Revitalizing Normativity: A Conceptual Framework for Social Justice Projects

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To Loki Télèsphore Everly-Xhignesse, whose presence makes all things possible.

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Abstract

This thesis explores the proposal that life is inherently normative, and that normativity is fundamentally vital. In examining the co-implication between normativity and life, I identify and develop a distinct concept that I call 'generative normativity': the distinctively vital capacity to establish new norms or standards that characterize conditions as either typical or atypical, or better or worse, from the perspective of living beings. I demonstrate that this concept has much to contribute to contemporary social justice endeavors—especially queer, feminist, and anti-racist projects. In the first half of the thesis, I trace the co-implication of normativity with life in the history of philosophy as well as in more recent contributions, which lays the groundwork for my identification and development of 'generative normativity.' In the second half of the thesis, I explore the implications of generative normativity for social normativity. I find that while both vitality and normativity have played problematic roles in the social sphere, a concept of generative normativity that retains its vital origin resists these problematic tendencies, and is also uniquely well-suited to grounding contemporary social justice projects.

In the first chapter, I locate the origins of the concept of 'vital normativity' in the work of Kurt Goldstein and Georges Canguilhem. I explain the ambiguity between two modes of vital normativity—*descriptive* and *evaluative*—and introduce a third mode I call *generative*. In the second chapter, having established the co-implication between life and normativity, the ambiguity between descriptive and evaluative normativity, and the conceptual potential of generative normativity, I trace these issues in the history of philosophy—particularly in Aristotle, Spinoza, and Henri Bergson. In the third chapter, I address recent contributions in feminist New Materialism that take a related but distinct perspective on life, and defend my approach to philosophical vitalism against these potential interventions. In the fourth chapter I turn to the functioning of vital normativity in the social sphere. I use Michel Foucault's concept of normalization—clarified and elaborated by Mary Beth Mader and Ladelle McWhorter—to identify the central role played by vital normativity in structures of domination and oppression centred on racialized, gendered and sexualized individuals and populations, but argue that *generative* normativity resists these tendencies. In the fifth chapter I turn to the question of identity and experience, offering an account that is rooted, not in the social or even in the phenomenological, but in the temporally distinctive vitality of the organism. In conversation with Linda Martín Alcoff, Frantz Fanon, Sylvia Wynter, Alia Al-Saji, and Shannon Sullivan, I convert this approach to identity, normativity, and experience from the vital to the social sphere.

In the conclusion of the thesis, I apply the concept of generative normativity to a specific issue related to social justice: the statistical discourses surrounding the suicidality of queer youth. I argue that what is required by this example is a mode of normativity open to future innovations while remaining deeply rooted in the past—particularly the embodied, sedimented, experiential and affective past of both individuals and social collectives.

Résumé

La normativité revitalisée :
Un cadre conceptuel pour des projets de justice sociale

Cette thèse développe l'idée selon laquelle la vie a une dimension normative innée et que la normativité est fondamentalement *vitale*. En examinant la co-implication de la normativité et la vie, j'identifie et développe un concept distinct que j'appelle la *normativité générative*; c'est-à-dire, la capacité distinctement vitale d'établir des nouvelles normes ou de nouveaux standards qui permettent de qualifier certaines conditions de typiques ou d'atypiques, ou de meilleures ou de pires, à partir de la perspective d'un être vivant. Je démontre que ce concept peut contribuer profitablement à divers mouvements associés à la justice sociale, notamment aux projets *queer*, féministes et antiracistes.

Dans la première partie de cette thèse, je retrace la co-implication de la normativité avec la vie à travers l'histoire de la philosophie ainsi que dans la philosophie contemporaine, ce qui établit les fondations de la définition et du développement du concept de normativité générative que je propose. Dans la seconde partie de cette thèse, j'examine les implications de la normativité générative pour la normativité sociale. Malgré le rôle problématique qu'ont joué la vitalité et la normativité dans le domaine social, j'avance qu'une normativité générative qui préserve ses origines vitales peut échapper à ces tendances problématiques et se révèle particulièrement féconde pour les mouvements contemporains associés à la justice sociale.

Dans le premier chapitre, je retrace les origines du concept de *normativité vitale* dans la pensée de Kurt Goldstein et de Georges Canguilhem. Je mets en évidence l'ambiguïté entre deux types de normativité vitale—la normativité *descriptive* et la normativité *évaluative*—et j'introduis un troisième type que je nomme la normativité *générative*. En s'appuyant sur cette co-implication de la vie et la normativité, sur l'ambiguïté entre normativité descriptive et normativité évaluative, et sur le potentiel offert par la normativité générative, mon deuxième chapitre retrace l'origine de ces enjeux à travers l'histoire de la philosophie, notamment dans la pensée d'Aristote, Spinoza et Henri Bergson. Dans le troisième chapitre, j'aborde des contributions récentes issues du néo-matérialisme féministe qui adoptent une perspective connexe mais distincte sur la vie et je justifie ma conception du vitalisme philosophique face à ces perspectives alternatives. Dans le quatrième chapitre, je me penche sur le fonctionnement de la normativité vitale dans le domaine social. J'utilise le concept foucaldien de normalisation (tel que précisé et développé par Mary Beth Mader et Ladelle McWhorter) afin de mieux identifier le rôle central joué par la normativité vitale dans les structures de domination et d'oppression centrées sur les personnes et les populations racialisées, genrées et sexualisées. Je démontre cependant que la normativité *générative* résiste à ces tendances. Dans le cinquième chapitre, je me penche sur la question de l'identité et de l'expérience, offrant une perspective fondée non pas sur le social ou le phénoménologique, mais bien sur la vitalité temporellement distincte de l'organisme. En conversation avec Linda Martín Alcoff, Frantz Fanon, Sylvia Wynter, Alia Al-Saji, et Shannon Sullivan, je convertis cette conception de l'identité, de la normativité et de l'expérience du domaine vital au domaine social.

Finalement, j'applique le concept de la normativité générative à un enjeu particulier ayant trait à la justice sociale : les discours statistiques ayant trait à la suicidalité de la jeunesse *queer*. Je suggère que cet exemple requiert un mode de normativité ouvert aux innovations du futur, tout en demeurant fermement ancré dans le passé – et en particulier le passé corporel, sédimenté, expérientiel et affectif des individus autant que des groupes sociaux.

Introduction

"*Life is Not Indifferent*:"
Descriptive, Evaluative, and Generative Normativity

This thesis explores what it would mean to think of life as inherently normative, and of normativity as fundamentally vital. Bringing these two concepts together yields rich conceptual resources for grounding contemporary social justice endeavors—especially queer, feminist, and anti-racist projects. My project is not concerned with *proving* that living beings are always or exclusively normative, or that normativity is always or necessarily vital.[1] The project is also not to provide a definition of life or of normativity as such. Rather, I begin from the hypothesis that life is significantly and interestingly co-implicated with normativity, and that this co-implication between normativity and life represents more fertile ground than existing treatments allow. In my view, both the normative character of life and the vital character of normativity could beneficially be explored, and their consequences elaborated upon, by and for those interested in both vital and normative theory of all kinds.

