assemblage Theory, 1.
elaborates this point when talking about models as modes of action, describing models as "embodiments of purpose and, at the same time, for carrying out such purposes." These are not neutral or accidental processes but processes put into action, and acting. Contingency in modeling is therefore an agentive process, an action prescribed by its own apparatus, its own conditions of possibility.

Since models are entanglements of material and discourse, which are themselves already products of entanglement, contingency is also the force that accounts for the immanence of these entanglements. While the model is an emergent product of the interaction of its parts, the model as a whole also exerts a constitutive agency on those parts, and so on as we travel along various scales of material constitution. In this schema a model is not simply the sum of its parts. While the sum of parts necessarily constitutes a differentiated whole, the parts themselves are not subsumed by the whole. Rather, they are caught in a contingent relationship of co-functioning, a making-of-meaning (which is also making-of-material) that redefines all its components for as long as they are assembled into this particular network of interaction. Contingency is therefore the putting-into-relation through which the entire modeling system functions.

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86 Wartofsky, Models, 142.
87 DeLanda, Assemblage Theory, 71.
v) Diagram/Tactic

a) Santu Mofokeng

In the series Train-Church (1986), the South African photo-essayist Santu Mofokeng meditates on the entanglement of complex agency in black infrastructural space. The series participates in the transformation of train carriages that transported (and still transport) black workers on the three-hour long journey between Soweto and Johannesburg. On this daily journey black commuters would congregate in certain coaches to hold religious services. Santu Mofokeng describes his relation to this scene: “You try to catch some sleep on the train before you go to work, and then you find these people with so much energy, who are dancing and drumming, and you can’t even sleep . . . So I decided to take some revenge and photograph what they were doing.”88 This notion of revenge is not just an offhanded remark, but sets up Mofokeng’s complex relationship to his own agency and the agencies in which his work is embedded.

Mofokeng’s photographs are often artifacts entangled in larger apparatuses of his own assembly. In this series, the apparatus Mofokeng is assembling is not an aspect of representation and the production of photographic images, although images play a part, but the transformation of the train coach as a specific material place into a different (specific) architecture of spirituality. In his photographs we do not confront the novelty of a the train as a church, a relationship of spatial appropriation with banal history going back to the first railroads and chapel cars and ambulant churches.89 Rather, the photographs are artifacts that model black social complexity, entanglement, and strategic spatial redefinition.

88 Mofokeng, Chasing Shadows, 17.
89 Wikipedia, “Railroad chapel car.”
Mofokeng significantly casts this three-hour journey as a hybrid of church and train, in a context where spirituality, including Christianity, has many other representative spatial models. Indeed in his later series’ *Chasing Shadows* (1996-2006) and *Lunarscapes* (1998-2011) Mofokeng delves deep into the entanglement of spirituality and place in South Africa. However it is important to note that the church is colonial infrastructure with a specific connection to the physical and psychic occupation of South African space.

Mofokeng recasts the nature of this connection by reminding us that “you’d be surprised to see who the people are who first embraced Christianity. they were outcasts, renegades, wife-beaters, women running away from a forced marriage they didn’t want. Its ironic.”

Mofokeng suggests that the church stands, not simply as a force of colonial domination but, also, as a refuge. This sense of refuge is neither neutral nor isolated. Mofokeng registers the church as a strategic refuge for a particular out of place subject. Mofokeng suggests that the church, as a site of refuge, operates through its friction (in the sense of two things moving against each other) with other conditions operating in a shared space. It is this same friction which Mofokeng recognizes in the incursion of church-folk into his attempts to sleep on the train. Against this friction Mofokeng enacts a counter-incursion through his “revenge”-by-photograph, entangling an additional source of friction in the scene.

Friction is the resistant force against which the train translates the power of its engine, through its wheels into forward momentum on the tracks. The train is overdetermined by its route along fixed tracks, its fixed temporal schedule (even when it violates that schedule, its lateness is determined by its scheduled-nature,) and its spatial containment (in the hierarchical arrangement of privileges across classes distributed linear along the precession of carriages, and within the enclosure of individual carriages). If Mofokeng encounters the church as an ironic site of refuge, a zone of friction, he also positions the train as an unambiguous site of oppression. Mofokeng describes the system

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of commuting as the result of "removals, resettlements and geographical zoning. Its progeny begins in the migrant labour system."  

As the *Train-Church (1986)* series traces these social frictions, it also functions as a register of Mofokeng’s own daily 6 hour commute to work and back and his enforced participation in the black migrant labour system from which this series emerges. Mofokeng comments: "A train journey is undertaken with a mixture of determination and dread", a will to move on, and desire to stay put. By operating through these two archetypal colonial infrastructures, the church and the train, loaded as they are with their own frictions, Mofokeng entangles a third agency, the result of so much friction, the agency of black anxiety.  

![Santu Mofokeng, *The Drumming, Soweto-Johannesburg Line*, black and white photograph, 1986, Fondation Louis Vuitton Collection, Paris](image)

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In order to diagram (map) this triple entanglement, Mofokeng mobilizes both photographic and literary tools. Describing the play of light and framing in the images Okwui Enwezor remarks on how the photographs “convey a sense of mysterious ecstasy” and “overwhelming intimacy.” 93 This ambiguous tone is contrasted by Mofokeng’s direct reference to Njabulo Ndebele’s caustic essay on black travel during apartheid in which he relates: “I experienced the journey not as distance to be traversed, but as a prolonged anxiety to be endured. Time was not distance and speed, but the intensity of anxiety, and the agony of endurance.” 94 Mofokeng’s work unfolds these ephemeral qualities into parameters of intensive and extensive space from which critical values can be identified, probed, transformed. DeLanda makes the point that cartographic space can be split into two categories, those with properties delimited by extensive boundaries and those with properties determined by intensive boundaries. Extensive boundaries mark those spatial properties that “extend to a limit marked by a frontier” in which Ndebele’s notions of distance and speed are operative properties. Intensive boundaries are those “critical points at which quantitative changes become qualitative,” 95 the points at which, in Ndebele’s notes, time becomes an intensity of anxiety, rather than a relation of distance and speed. DeLanda notes that intensive and extensive properties are always co-present but interact under different logics of relation and require different modes of mapping. 96

In Train-Church (1986) Mofokeng sets up conditions under which the intensity of anxiety unfolds as a quality of time. What Enwezor identifies as Mofokeng’s photographic ambivalence can be read as the photographic mapping of multiple valences. The valences intersecting at this critical point are those quantities of spatial, historical, technological,  

93 Enwezor, Chasing Shadows, 39.
94 Ndebele, The Cry of Winnie Mandela, 82-83.
95 DeLanda, Assemblage Theory, 110.
96 DeLanda, Assemblage Theory, 110.
spiritual frictions which transform time from a quantity of distance divided by speed, into an intensity of anxiety and the endurance of agony. The multivalence of these intensive qualities are mapped through the ambivalence of the image. Enwezor identifies two images: *The Book, Soweto-Johannesburg Line (1986)* and, *The Drumming, Soweto-Johannesburg Line (1986)*, as reflections of “mysterious ecstasy”. The figures in both of these images are shrouded in deep shadows, present only as silhouettes of partial images that both identify and obscure the nature of their subjects. In both images the light of the train windows cuts a line across the composition, perhaps invoking the dramatic play of light through church windows. The images are monochrome. Here, the church is actually, despite the presence of a bible in *The Book, Soweto-Johannesburg Line (1986)*, a steel train carriage, segregated for blacks only. The man holding the book, beside his preacher-like posture, is a black commuter, a worker in a migrant labour system. In his accompanying text for the series Mofokeng describes the subjects of these images as “office cleaners, clerks, factory workers and general labourers enjoined in a cacophony of song, drumming, preaching and prayer.” The *Train-Church* is therefore not an just account of church-folk but also an account of black working people engaged in the act of making church.

Mofokeng’s image functions here as a mark of “the invisible... in the visible”, but it is not the simple shift between worker and worshipper that marks the modes of visible or invisible. The relationship between what is visible and invisible is not the multiple subjectivities performed in this series, but rather the critical relationship between the extensive space of the carriage (the commuter railway, the train as it moves through the political landscape) and the intensive space of anxiety. Mofokeng arranges these

infrastructures and events through the frame of the photograph such that they map the relationships that structure black anxiety in South Africa.

Mofokeng's revenge can then be properly viewed as not directed towards his fellow train riders but rather as an unfolding of that anxiety and exhaustion that are the material conditions of black life in South Africa and in which they are collectively entangled. The revenge is the mapping, and therefore capturing, of the deep structures of South Africa commuter space. Critically Mofokeng performs this revenge through participating in the re-assembly (re-inscription/critical misreading) of the very thing that marks the site of his own exhaustion—the entanglement of the itinerant space of the train, through the church, into the Train-Church, an intensive site of anxiety, boredom, spirituality. Mofokeng explains: "[the train] was no longer a means to an end but an end in itself."