A sustained examination of the co-implication between normativity and life allows me to identify and develop a distinct concept that I call 'generative normativity.' In the first half of the thesis I trace an account of the co-implication of normativity with life in the history of philosophy as well as more recent contributions, articulating a concept of 'vital normativity' that is rooted in the work of physician and philosopher of medicine Georges Canguilhem and elaborated through the work of philosopher of life Henri Bergson. This lays the groundwork for my identification and development of 'generative normativity.' In the second half of the thesis, I explore the implications

[1] I do happen to think that both are true—but that is an argument for another project!

of vital normativity in general, and generative normativity in particular, for social normativity.[2] I find that while both vitality and normativity have played problematic roles in the social sphere, a concept of *generative* normativity which retains its vital origin resists these problematic tendencies, and also has much to contribute to contemporary social justice projects.

I first noticed a strange (to my ear) use of the term 'normative' in the early 2010s, listening to author, social commentator, and LGBT community activist Dan Savage on his relationship- and sex-advice podcast, The Savage Lovecast.[3] I suspect I had heard the term used this way for some time, since I understood what it meant in the context despite being unfamiliar with its specific definition in this domain. Here is a representative example from an interview between Dan Savage and Ophira Eisenberg on NPR in 2015:

"SAVAGE: It's the vanilla, missionary position, marital, heterosexual *norms* who feel just like *freaks*, and they are because...

(LAUGHTER)

SAVAGE: ...When you ask people what *normal* sex is, they say missionary position, opposite sex, within the bounds of matrimony, open to contraception [sic].[4] And that actually, *statistically*, is *freakishly rare*.

(LAUGHTER)

SAVAGE: That is not *normative* sex. *Normal* is what happens near this theater on any given Saturday night" (Eisenberg 2015, emphases mine). [5]

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[2] Canguilhem suggests this connection in the postscript to his foundational work *The Normal and the Pathological*, and the connection is taken up again in a short article by Maria Muhle (2014).

[3] The Savage Lovecast began in the early 1990s as an advice column in the Seattle newspaper The Stranger. The podcast began in 2006 and today has over 200,000 regular listeners. Savage has also gained wide recognition for co-founding the It Gets Better Project, which advocates for queer youth (Raptopoulis 2014).

[4] Perhaps Savage meant to say "open to conception" here?

[5] Ophira Eisenberg, "Sex Advice Columnist Dan Savage Still Fresh After 20 Years," *npr.org* (April 8, 2015). https://www.npr.org/transcripts/398343026.

The italicized words and phrases above demonstrate what has now, on my reading, become a common popular understanding of the concepts of normality, 'normativity,' statistical prevalence, and the relationship between them. In the first line, Savage uses 'norm' to denote a *kind of person* whose exclusive engagement in a certain range of sexual behaviours—"vanilla, missionary position, marital, heterosexual"—actually, he asserts, makes them 'freaks.' He explains, in the second line, that this is because while (he implies) this kind of behaviour is socially *valorized*, it is *statistically* rare. In the final line, Savage emphasizes that statistically normal sex, "what happens near this theater on any given Saturday night," is not limited to this narrow range of behaviours. Here, though, Savage uses 'normative' as a near-synonym for 'normal'—one that, it seems, is intended to be free of the *evaluative implications* carried by the term 'normal.' This last interpretation is not fully justified by the passage itself, but it is well supported by a number of occasions on the podcast, when Savage has responded to callers wondering if a given behaviour is 'normal' by saying that what they really want to know is whether it is 'normative'—that is (according to Savage), whether many or most people engage in the behaviour.

What is surprising about Savage's use of the terms 'norm' and 'freak' to denote kinds of people here is that they *explicitly* reverse our common understanding of these concepts—which is evaluative—and replace it with one that is merely descriptive. The 'freaks' are the numerical minority, who engage in exclusively "vanilla, missionary position, marital, heterosexual" sexual behaviours, while the 'norms,' it turns out, are the numerical majority who engage in everything else. That is, the fact that the freaks are freaks is confirmed, for Savage, by the fact that those who engage only in the limited range of sexual behaviours identified as "vanilla, missionary position, marital, heterosexual" are in the numerical minority. As implied by the laughter of his audience, this mobilization of a reversal of expectations is a successful rhetorical device, which Savage also

employs in another of his sayings: that "when it comes to human sexuality, variation is the norm" (Savage 2017). What is surprising about Savage's use of the terms 'normal' and 'normative,' however, is that they *tacitly* reverse the original definitions of these concepts—in which 'normal' is descriptive and 'normative' is evaluative—so that they mean the opposite of their explicit, technical definitions. That is, 'normal' is rejected as evaluative, while 'normative' is preferred as merely numerically descriptive.

My impression upon encountering this latter reversal was that it was strange, but also familiar. I came to realize that I had often seen 'normative' used in academic writing to describe a value-neutral fact of numerical representation—usually, in fields such as queer theory, disability studies, and (to a lesser extent) feminist theory and philosophy of race, which take the amelioration of the social devaluation of certain social features—e.g. minority sexual behaviours, gender expressions, and forms of embodiment—as an explicit goal. Instances of this include such locutions as 'normative gender presentations' and 'normative relationship models.' It makes sense, given their ameliorative commitments, that such fields should be sensitive to the implicit evaluative implications of the term 'normal' and related terms, and turn to putatively value-neutral terminology in order to describe the concept of the 'normal' in terms of numerical or statistical representation. 'Normative' seems to have been the term chosen for this purpose.

The term 'non-normative,' especially, carries this resignification, particularly in explicitly ameliorative fields. A casual review of the occurrence of the term 'non-normative' in paper titles on PhilPapers.com yields a long list of items. In almost all of these, the term seems to carry its familiar philosophical meaning, i.e. lacking in evaluative significance. In a few cases, however, the term clearly refers to numerical representation (of behaviours, identities, etc); notably, in all of

these cases, the article in question was published in a psychology-related journal (*Behavior & Brain Science*, *Consciousness & Cognition*, etc).

Indeed, the definition of 'non-normative' in the American Psychological Association Dictionary of Psychology reads as follows: "not conforming to or not reflecting an established norm deviating from a specific standard of comparison for a person or group of people, particularly a standard determined by cultural ideals of how things ought to be." As we shall shortly see, this APA definition of 'norm' (pertaining *either* to a 'standard of comparison' *or* to an ideal) is consistent with the Oxford English Dictionary definition of the term. However, in distinction from the dictionary presentation of 'norm,' its usage in psychology and related fields appears to be intended to *neutralize* the term by *replacing* the 'ideal' sense with a merely descriptive sense, thus correcting overreach by refraining from passing judgment on what is merely descriptively the case. This usage is evident not only in psychology, but also, on my reading, both in ameliorative sub-disciplines in philosophy, such as queer theory, disability studies, feminist theory, and philosophy of race, and in popular discourses related to these sub-disciplines. In this sense, Dan Savage's pithy pronouncement that it is the 'norms' who are 'freaks' simply takes the project a step further, by rhetorically *de*valuing what has hitherto been overvalued—that is, sexual behaviours which are considered both 'normal' and socially valuable but are not, apparently, the (numerical) norm.