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100 Mofokeng, *Chasing Shadows*, 16.
Mofokeng's photographs emerge as diagrammatic mappings of the multiple agencies entangled in the phenomena of the *Train-Church*, his practice (caught between writing and photography) becomes a series of protocols for expanding the scope of meaning-making. Mofokeng's strategy for setting the conditions of his practice, the assembly of his local apparatus of practice, is demonstrated by his entangling of the invisible and the visible. The images exceed what is visible through their diagrammatic action: their entangling of virtual and actual space. The images are active artifacts that fold into themselves things that lie beyond their limits. Mofokeng explains: "What is not in the photograph is in the memory, in the mind; there is no violence, it is what you *know* that is violent."\(^{101}\)

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\(^{101}\) Mofokeng, *Chasing Shadows*, 94.
b) Charles Gaines

In his influential text *Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought* (2009,) Charles Gaines proposes a schema for establishing two kinds of relationships between meaning and aesthetics. Gaines relates this structure to the suppression of thought, suggesting that there are relationships between the aesthetics of an art work and the type of knowledge it enables or curtails. Gaines distinguishes between metaphor and metonym on the basis of their analogical relationships to meaning, suggesting that metaphor operates, structurally, to suppress thought in favor of a “Western idea of universal knowledge.”

Gaines suggests that a relationship of metaphor is arbitrary on the level of meaning but projective on the level of predicate such that what is transferred in a metaphorical relationship is not meaning but structural similarities, affinities and resemblances. In this relationship a sign is simply substituted for another sign on the basis of redundancy on the level of predication, so two unrelated semantic units are conflated simply because they share a syntactical structure. Gaines offers the example of a John is a wolf, this metaphorical relation is based on structural similarities unhindered by any specific meanings.

\[
\text{John is } + \text{ (predicate)}
\]
\[
\text{Wolf is } + \text{ (predicate)}
\]

This allows for a free-flow of ideas unconstrained by meaningful relations producing, in Gaines opinion, a totalizing construction. Gaines suggests that by the unconstrained shifting of one sign for another, metaphor become a tool for protecting practices from scrutiny. This power to grant arbitrary equivalences is only made meaningful on the basis of authoritarian power. Gaines notes that while metaphors are constructed via arbitrary

\[102\] Gaines, “Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought”

\[103\] Gaines, “Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought”
conventions outside of meaning, they still function as meaning-making operations. Gaines identifies metaphor as operating to shift meaning arbitrarily such that the metaphor "protects that practice from critical scrutiny by becoming its very definition" 104.

fig.05 - metaphoric relations

In this critique Gaines reflects on the general scheme of material-discursive relations of knowledge. Gaines proposes metonymic relations as the coming together of signs based upon contiguity and social agreement. 105 The basic relationship of a metonym is one where a part stands for a whole, or a cause stands for an effect, where the means and the ends are inseparably entangled. The coming together of two signs in a metonymic relationship is only possible through their entanglement with some social object, seemingly outside of the two signs. The social basis of this relationship is reflected through their everydayness, their specificity, Gaines explains: "One of the ways one can recognize a metonymic sign is if it is familiar, it points to something existing in culture." 106 Although Gaines engages this relationship solely on the basis of language, his metonymic position suggests other kinds of material entanglements, especially when put into relation with his art-work. Indeed his

104 Gaines, "Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought".
106 Gaines, "Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought".
notion of social agreement prefigures meaning as a product of multiple agencies, while agreement suggests that meaning is an active and impermanent process.

In his ongoing drawing series, *Walnut Tree Orchard (1975-2014)*, Gaines performs a series of significant operations. The work, which consists of a series of 26 triptychs, each group containing a photograph of a tree, a silhouette of the tree in the photograph systematically plotted onto a grid, and a silhouetted composite of all the trees that have been included in the series up to this point, including the tree which is part of this work. The silhouetted composite is produced as a numerical plot onto grid and functions as a register of the entire orchard in two dimensions. The entire series therefore becomes a diagram of the orchard, putting the virtual capacities into a particular relation with its actual capacities. Gaines sets clear conditions for the production and operation of these works, include the range of semiotic values and semantic values classically associated with the tree as a trope in semiotics, the cartesian space of the grid, the image as a representational object. But also the limits set by these co complete set of all trees.