This digression begins to illustrate the stakes of our conceptual framing of normativity in the social sphere, particularly with respect to social justice concerns. 'Normal,' while it is intended to denote what is *typical* or *average* in a value-neutral way, has come to carry evaluative connotations in social contexts, as when we ask whether a given sexual behaviour is 'normal,' or when we use the statistical predictions of prenatal testing results to inform a decision about continuing a pregnancy. 'Normative,' while it originally pertained to evaluative judgements (and

still overwhelmingly does, in philosophy at least) has been adopted in both psychology and many ameliorative discourses to stand in for 'normal'—that is, to identify what is *typical* or *average* in a value-neutral way.

A linguistic or ethnographic analysis of this shift would be fascinating, but my analysis is a philosophical one. Philosophers may be quite confident in our ability to distinguish between the 'normal' and the 'normative,' but the ambiguity between them lies at the very centre of normativity as a concept. The distinction between the *typical* or *average* and the *healthy* or *good* is simply not as clear as we professional parsers of conceptual distinctions would prefer.

My proposal is that this ambiguity arises from the very co-implication of normativity and life that serves as the central focus of this thesis. Living beings are the kinds of beings for whom *typicality* is most easily conflated with *health*; indeed, definitions of health and disease rarely fail to refer to typical conditions. Living beings are uniquely subject, and susceptible, to confusion between the *typical* or *average*, and the *healthy* or *good*. A significant ramification of the co-implication of normativity with life, then, is that living beings are uniquely involved in the ambiguity at the heart of normativity.

Normativity, as we've just seen, is commonly understood in one of two ways: first, as relating to what is usual or typical, and second, as relating to a standard or ideal.[6] Here, then, lies the fulcrum of ambiguity at the heart of normativity: terms such as 'usual' and 'typical' imply rate of occurrence, while 'standard' implies an ideal or preferable state. These distinct implications correspond to two distinct modes of normativity, which I term 'descriptive' and 'evaluative.' What I call 'descriptive normativity' characterizes conditions as *typical* or *atypical* for members of an

[6] This is consistent with common usage as rendered in the Oxford English Dictionary, which defines the term 'normative' as "establishing, relating to, or deriving from a standard or norm, especially of behaviour," while a norm is defined as "something usual, typical, or standard," and a standard is defined as "a level of quality or attainment" ("normativity," n.d.).

aggregate of individual beings. Given that the kind of relationship that serves as the basis of the descriptive norm is a relationship between an individual and an aggregate, the descriptive norm is determined and determinable *from the third-person perspective*. What I call 'evaluative normativity' characterizes conditions as *better* or *worse* from the perspective of *individual* beings. Given that the kind of relationship that serves as the basis of the evaluative norm is a relationship between an individual and its unique environment, the evaluative norm is determined *from the first-person perspective* of the individual itself.

These two modes of normativity correspond with the two ways of understanding the concept just outlined. Descriptive norms pertain to what is usual or typical, and evaluative norms pertain to what is standard or ideal. These two modes of normativity also correspond with two modes of association with a norm. A 'normative' behaviour, for example, can mean either a behaviour that *relates to* a norm *descriptively*, or one that *derives from* a norm *evaluatively*.[7] In this thesis, by distinguishing explicitly between these two modes of normativity, providing clear definitions of each, and identifying them consistently throughout, I illuminate a through-line from the history of philosophy to recent contributions, and also enable a fertile exchange between thinkers of diverse traditions. Philosophy of medicine joins critical vitalism, philosophy of biology, New Materialism, post-structuralism, existentialism, and critical phenomenology. This allows for a deeper exploration than has been possible so far of the role of normativity in vital and social life.

In the process of facilitating this exploration of vital normativity in philosophy, I identify and develop a unique mode of normativity that I call *generative.* "Generative normativity'

[7] This ambiguity is often apparent in everyday uses of the term 'normativity,' especially in compound terms such as 'heteronormativity.' In my interpretation, this term describes behaviours that *both* derive from a descriptive norm of typical behaviour, *and* constitute an evaluative norm of standard or ideal behaviour. Thus the insidiousness of heteronormativity: it constitutes the *evaluative* application of a norm which is merely *descriptive*. I will explore this and related issues at length in the third chapter.

describes *the establishment of new norms or standards* that characterize conditions as (descriptively) typical or atypical, or (evaluatively) better or worse, from the perspective of living beings. Generative normativity is a central concept of the thesis, as it both highlights the distinctively vital character of normativity, and represents the most productive contribution that vital normativity can offer to the social world. I derive my concept of generative normativity from several references in *The Normal and the Pathological* which, while they do not distinguish the concept explicitly, nonetheless demonstrate its distinctness from the other two modes of normativity, as well as its rootedness in life.

The goal of the present chapter is to introduce these three modes of normativity and illuminate the distinctions between them by outlining how this distinction has been taken up and implemented in the philosophical literature. This lays the groundwork necessary to identify less explicit engagements with each mode of normativity in various historical approaches to life. I outline these less explicit engagements with descriptive and evaluative normativity and their co-implication with life in Chapter 2. In Chapter 3, I use the conceptual apparatus I have developed over the previous two chapters to launch a defense of philosophical vitalism. Generative normativity becomes a central tool of analysis in Chapters 4 and 5, where I use it to rehabilitate the role of vital normativity in social life in general and contemporary social justice issues in particular.

I. *Goldstein: Health as 'Ordered Behaviour'*

As just discussed, at the centre of normativity lies a foundational ambiguity: between the descriptive and the evaluative, the 'standard' and the 'ideal.' Neurologist and psychologist Kurt Goldstein carries the distinction of being one of the earliest and most formative theorists of this

ambiguity. The primary thesis of his book *The Organism*, a philosophical investigation of issues raised by and through clinical neurology after World War I, concerns the importance of adopting a holistic account of the organism that would treat the individual, in relation to its environment, as a functional whole. Goldstein's methodological approach consists of three main interconnected commitments: the neutral analysis of vital phenomena *without* first categorizing conditions or behaviours as 'healthy' or 'diseased,' 'normal' or 'abnormal'; a critical attitude toward phenomena that are presented as fundamental but may be merely epiphenomenal or symptomatic; and the contextualization of all vital phenomena within the particular situation of each individual organism (Goldstein [1934] 1995, 40).[8] All three of these commitments turn on the ambiguity of normativity.

Goldstein begins his discussion of "Norm, Health, and Disease" by introducing a distinction between two approaches to the concept of normativity, which correspond to the two primary senses introduced above. First, he says, attempts have been made to establish an 'idealistic norm' under which "one regards a person as normal, or more or less abnormal, in the degree to which he corresponds to a certain philosophically founded ideal" (Goldstein [1934] 1995, 325). This coincides with what I have called an 'evaluative norm.' In Goldstein's view, this definition of the norm is doomed to failure by its relativity to the philosophical theory that grounds it. That is, conventional approaches to evaluative normativity begin by formulating an abstract ideal and then attempt to relate concrete individuals to it, evaluating individuals not in their own right but in relation to the ideal.

The second alternative Goldstein outlines is to develop a concrete, empirically grounded, and objective concept of the norm that he calls an 'average [or sometimes 'statistical'] norm' (ibid). This corresponds to what I have called a 'descriptive norm.' While Goldstein concedes that the

[8] Kurt Goldstein, *The Organism: A Holistic Approach to Biology Derived from Pathological Data in Man* (New York: Zone Books, (1934) 1995).

derivation of an average value for an aggregate of individuals is sometimes practically useful, he holds that "it cannot be used to determine whether a given individual is to be regarded as normal or abnormal" because it simply "cannot do justice to the individual" (Goldstein [1934] 1995, 326). That is, descriptive norms that define the normality of the individual in terms of the average for an aggregate overlook the question of what is normal (or healthy) *for that individual*.

Indeed, as Goldstein sees it, much of the confusion in attempts to clarify concepts of health and disease, as well as normative concepts more generally, arises from the tendency to define these terms 'superindividually,' either by reference to an average or by reference to an ideal. "The ambiguity of the concept of disease shows itself then as the consequence of the ambiguity of the concept of norm. From an 'average norm' or an 'idealistic norm,' it is certainly, in general, impossible to derive a definition of disease" (Goldstein [1934] 1995, 327). Goldstein identifies disease with the qualitative, subjective experience of the sick individual, rather than with a failure to exemplify an ideal or a deviation from a statistical norm. He holds that "disease can be determined only by means of a norm that permits taking the entire concrete individuality into consideration, a norm that takes the individual himself as the measure" (Goldstein [1934] 1995, 329).

For Goldstein, it is only in terms of an individual organism's existing relationship to its environment that an alteration in that relationship can be defined as healthy or sick, normal or abnormal. The proper comparison class in determining sickness and health, then, is the individual organism considered diachronically and in relation to its environment, rather than an aggregation of organisms compared synchronically to one another. This move redirects the concept of the norm toward the health of the individual organism in relation to its environment. This association between normativity, individuation, and the environment reappears in several of the theories of

life I will review in this thesis, and it is central to my implementation of generative normativity in the social sphere.

This individual concept of the norm offers an alternative to both statistical and ideal definitions of the norm in the medical context. Goldstein contrasts his approach with what he sees as a countervailing tendency in medicine to identify disease either in relation to a statistical average for a population or species, or in relation to an ideal of health and disease. Goldstein's insistence that the norm of health is found not through a synchronic analysis of an aggregation of individuals but through a diachronic analysis of each individual, calls into question the medical relevancy of both the 'average' norm and the 'idealistic norm.' The average (or descriptive) norm pertains to conditions identified as typical or atypical for members of an *aggregate* of individuals; if the relevant relationship is instead the relationship of each individual *to itself*, then the average norm loses its relevance. The idealistic (or evaluative) norm pertains to an individual's correspondence with conditions identified as ideal for individuals of its kind; again, if the relevant relationship is a diachronic self-relation, then the idealistic norm loses its relevance. On these grounds, Goldstein rejects both the idealistic and the statistical attitude in medicine.

Having identified the individual organism as the unit to which the concepts of health, disease, and norm properly apply, it remains for Goldstein to formulate a definition of health that properly pertains to the individual in relation to its environment. Goldstein points out that the same injury or illness can produce very different results in different organisms, under different environmental conditions, and given different demands. He seeks a description that can capture these distinctions, and his approach internalizes and relativizes the concept of the norm. He develops the concept of 'ordered behaviour': this concept differentiates between 'effectual performances,' which are conducive to a stable relationship between organism and environment,

and ‘deficient performances,’ which are not. ‘Ordered behaviour’ describes both the unified, integrated functioning of the organism itself, and the adequacy of its behaviour to ensure a stable relationship with its environment. Under this account of normativity, the relationship of the individual organism to its environment over time constitutes a baseline of proper functioning for that organism, and “an organism that actualizes its essential peculiarities, or—what really means the same thing—meets its adequate environment and the tasks arising from it—is ‘normal’” (Goldstein [1934] 1995, 325). The concept of ‘ordered behaviour’ identifies the ability of the organism to meet the challenges of its environment—rather than its conformation with an average norm or its exemplification of an idealistic norm—as the definition of health. Goldstein thus avoids relying upon the conventional medical concept of health while retaining the capacity to compare and evaluate different conditions of the organism. An organism’s relationship to itself and to its environment over time is the basis of his new definition of the norm.

Both disease and ordered behaviour, on Goldstein’s account, are identifiable through the individual’s *experience* of its own states. For Goldstein, this individual experience constitutes the perspective from which conditions are evaluated as normal or abnormal, healthy or diseased. Disease is identified as “a basic change of attitude toward the environment, as uncertainty and anxiety” (Goldstein [1934] 1995, 328), while ordered behaviour comes “with a feeling of smooth functioning, unconstraint, well-being, adjustment to the world, and satisfaction” (ibid, 325). As Goldstein sees it, no phenomenon can be evaluated as good or bad with respect to a given individual organism—let alone an aggregation of individuals—without first accounting for the *meaning* of that phenomenon *to the individual*. Biological phenomena are not ‘self-evident facts’ but “must first prove their ‘significance’ for the organism” (Goldstein [1934] 1995, 306). Thus the diachronic analysis of the individual organism that forms the basis of Goldstein’s definition of

health is first carried out by the organism itself. The organism analyzes the conditions that obtain in the whole constituted by itself and its environment, and evaluates these conditions experientially, in relation to previously experienced phenomena and previously experienced states. Only from according to this first-person evaluation can a concept of 'ordered behaviour' emerge. This basis of vital normativity in temporally grounded experience reappears in several other theories of life, and is also important to my social mobilization of generative normativity.

Though Goldstein's motivating concern is with health and disease as they pertain to the *human* organism, his project in *The Organism* is not metonymic in this respect. His discussion of 'meaning,' 'experience,' and 'significance' pertains to *all* organisms, non-humans as well as humans. When my cat Ampersand once had an infected bite, he responded not only by favouring the limb that had suffered the bite, but also with an attitude of uncertainty and defensiveness—staying inside, eating less, and evincing a preference not to be touched. This exemplifies 'disordered behaviour.' Ampersand's experiential evaluation of his present state vis-à-vis his previous state was one not only of discomfort, but also of a qualitative change in his relationship to his environment, clearly expressed through behavioral change. Once the infection had resolved and the bite had healed, Ampersand returned to 'ordered behaviour'—that is, to engaging in his usual activities with his customary ease and enthusiasm. A cat accustomed to functioning with only three limbs, in contrast, often acts with the same ease and apparent well-being as Ampersand did once his injury had healed. The fact that functioning on three legs is an accustomed state would give this latter cat a distinct baseline experience of 'ordered behaviour,' and thus of 'health.'