The first significant operation is the grid, which Gaines employs in his transformations of the photograph of the tree. This system of cellular coordinates performs a flattening of the image and suggests a type of semiotic game. Each triptych follows the same rules of transformation, suggesting a symbolic system of equivalences where tree = tree = tree. It would seem that the notional orchard that grows in the third aggregate image of each triptych is itself a play on this level of equivalences. There is little in the image to suggest that it signifies not one but multiple trees. However, if this series is viewed in terms of metonymic relations, what was potentially a closed system of signification can only stand if it has some basis in social agreement. In this light, each transformation in the triptych

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becomes an apparatus that must include the social/political context of its meaning. As Gaines produces each transformation, each act of equivalence begs the question, with what, or with whom is the meaning of this sign in agreement? Gaines' defamiliarization of the everyday (in the form of the tree) seemingly stands in stark contrast to his claim that metonymic meaning is recognized through familiarity. That is, unless it is the social with which it is contiguously linked is itself unfamiliar, or unfamiliar as a social space. In a material-discursive light, metonymic relations of meaning not only refer to semantic lines of connection but principally to the entanglement of multiple material agencies in the production of this meaning.

The grid, determines resolution and limits the tolerance of nonlinear gestures. The coordinate structure arranges equivalence as its basic condition. Each position is definable in terms of two values which can be transferred invariably to any other grid space. Krauss describes this as the "crowding out the dimensions of the real and replacing them with the lateral spread of a single surface". The grid is a machine for equivalence. Gaines however uses the grid to produce an equivalence that violates the principle of the grid. If the

109 Krauss, "Grids", 50.
cartesian logic of the grid is the point for point equivalence of objects in space, Gaines’ schema \( \rightarrow \) tree=tree=tree; uses the grid to produce a series of equivalences which owe their equivalence not to their point for point correlation but to a process of point for point transformations. These transformation reconfigure the grid from a space of equivalence to one of ambivalence.

The tree that is reproduced in each iteration of Gaines’ process is the same tree but it stands in a relation difference to its former (and future) selves. The tree that each tree is equivalent to is only the tree which forms our idea of tree, and not our ideal or generalized idea of tree, but our idea of the specific tree which is right in front of us in each triptych. The grid here becomes a system for accessing simultaneous multiplicities. From the photographed tree, to the first silhouetted tree, to the overplayed silhouettes of all previous trees, Gaines’ procedures can be understood as producing a diagram of the tree which apprehends the virtual qualities (those higher order equivalences which are projected onto each iteration of the tree so that they can read as same) in relation to their actual qualities (the fact that each image in the triptych is actually a different image, non-equivalent). This plain equivalence might be taken as a banal visual slippage, except for Gaines’ use of the grid.

The grid functions systematically through the invariance of its coordinate relations regardless of scale or magnitude, when one set of points is transferred from one grid to another all xy coordinates are equivalent. Gaines subjects the points on his grids to transformations which destabilize these coordinate relations. Gaines’ uses the grid to set up a system of equivalences, but it is his misuse of that system which reveal the conditions under which it operates. Massumi describes the virtual as “the formative dimension of the

\[ \text{110 Mbembe, } \textit{On the Postcolony, } 145. \]

\[ \text{111 DeLanda, } \textit{Assemblage Theory, } 112. \]
real"¹¹² a form of power. Massumi suggests that this formative quality puts the virtual always out of reach the actual, we can never apprehend the "reality of the virtual"¹¹³ except in the act. By setting these grid conditions, Gaines' puts the viewer in the middle of the action, in the act of producing equivalence where only resemblance exists.

fig.06 - metonymic relations

¹¹² Massumi, "Envisioning the Virtual", 2.
¹¹³ Massumi, "Envisioning the Virtual", 2.
If we consider Gaines own suggestion that metonymy finds its meaning through contiguity, or correspondence with something in culture and society, there is a sense that meaning can only arise from processes of putting-things-into-relation. Importantly, those things which are put-into-relation to produce meaningful relations (not arbitrary relations) must necessarily lie both within and outside of the artifact. Gaines clarifies this point, stating “A metonym is the relationship or coming together of two signs based upon contiguity, that is, social agreement, and not a similarity between them.”

If the grid introduces a system of equivalence which Gaines reassembles as a means to his own ends, the question or what with what society does Gaines find agreement in his formal and conceptual operations of meaning-making?

Charles Gaines, *Faces: Set #4*, 1978, black and white photograph, ink on paper

When approached in terms of Gaines’ notion of metonymy, what stands a purely semiotic concern, dismantling systems of equivalence, is inseparably entangled with a reassembly of social structures of symbolic meaning-making. Meaning-making here demands we fold into these triptychs, a socius with which their contiguity finds agreement. The question then becomes, what society is Gaines coded and gridded transformations of the tree calling upon to produce its meaning.

114 Gaines, “Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought”. 
Faces (1978-79), a series of works that follows Walnut Tree Orchard (1975-2014), applies a similar triptych structure and similar grid transformation operations on a series of human faces. In this series the metonymic socius is much more clearly suggested. The compelling politics of an equality of faces, or the notion the ideal face, is immediately laced with a critique of racial and gender normativity, indeed it is conspicuously reaching out to contested social structures. However the return of the structures and operations employed of Walnut Tree Orchard (1975-2014) reanimates the unresolved question of the metonymic meaning of that work. The question of what society is Gaines in agreement with in the production of meaning in Walnut Tree Orchard, leaks back into the seemingly semiotically stable metonymic relations of Faces, such that, without negating the connections to the politics of the racial and gendered face, Faces is rendered metonymically polysemic and, on the level of the grid ambiguous.

Art critic Rosalind Krauss views the grid in modern art as "antinatural, antimimetic, antireal. It is what art looks like when it turns its back on nature."\(^1\)\(^1\)\(^5\) Gaines however uses the grid to produce a pseudo-mimetic portrait of what me might call nature. If read metonymically, Gaines’ grid does not turn its back on nature but rather reaches out to so-called-nature (perhaps an agricultural nature, or human nature). This inversion is consistent with what Gaines describes as his intention to use the tools of modernism “to reveal what modernism’s trying to repress.”\(^1\)\(^1\)\(^6\) However the contiguous relations of meaning associated with grid must still play a role in this inversion. Gaines is precisely using the tools of modernism reach its underside, a process that, in the logic of metonymy, must carry those meanings built through familiarity and social agreement. The question of what socius can then be approached from the direction of formal community, such that the inheritors of the

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\(^{11}\) Krauss, “Grids”, 50.

grids cartesian origins can be mapped, not only to modern art, but also to the world of computer graphics (the pixel) and machine vision, an increasingly non-human community of meaning-making.  

The suggestion that metonymy in Gaines work is related to a correspondence with non-human social context introduces a more complex sense of the material agencies entangled in this work. If, as Gaines suggests, the power to suppress critical thought is a function of the mechanism through which meaning is made, then Gaines’ use of the grid pushes our attention towards the techno-political assemblages which structure that meaning. In Gaines’ grid works there lies an under community of machine agency with which he is drawing meaning. This is not the banal claim that these are drawings made with, like or for machines, but rather that the meaning produced in these works are entangled with the agency of computational processes in society, and through this entanglement these works produce real social meaning. The series *Walnut Tree Orchard (1975-2014)* finds its critical meaning through a social-agreement that entangles computational agency, agricultural agency, technological agency, recreational agency, and political agency.

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117 Mattern, "Mapping's Intelligent Agents".

118 Gaines, "Reconsidering Metaphor/Metonymy: Art and the Suppression of Thought"
vii) Power-Moves

The assembled-apparatus is the entire field in which the capacities of artifact, discourse, contingency, are entangled in the practice of art-making. Assembled-apparatuses, in both their model and diagram form, are strategic ways of viewing the arrangements of material and meaning through which art practices perform a certain kind of meaning-making. These arrangements must take into account the multiple agencies and scales of agency involved in these practices. This requires acknowledging those agencies that exceed the frame of the art object, meaning the politics of the social, historical, and technological conditions that define the materialization of the object. The assembled-apparatus implies that art-making claims a certain agency of assembly over those conditions, such that art-making can be considered as the production of local-apparatuses. These local-apparatuses are reconfigurings of relations of power, and a form of limited sovereignty. This sovereignty of meaning, if and when it can be produced, gives art-making a particular potency in the decolonial production of (k)new knowledge, and new worlds.

This agency is approached through the model of model-making in experimental science as they share certain characteristics related to the guiding power of the model-maker and the agency to produce local relations of meaning that may exceed the limits of the status-quo of knowledge production. The critical dimension of the assembled-apparatus is the capacity to effect changes on the sequence of the apparatus. This approach enables art-making to be performed through the mobilization of greatly expanded field of action, and to produce, through that mobilization, the interruption and introduction of something (k)new.