The concept of ordered behaviour fulfills several desiderata for Goldstein, as well as for my construction of a concept of vital normativity. It considers the organism as a functional whole and evaluates this functionality in the context of the organism's environment. It supports a concept

of health that considers each individual organism in diachronic self-relation, rather than in synchronic relation to an aggregate of other organisms. It rejects both the average and the ideal as external norms of health and disease. It emphasizes the role of experience in determining and distinguishing between disease and health, normality and abnormality. Moreover, the concept of ordered behaviour recognizes that changes in the state of the organism—and even in its relationship to its environment—do not always signify an onset of disease for that organism: 'being well' means not retaining *all* of one's former capacities, but rather retaining one's adequacy to continue to meet environmental demands even if one's capacities are altered or diminished (Goldstein [1934] 1995, 332). Health is signified not by a static relationship between organism and environment, but by a dynamically responsive one. The organism's experiential capacity to *identify* norms can thus be seen as a nascent capacity to *develop* new norms. This latter capacity, which I call generative normativity, is merely hinted at in Goldstein's work but becomes further illuminated in Canguilhem's.

II. *Canguilhem: Health as the Generation of New Norms*

Philosopher and physician Georges Canguilhem, though not well-read in the Anglophone world outside Foucault scholarship, is nonetheless perhaps the most well-known theorist of the ambiguity of normativity. Canguilhem's objective in *The Normal and the Pathological*, like Goldstein's in *The Organism*, is to reckon with the problem of defining health and disease in the medical context. Canguilhem's project, however, extends beyond Goldstein's insofar as Canguilhem sets out *explicitly* to articulate a mode of normativity that is properly vital, or as he puts it, 'original to life.' Canguilhem challenges both the tendency of biology to take a third-personal, objective approach to understanding the organism, and the tendency of medicine to take an exclusively quantitative

approach to understanding health and disease (Canguilhem [1943] 1991, 42).[9] He poses his guiding questions as follows: "is the concept of disease a concept of an objective reality accessible to quantitative scientific knowledge? Is the difference in value, which the living being establishes between his normal life and his pathological life, an illusory appearance which the scientist has the legitimate obligation to deny?" (Canguilhem [1943] 1991, 76). The second question follows from the first. To the extent that the concept of disease is an objective, quantitative reality, the scientist is obligated to deny as 'illusory appearance' the difference in value recognized by the living being. For Canguilhem, however, it is precisely this difference in value that constitutes the distinction between health and disease. Thus medicine, informed by the adoption of a first-person perspective in biology, must account for the qualitative and the evaluative as approached from this perspective.

Formulating a response to these questions that accounts for the organism's own *evaluation* of conditions as normal or pathological necessitates an inquiry into the boundaries between the normal and the pathological, and their implications for a theory of life. Noting that medicine, in the quantitative mode, has historically been conflated with physiology, Canguilhem takes on the problem of articulating concepts of health and disease, the normal and the abnormal, that are proper to medicine in the qualitative, evaluative mode. He is specifically concerned with differentiating the *descriptive* mode of normativity that belongs to physiology from the *evaluative* mode of normativity that, in his view, belongs properly to medicine. This project presents its own issues:

> Physiological constants are normal in the statistical sense, which is a descriptive sense, and in the therapeutic sense, which is a normative sense. But the question is whether it is medicine that converts—and how?—descriptive and purely theoretical concepts

[9] Georges Canguilhem,, *The Normal and the Pathological*, trans. Carolyn R. Fawcett, in collaboration with Robert S. Cohen (New York: Zone Books, (1943) 1991).

> into biological ideals or whether medicine […] would not also admit […] the notion of norm in the normative sense of the word (Canguilhem [1943] 1991, 123). [10]

Here Canguilhem clearly distinguishes between 'statistical' (or descriptive) normativity and 'therapeutic'(or evaluative) normativity. He also grapples with several central motivating questions of his project. First, how does one—in physiology or in medicine—disentangle descriptive norms from evaluative norms, particularly when the norms pertaining to the same phenomena overlap? Second, does medicine simply adopt the descriptive norms provided by physiology, and convert these into biological ideals—or evaluative norms—for the organism? Or alternatively, can medicine account for the evaluative norms arising from the organism itself—the organism's *own* sense of 'better' and 'worse'? Canguilhem clearly advocates for the latter; it is this capacity of the organism to distinguish between 'better' and 'worse' that both serves as the basis of vital normativity, and allows for the development of *generative* normativity.

Canguilhem illustrates his approach to vital normativity—specifically in contrast to 19th-century physiologist and pioneer in experimental medicine Claude Bernard—through the example of diabetic glycosuria, which as he points out "consists solely and entirely in the disorder of a normal function" (Canguilhem [1943] 1991, 67). Bernard's innovation, according to Canguilhem, was to establish that blood sugar need not necessarily be ingested from plants, but is produced by animal organisms with or without access to dietary sugars. This means that the presence of sugar in the blood is a constant for animals; therefore, Canguilhem concedes with Bernard, "in a diabetic, [hyper-or hypo-] glycemia is not itself a pathological phenomenon—it is so only in terms of its quantity" (ibid, 70). Bernard presents this fact as corroboration of his position that all disease can

[10] Canguilhem clearly distinguishes between the two modes of normativity I have termed 'descriptive' and 'evaluative,' and also recognizes the confusion produced by equivocation between these two modes. However, he adds to this confusion somewhat by reverting to phrases such as "norm [or 'normal'] in the normative sense," through which he clearly refers to what I call evaluative normativity. I will attempt to clarify each such locution when quoted.

and should be quantitatively, rather than qualitatively, demarcated from health. Diabetes is not the spontaneous appearance of a new substance (sugar) in the blood; rather, it is defined by the increase or decrease of a substance that is already there (ibid, 71).

Canguilhem concedes that diabetes *can* be interpreted quantitatively, as an excess or deficiency of blood sugar. In this sense, glycosuria can be identified entirely in terms of descriptive normativity: a normal—or average— blood sugar range for a given species or subgroup can be established, and glycosuria can be diagnosed where individual values fall outside that range. Canguilhem is quick to point out, however, that glycosuria—let alone diabetes—is not reducible to quantification. Some individuals exhibit morbid symptoms with blood sugar levels within the descriptively normal range, while others are asymptomatic with blood sugar levels outside that range; moreover, both symptomatic and asymptomatic individuals display widely different blood sugar levels throughout the day (Canguilhem [1943] 1991, 80). Thus, in order for any given blood sugar value to be identified as quantitatively 'too high' or 'too low,' it must be evaluated in the context of *symptoms*. The morbidity of these symptoms, meanwhile, is a qualitative matter in terms of their classification *as* symptoms, and an evaluative matter from the perspective of the healthy or sick individual (ibid). Canguilhem therefore insists that the quantitative, descriptive interpretation, even of seemingly quantitative, descriptive values such as blood sugar, fails to capture what is relevant about disease. One necessarily relies upon qualitative evaluation in explaining why a given value is indicative of disease.