The assembled-apparatus is the strategic putting-into-relation of material artifacts. Artifacts that are not only products of language, forms of social organization and
interaction, techniques of production and skills, but, importantly, products of memory, evolution, geologic, meteorologic, ecologic, atomic, and cosmic forces. This putting-into-relation is the motive force of the assembled-apparatus, while the assembled-apparatus is the strategic process-network through which material artifacts are mobilized toward a different kind of knowledge. An essential corollary to this broad claim is that in this process-network, material artifacts have their own strategic agency that is itself mobilizing art-making towards a different kind of knowledge.

**Apparatus-Index (fall)**

The properties of utility and co-functioning expose a deeper question for the notion of knowledge-making, the question of value. This thesis has relied on model theory from the philosophy of science to navigate the realm of material-discursive agency. However, it has been adopted in an effort to reconfigure this model-theory to function as a model for thinking about art practices more strategically. The interaction of this move makes accounting for value and power in relations of knowledge a critical task.

The assembled-apparatus is a proposition based on the contingency of art-making as a practice and the unstable status of art practice within larger circuits of knowledge practices. This instability enables art-practices to transgress disciplinary boundaries and to operate on the edges of what Giorgio Agamben, after Foucault's notion of the dispositif, calls the apparatus. The instability which grants this ability is a critical aspect of distinguishing between model-theory in science (or what could be mistaken as a model theory for art) and the assembled-apparatus as a strategic use of model-theory for thinking about art-practice. It is critical for this thesis to make the distinction between a certain tendency to think of "[t]he artist as 'technologist'"\(^\text{119}\) and the proposition this thesis is aiming for, which is the artist as assembly-ist, such that science and technology can be

productively misread according to a (k)new agenda. The critical claim here is that art-making enables the assembly of a local apparatus, which is different to, but produced from the same material-discursive conditions that characterize existing relations of power. It is in the mode of operating as “that difference that the same contains, and that same that difference contains,”¹²⁰ that this thesis attempts a strategic use of model-theory.

However, it is still necessary to consider the ways in which art practices as research and modeling practices are entangled in the wider apparatus network of power relations. Agamben summarizes Foucault’s writing about the apparatus (dispositif) in three main points:

a. It is a heterogeneous set that includes virtually anything, linguistic and nonlinguistic, under the same heading: discourses, institutions, buildings, laws, police measures, philosophical propositions, and so on. The apparatus itself is the network, which that is established between these elements.

b. The apparatus always has a concrete strategic function and is always located in a power relation.

c. As such it appears at the intersection of power relations and relations of knowledge."¹²¹

While art practices themselves may have the privilege of moving between different modes of knowledge production and acting indisciplinarily with regards to the apparatus, they are also always at risk of falling into their own bounded discursive practices. We could say that art practices occupy a privileged position of exteriority, which is to be that ‘outside’ which is already named from within the exercise of colonial power that governs relations of

¹²⁰ Stocker, Routledge Philosophy Guidebook to Derrida on Deconstruction, 178.
¹²¹ Agamben, What is an Apparatus, 3.
knowledge. This relation of exteriority is extensively mediated by the academic discipline of art, art-theory, art history and the art market. We could think of these four categories as a localized apparatus: a set of “practices, bodies of knowledge, measures, and institutions that aim to manage, govern, control and orient—in a way that purports to be useful—the behaviors, gestures, and thoughts of human beings.” In this case we are referring to the behavior of artists, their artworks and the ways in which their art works.

The implications of this exteriority is that while art practices purport to transgress disciplinary boundaries, that transgression is always-already accounted for within the apparatus. Art-making as meaning-making practice, a knowledge-making practice, puts it in cramped proximity with the academic disciplining of art. This proximity means art-making is always at risk of losing its agency to assemble its own local apparatus. The performance of criticality that is enabled by the conditions of discourse in an academic context requires this loss. Fred Moten and Stefano Harvey caution us “that to be a critical academic in the university is to be against the university, and to be against the university is always to recognize it and be recognized by it, and to institute the negligence of that internal outside, that unassimilated underground . . .”

Apparatus-Index (fail)

While the idea of a localized apparatus is useful to delineate those parts of the ‘art-world’ which most directly work to discipline art-making practices, this simple categorization should not restate the flawed disciplinary limits that presuppose the notion of any ‘art-world.’ Indeed for art-practices to co-function as modeling practices and

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122 Mignolo, "Cosmopolitanism and the De-Colonial Option", 122.
123 Agamben, What is an Apparatus, 12.
124 Moten and Harvey, The Undercommons, 31.
participate in “disclosing things and events that lie beyond the senses,” they must "account for not only what is excluded from the economies of discursive intelligibility… but [also] what has to be excluded for those economies to function." What this exclusion introduces is a peculiar shift in what else we refer to when we talk about “disclosing things and events that lie beyond the senses." We have to account not only for that knowledge that does not yet exist and that which has always existed but is excluded, but especially for that knowledge that is fundamentally not knowledge, the forms of knowing that can not be accounted for.

The model should model its own failure. The aporia from which the assembled-apparatus operates has a parallel dimension circumscribed by Audre Lorde's warning “the master's tools will never dismantle the master's house. They may allow us temporarily to beat him at his own game, but they will never enable us to bring about genuine change.”

Lorde's warning locates these ideas about models in what Walter Mignolo calls the geopolitics of knowing, an entangled notion that highlights that the model as a model is a product of "who and when, why and where." The assembled-apparatus is a strategic model of engaging the material-discursive agency of art-making as meaning-making as world-making. It is also a product of a discourse of science with a material history and present material-discursive conditions that reinforce “the colonization of cognitive perspectives, modes of producing and giving meaning, the results of material existence,

125 Harré, Modeling, Gateway to the Unknown, 3.
126 Barad, Meeting the Universe Halfway, 64.
127 Rothbart, "Introduction", vii.
128 Lorde, "The Master's Tools Will Never Dismantle the Master's House.", 112.
the imaginary, the universe of intersubjective relations with the world." When this thesis makes the claim for viewing the assembled-apparatus as a strategic model for producing decolonial possibility, it is made in the knowledge (and fear) that the site of its enunciation (MIT) already places this possibility in the realm of negligence and the denial of conquest. The apparatus from which any model must be assembled is already a practice of violence and the assembled-apparatus, as a strategy for art-making, carries this violence as a material agent in its performative meaning-making. The body that assembles these material-discursive models is still "a racially marked body in a geo-historical marked space." 

**Apparatus-Index (feint)**

To operate from within this material-discursive zone of violence is therefore to work against the entanglement of all things (against has the advantage of meaning both next to, and opposed to.) In colonial-relations of power, the political dimension of material-discursive entanglement is related to processes of becoming impossible, un-becoming.

In an assembled-apparatus, un-becoming is cast as a strategy rather than an ontology. To un-become is to move out of the zone of being, and beyond methods of discipline, management or governance—to become strategically empty. Arthur Jafa describes this strategy as "adopting a posture that's essentially one of death . . . a way of saying 'pretend to be dead so that the forces that are trying to destroy you will assume that they've already achieved their goal.'" In a material-discursive mode, however, to perform death means putting the conditions of death into-relation around oneself. In colonial

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131 Moten and Harney, *The Undercommons*, 41.
133 Jafa, Interview
relations of power, to assemble an apparatus of death around oneself, as a black person, is simply to assemble the material conditions that regulate everyday life. The conditions of death are simply those practices of discourse that determine and curtail the everyday making of meaning in the colonial world.

In this light, any strategy of possibility that can emerge from an assembled-apparatus must take the form of disavowal. The futility of feigning death in the living body forms the basis for another kind of art-making as meaning-making as decolonial world-making. Since colonial difference is the difference that makes no difference, the kind of flat difference that is invoked in the relations of knowledge that underpin colonial relations of power. The assembled-apparatus must necessarily produce its strategy from within this difference. To move beyond "the outside, invented in the process of building the inside," death itself is not an adequate model, governed as it is by a necropolitics that has already determined the conditions and distribution of death.135

Linda Tuhiwai Smith reminds us that the construction of colonial difference is not only achieved through "classification systems, rules of practice and methods . . . developed to allow for knowledge to be selected and included" but also the simultaneous "actual material redefinition of our world." This simultaneity is not happenstance or the violence excess of colonial discipline but a necessary aspect of what it means to shift knowledge — a material-discursive catastrophe.