The first half of *The Normal and the Pathological* is largely devoted to Canguilhem's refutation of a purely quantitative conception of the normal and the pathological—that is, one that would portray the two states as *merely* quantitatively distinguishable. This refutation is formulated primarily in conceptual terms and turns significantly upon questions of continuity and

discontinuity. While previous theorists have suggested that the ease of transition from health to disease implies the homogeneity of—or at least a continuity between—the two states, Canguilhem points out that "the continuity of a transition between one state and another *can certainly be compatible with the heterogeneity of those states*" (Canguilhem [1943] 1991, 56, emphasis mine).[11] Rather than associating these transitions with a quantitative increase or decrease of symptoms, Canguilhem identifies them as 'alterations,' clarifying that "augmentation and diminution are concepts which denote quantity, but alteration is a concept of *qualitative* force" (ibid, 62, emphasis mine).[12] Finally, Canguilhem draws another connection which exposes the folly of the purely quantitative account: "The idea of a continuity between the normal and the pathological is itself in continuity with the idea of the continuity between life and death, organic and inorganic matter" (ibid, 72). Thus, in the final analysis, conceptualizing health and disease as continuous and merely quantitatively distinct in effect erases the very qualitative distinction between organic and inorganic matter upon which both biology and medicine must be founded. In Canguilhem's view, this contradiction helps to justify the introduction of a new approach.

Canguilhem uses the quantitative interpretation of health and disease as a foil for the development of his own account, which formulates the shift between the normal and the pathological as a qualitative alteration in the first-person experience of the organism. Thus Canguilhem's account in *The Normal and the Pathological*, like Goldstein's in *The Organism*, highlights the organism's *own* experience of health and disease; also like Goldstein's, Canguilhem's foregrounding of experience pertains to *all* organisms, not only to human beings.

[11] I will return to a discussion of continuity and discontinuity in greater detail in examining both Bergson's concept of duration and Foucault's critique of the construction of statistical continuities.

[12] This view and its attendant terminology are in precise concordance with Aristotle's in the *Metaphysics*, which also provided the foundation for Medieval debates on the concept of intensity (see Mader 2014). Similar efforts to rehabilitate a concept of specifically *qualitative* alteration can also be found, as we shall see, in Bergson and Deleuze.

The second half of the text lays out Canguilhem's positive account. Canguilhem illuminates not only the individual organism's qualitative experience of disease, but its very formation *as an organism* by this experience.[13] In this way, Canguilhem's account of vital normativity is also an account of the co-implication of normativity with life.

Canguilhem's foregrounding of *qualitative* experience in *The Normal and the Pathological* represents a departure from the traditional approaches of biology and medicine to the phenomena of norm and pathology, which tends to be third-personal, objective, and quantitative (Canguilhem [1943] 1991, 42). Meanwhile, as Foucault points out in his introduction to this volume, Canguilhem's approach to qualitative *experience* is distinct from more familiar philosophical approaches that foreground experience, such as existentialism and phenomenology (Foucault 1991, 20).[14] While these approaches usually begin either from the perspective of the experiencing subject or with its formation, Canguilhem calls for an analysis of *pre*-subjective experience on the part of the organism as a living, experiencing—but not necessarily self-conscious—being. Foucault summarizes Canguilhem's motivating question as follows: "phenomenology asked of 'actual experience' the original meaning of every act of knowledge. But can we not, or must we not look for it in the living being himself?" (Foucault 1991, 20). Looking for knowledge *in* 'the living being himself' also distinguishes Canguilhem's project from biology and medicine, which have traditionally sought knowledge *of* or *about* the living being as object, from the perspective of the biologist or physician as subject (Canguilhem [1952] 2008, 59-60).[15] His project is thus in contact with several other fields of inquiry, without fully coinciding with any of them. Rather,

[13] I will return to this point shortly, and again, in more detail, in the third section of this chapter.
[14] Michel Foucault, Introduction to *The Normal and the Pathological*, trans. Carolyn R. Fawcett, in collaboration with Robert S. Cohen (New York: Zone Books, 1991).
[15] Georges Canguilhem, *Knowledge of Life*, eds. Paola Marratti and Todd Myers, trans. Stefanos Geroulanos, and Daniela Ginsburg (New York: Fordham University Press, (1952) 2008).

Canguilhem's distinct approach lies somewhere between biology and philosophy—or, more specifically, between biology and a philosophy of vitalism.

As Foucault points out, Canguilhem's approach is not an ontology or an epistemology of life—it does not seek to explain what life *is*, nor does it purport to be a 'rigorous' or 'true' account of what can be known about life. Rather, Canguilhem's vitalism takes life as an *indicator* for philosophy and biology, both "a theoretical indicator of problems to be solved," and "a critical indicator of reductions to be avoided" (Foucault 1991, 18). For Canguilhem, the living being is host to distinctive processes of self-regulation and self-preservation, which are associated with its normative capacities and activities (ibid). These vital, normative processes serve as "indicators of reductions to be avoided" in the sense that they are ontologically and epistemically inextricable from living beings themselves, and they serve as "indicators of problems to be solved" in the sense that further inquiry is necessary into their co-implication with life. It is precisely this unique approach to vitalism, normativity, and vital normativity that renders Canguilhem such a rich resource for my project of thinking through these concepts in relation to one another and later implementing them in the social sphere. The normativity of life, and the vitality of normativity, are rich concepts with extraordinary scope and adaptability when applied to social life. They serve as reminders to avoid the reduction of the social to the biological, and vice versa. They also serve—especially in light of my identification and elaboration of generative normativity—as analytical tools for reevaluating the normative underpinnings of contemporary social movements.

As we have just seen, Canguilhem delineates, as Goldstein does in *The Organism* and as I did in opening this chapter, two senses of 'normal': "that which is met in the majority of cases of a determined kind," (i.e. descriptively normal) and "that which is such that it ought to be" (i.e. evaluatively normal) (Canguilhem [1943] 1991, 125). These two modes of normativity correspond

both to my respective definitions of descriptive and evaluative normativity, and to Goldstein's respective characterizations of statistical and idealistic normativity. Unlike Goldstein, however, Canguilhem does not define evaluative normativity as 'idealistic,' and thus does not characterize it as teleological or external to the organism. Rather, Canguilhem emphasizes, with Goldstein, the organism's unique capacity to evaluate conditions from its own perspective; for Canguilhem, this capacity constitutes 'normativity' in the most general sense. Rather than propose the abolition of the use of the norm in medicine, Canguilhem strives to articulate an account of normativity that is proper to (qualitative, evaluative) medicine—that is, an account that incorporates the organism's own normative evaluations. Thus, his is the first account of 'vital normativity' proper.