To avoid inscribing this kind of colonial difference (and its attendant violence) the assembled-apparatus must then operate from the zone of non-being, the zone from which

136 Smith, Decolonising Methodologies, 33.
recognition is not possible. This zone corresponds to Membre's notion of another side of all things, the world of shade, the spectre and the phantom, "a particular ontology of violence and the marvelous."

The assembled-apparatus, stuck as it is within the material conditions that govern its possibilities, and its model strategy for exceeding those conditions, is placed in the mode of providing "capacity to provide a basis for, and [stating] the inseparability of, the being and the nonbeing of persons and things." In this sense, the assembled-apparatus is a strategy derived from the understanding that epistemological power asserts itself paradoxically through exclusion by the very process of including. A problematic notion indeed.

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137 Gordon, "Through The Zone of Nonbeing", 3.

138 Membre, On the Postcolony, 145.

139 Membre, On the Postcolony, 145.

This thesis, and the proposition of the strategic assembled-apparatus, operates within a colonial matrix of power in which "all forms of the control of subjectivity, culture, and especially knowledge and the production of knowledge" is concentrated under the hegemony of a US-Eurocentric, racist world order. Harney and Moten caution that to not attend to the immanent context in which we operate, the material conditions that enable practice, is to join in the denial of the conquests which have made this world possible, and, simultaneously, impossible. \textit{La paperson} reminds us that while the goal of settler schooling is to produce ever more settlers, just as colonial universities produce colonialists, these places also carry a hidden tradition of "harboring spaces of anti-colonial resistance". These conditions are not unique to the university, but are found throughout contexts determined by colonial relations of power. The settler university is simply the context in which my practice currently confronts these conditions. To function as a decolonial agent in these conditions is occupy a site of tension where the colonial and the decolonial are crowded together in inseparable friction, the kind of relations Mbembe describes as "a kind of combat between bodies in a dark tunnel." To exercise decolonial agency in such a context is therefore akin to working in the dark, where the visible and invisible are one and the same.

The material-discursive entanglement of the colonial and the decolonial in this context, where meaning emerges from the anxious tension between what is visible and what is invisible, can be approached as the aporia which underlies this thesis paper. This

\begin{flushright}
142 Moten and Harney, \textit{The Undercommons}, 41.
143 paperson, \textit{A Third University Is Possible}, xv.
\end{flushright}
entanglement forms an impossible relation from which (k)new assemblages are possible. A decolonial agent must therefore act as both a counter-agency producing tension (against the colonial), as well as the agent who must act from within the darkness to discern (k)new agencies. The intention is not to act against the darkness itself, but against those colonial structures which prefigure relationships as a binary contest between light and dark, visible and invisible, knowable and unknowable. Rather, material-discursive strategies aim to claim the power to reassemble the structures of what is possible, not to set the limits of what is legitimate or recognizable.

In this spirit, my thesis is both a driver of my practice as well as a product of that practice. This thesis is an enactment of that part of my practice which tries to apprehend the structures that determine the flow and shape of the world as it confronts me—the apparatus. Apprehending these structures is not an end in itself but rather a way of identifying the parts that constitute the apparatus, as well as the strategies by which these parts can be reassembled, redetermined, and reorientated towards another meaning. This suggest a simple description of my decolonial intention: the effort to apprehend the structures that determine the world, not in order to see this world better, but, to better build another world.

The practice of apprehending and making (k)new structures, follows a common logic of assembly - putting things together. The things that are put together are always ‘things’ in the material-discursive sense, meaning they are not static objects but lines of flight, potentialities, instances of flow which are full with the heaviness and light of memory, meaning, and dreams. The diagrammatic aspect of this assembly is the work of connecting what is actual, the ‘things’ in the world with what is virtual, the structures that determine what things mean.
Gestures of apprehending and assembling structure both deal with immanent systems and therefore, any gesture that attempts to capture and produce these structures is always a little bit out of time, out of sync, and untimely. Where these attempts materialize too early, so that the structures being apprehended do not yet exist, the practice becomes a futurist endeavor, a form of divination. Where these attempts materialize too late, the practice becomes an archival effort, a form of memory. When they arrive right on time, they are already apparent and so redundant. In this temporal slippage the banality of this practice finds its potency. The everyday, the boring, and the familiar become formidable forms precisely because what is familiar is in practice also the structure of the impossible which nonetheless must seem totally possible; and conversely the familiar is the structure of what is possible that must appear as in fact completely impossible. To unfold these structures is the cycle of work that must always be done. This end is only a beginning.
Bibliography


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