In addition to distinguishing between descriptive and evaluative normativity—and, as I will shortly show, suggesting a third mode of normativity that I identify as 'generative'— Canguilhem also identifies the fundamental basis of normativity in living beings. For Canguilhem, a condition of possibility for normativity in any mode is the capacity of the organism to discriminate between beneficial and harmful conditions in its surrounding environment.[16] He calls this discriminatory capacity 'dynamic polarity': the distinctive capacity of living beings to differentiate between beneficial and harmful elements of their respective environments (Canguilhem [1943] 1991, 128-9). This discriminatory relationship of the organism to its environment endows the environment with meaning and differentiation and, in so doing, shapes organisms in turn. An organism becomes the kind of being that it is in relation to its environment, specifically by relating to its environment

[16] Canguilhem expresses ambivalence about the term 'environment' (environnement), especially in his article "The Organism and its Milieu." In his view, the use of the term 'environnement' has several undesirable tendencies: to emphasize human control over one's surroundings, to underemphasize the connection between organisms and their milieux, and to emphasize organism's adaptation to, rather than transformation of, their milieux (Georges Canguilhem, "The Living and its Milieu," trans. John Savage, *Grey Room* 3 (1974) 2001: 6-31). Due to its familiarity in English and its concordance with other authors I cite, I have elected to retain the term 'environment' despite these justified misgivings, with the caveat that I mean it to imply a holistic and mutually influential relationship between any organism and its surroundings.

in a discriminatory way—that is, by preferring some surrounding conditions over others and thus investing these conditions with distinct meanings and values. The unique discriminatory capacity of living beings thus serves as the basis of normative relations.

This discriminatory capacity is observable in even the 'simplest' of organisms. The unicellular protozoan *Physarum polycephalum*, for example, has been shown to regulate its intake of basic nutrients in such a way that an optimal proportion for its subsistence—namely, two-thirds protein and one-third sugar—is maintained. Not only does this organism ingest sources of nutrients selectively among those that are immediately available; it locomotes to access more distant nutrient sources until the optimal proportion of nutrients has been achieved—moving farther when nutrients are in lower or disproportionate concentrations and less far when rich sources of balanced nutrition are nearby (Dussutour et al, 2010).[17] These behaviours can be interpreted as prime expressions of the discriminatory capacity. Moreover, these behaviours shape both the *Physarum polycephalum* and its environment. In consistently ingesting twice as much protein as sugar, the protozoan engages in small-scale bioengineering of its immediate area, leaving twice as much sugar as protein untouched. Such nutrient-seeking behaviours, along with a whole host of other habitual and discriminatory behaviours, both mediate the relationship of an organism to its environment and shape the organism in turn.

Lest we suspect that Canguilhem's account of dynamic polarity is simply the *human* capacity for expressing preference, anthropocentrically projected onto all living beings, he insists that this human capacity in fact arises from a more fundamental, and universal, vital capacity. "We do not ascribe a human content to vital norms but we do ask ourselves how the normativity essential to

[17] Audrey Dussutour, Tanya Lattey, Madeleine Beekman, and Stephen J. Simpson, "Amoeboid organism solves complex nutritional challenges," *Proceedings of the National Academy of Sciences* 107, no. 10 (2010): 4607-11.

human consciousness would be explained if it did not in some way exist in embryo in life" (Canguilhem [1943] 1991, 127). In Canguilhem's view, if we accept the existence in human beings of a discriminatory capacity in relation to our environment, we must ask how this polarity arises. His hypothesis is that 'vital norms' are a fundamental feature of all living beings. As he puts it, "life is not indifferent to the conditions in which it is possible […] life is polarity and thereby even an *unconscious* positing of value; in short, life is in fact a normative activity" (Canguilhem [1943] 1991, 126).[18] For Canguilhem, life is distinguished by what I have called 'the discriminatory capacity'—the ability to exercise 'vital norms,' or 'dynamic polarity.' This capacity is present in *all* living beings and exists *prior to* more sophisticated manifestations of normativity. This identification of all living beings as having, and exercising, this discriminatory capacity renders life synonymous with 'normative activity.' As we shall see, conceiving of life as 'normative activity' has interesting and important implications both for normativity and for life.

Canguilhem clarifies that vital norms are most often—or at least, most observably—expressed as an *aversion* to what the organism regards as a 'dreaded,' or pathological, state (Canguilhem [1943] 1991, 126). In contrast to Goldstein's account of the experience of 'ordered behaviour' above, Canguilhem contends that "the awareness of the body consists in a feeling of limits, threats, obstacles to health" (Canguilhem [1943] 1991, 91). Thus, disease often serves—even for the organism itself—as an epistemic indicator for health. I may only become aware of the ease with which my digestive system usually functions, for example, when it is not functioning as usual. This does not mean, though, that disease is *ontologically* prior to health. As Canguilhem puts it, "health is positive, but not primitive, disease is negative, but in the form of opposition (irritation), not deprivation" (ibid). Here the 'positive/negative' relation appears to have an

[18] Emphasis mine, and translation corrected—the context makes clear that the French 'position' in the original passage is better translated by the English 'positing' than 'position.'

ontological sense, and the 'primitive/opposition' relation appears to have an epistemic sense. That is, disease is known first (i.e. it is primitive), and health is known primarily as an absence of, or in opposition to, disease. Health, meanwhile, is a fundamental and positive ontological fact, in relation to which disease exists as a negation of health. Disease, then, is understood not as *disorder*, as Goldstein would have it, but as a negation in relation to the environment that poses an obstacle to health.

Canguilhem carries out a similar explication of the concept of the norm: "Strictly speaking a norm does not exist, it plays its role which is to devalue existence by allowing its correction" (Canguilhem [1943] 1991, 77). While a norm—or its contravention, signaled by disease—may represent our first epistemic contact with the concept of health, the norm of health *itself* has no independent existence. "The concept of health is […] of a norm whose function and value is to be brought into contact with existence in order to stimulate modification" (ibid). The norm, then, plays an active role in the behaviour of the organism—it represents the pull of the organism's preference for some conditions over others, which in turn leads it to seek out those conditions preferentially. Thus the 'dynamic polarity' of the organism as expressed through its 'normative activity,' shown above to be a fundamental feature of life, is highlighted as the ontological basis of normativity as well.

In defining life as normative activity, Canguilhem presents himself as in substantial agreement with several earlier theorists of life. Like surgeon and physiologist René Leriche, he thinks "that health is life in the silence of the organs, that consequently the biologically normal […] is revealed only through infractions of the norm, and that concrete or scientific awareness of life exists only through disease" (Canguilhem [1943] 1991, 118).[19] As we have just seen, disease

[19] As we shall see, Canguilhem later—in the context of what I call here 'generative normativity'—complicates this account of health as "life lived in the silence of the organs."

is an epistemic indicator of the nature of health. Like Kurt Goldstein, Canguilhem is convinced that "the norm in pathology is above all an individual norm" (ibid). That is, it is only from the perspective of the individual organism that any set of conditions is preferred or dis-preferred—thus, the norms of health and disease pertain specifically to individuals. In this sense, like medical historian Henry E. Sigerist, Canguilhem holds that "disease isolates" (ibid). Like pain, birth, and death, every living being endures its own disease alone.

Canguilhem's account of vital normativity corresponds well with the distinction I have drawn between descriptive and evaluative norms. As we saw above, Canguilhem distinguishes between two senses of 'normal': "that which is met in the majority of cases of a determined kind," (i.e. descriptively normal) and "that which is such that it ought to be" (i.e. evaluatively normal) (Canguilhem [1943] 1991, 125). For Canguilhem in contrast with Goldstein, evaluative normativity pertains to the organism's own evaluation rather than to an external ideal; the evaluative norm in medicine must always arise from the orientation of individual organisms toward the state of being that *each* organism experiences as preferable. "Medicine exists as the art of life because the living human being himself calls certain dreaded states or behaviours pathological (hence requiring avoidance or correction) relative to the dynamic polarity of life" (Canguilhem [1943] 1991, 126). Medicine exists because living beings wish to be well rather than sick, and human beings have the technological means to fulfill this preference.[20] Health, then, begins with the state preferred by each individual organism, and it is this preferred state that medicine should facilitate.

In addition to clarifying the distinction between descriptive and evaluative normativity in relation to the qualitative preferences of the organism, Canguilhem highlights an additional

[20] Non-human organisms, of course, share this preference, and also have many means at their disposal for fulfilling it. Canguilhem's specific concern with 'medicine'—though not with the norm—is limited to human beings.

capacity of the organism: the establishment of *new* constellations of values and preferences—or even, more fundamentally, new discriminatory capacities—often through its encounter with new environments. Here Canguilhem offers the example of a person who experiences no qualitative dis-ease when living near sea level, but finds herself ill when required to travel into the mountains (Canguilhem [1943] 1991, 182). He explains this altitude-induced illness as a failure, not merely to *respond* to new surroundings (which, descriptively, the traveler has done by becoming sick), but to *develop new capacities* in response to her new situation. These new capacities can constitute modifications in both descriptive and evaluative terms. A 'healthy' organism would respond to the lower air pressure of its new environment—if moderate—by acclimatizing, primarily through a decrease in blood volume and an increase in red blood cell concentration, which allows for more efficient oxygenation than would have been necessary at sea level; these developments would then constitute, descriptively, a 'new normal' (Young and Reeves, 2002, 666-9).[21] Meanwhile, in part as an effect of these descriptive developments, the high-altitude atmosphere of the mountains might gain new value and significance for the acclimatized organism. It might be reinscribed as a place where the organism could *be healthy*, that is, comfortably carry out its daily activities. In this way, a shift in the body's descriptive state of being initiates a shift in value and significance within the relationship between body and environment. Such a shift may or may not include a shift in subjective attitudes—e.g., enjoyment of fresh mountain air—for the organism.

On my reading of Canguilhem, this example suggests two levels of normative transformation. When exposed to new conditions, the organism modifies both what is normal for it—and thus, on aggregate, for an organism of its type—and which configurations of conditions are evaluatively preferred or dis-preferred by the organism. That is, the organism establishes both

[21] Andrew J. Young and John T. Reeves, "Human Adaptation to High Terrestrial Altitude," in *Medical Aspects of Harsh Environments, Vol 2* (Washington, DC: Borden Institute, 2002).

a new baseline of normalcy, and a new constellation of values and preferences. The new constellation of values and preferences generated by an individual organism can also, in turn, become the baseline constellation of values and preferences for a new aggregate of individuals. This effectively shifts the perspective of generative normativity from one that begins with aggregate values that are then imposed on individuals—the perspective critiqued by Goldstein and Canguilhem alike—to one that reveals how aggregate values are *generated by* individuals.

I term this last mode of normativity 'generative.' 'Generative normativity' describes *the establishment of new norms or standards* that characterize conditions as either (descriptively) typical or atypical, or (evaluatively) better or worse, from the perspective of living beings. This mode of normativity, like the previous two, is also suggested by the everyday dictionary definitions of the term reviewed at the beginning of the chapter. For a behaviour to be 'normative' can mean that the behaviour *relates to* or *derives from* a standard or norm—but it can also mean that the behaviour *establishes* a new norm or standard. Generative normativity, then, can pertain to the establishment of new descriptive *or* evaluative norms. For Canguilhem, in contrast with Goldstein, the organism's ability to establish new norms—what I call generative normativity—is the very definition of health.

Thus Canguilhem moves beyond the distinction between descriptive and evaluative normativity, and suggests a third mode of normativity—though he does not explicitly identify it as such. For Canguilhem, "normative, *in the fullest sense of the word*, is that which establishes norms. And it is in this sense that we plan to talk about biological normativity" (Canguilhem [1943] 1991, 126-7, emphasis mine).[22] Life is normative activity, then, in three distinct senses: first, in

[22] Here again, Canguilhem refers to normativity 'in the fullest sense' rather than in a *different* sense. Here he clearly refers to something distinct from what he called 'normal in the normative sense' above. 'Normal in the normative sense' appears to refer to evaluative normativity, and normativity 'in the fullest sense' appears to refer to generative normativity.

the sense that groups or types of living beings evince a certain regularity of relationship with their environments, which means that the relationship of an individual living being to its environment can be typical or atypical with respect to organisms of its type; second, in the sense that living beings, by virtue of their capacity for dynamic polarity or discrimination, are beings for whom conditions can be better or worse with respect to their embodied preferences (evaluative normativity); and third, in the sense that *healthy* living beings possess the capacity to establish *new* norms, both descriptive and evaluative. This means that, as in the altitude example above, a healthy organism can establish new standards, not only of what is evaluatively preferable, but also of what is descriptively normal. That Canguilhem identifies the third of these modes—generative normativity—as 'the fullest sense' of vital normativity suggests that he considers this mode of normativity to be the most uniquely and significantly *vital*, as well as most properly and significantly *normative*.

As his argument progresses, rather than—as in the passage above—continuing to present these various senses of normativity as relative intensive magnitudes of the *same* concept, Canguilhem ultimately emphasizes their distinctness:

> We think that the concepts of norm and average must be considered as two different concepts: it seems vain to try to reduce them to one by wiping out the originality of the first. It seems to us that physiology has better to do than to search for an objective definition of the normal, and that is to recognize the original normative character of life (Canguilhem [1943] 1991, 177-8).

Here again, Canguilhem refers to only *two* senses of normativity, rather than the three I have now distinguished. However, he clearly emphasizes the primacy of the 'normative character' with which he has identified both evaluative and generative normativity thus far. While he has conflated these two senses of normativity, his respective characterizations of them at different points make clear that they are distinct. It is plausible, given his contention that the generative sense represents

the 'fullest sense' of the norm, that *this* is what he contrasts with the average in this passage. It is this sense of normativity—generative normativity—that Canguilhem presents as most distinctive and original to life. That Canguilhem himself does not distinguish it explicitly from evaluative normativity should not dissuade us from developing generative normativity as a concept in its own right—or from considering its social applications, as I will do later in the thesis.

Returning to his conviction, shared with Goldstein, that health inheres in the individual organism's experience of wellness, Canguilhem insists that "man feels in good health—which is health itself—only when he feels more than normal—that is, adapted to the environment and its demands—but normative, capable of following new norms of life" ([1943] 1991, 200). Here Canguilhem departs most clearly from Goldstein. For Goldstein, for an organism to be "adapted to the environment and its demands" is the very definition of 'adequate performance,' of 'ordered behaviour,' and thus of health. Canguilhem, in contrast, presents normativity 'in the fullest sense' as "more than normal," namely as a productive, differentiating, *generative* activity, which renders the organism "capable of following *new* norms of life." For Canguilhem, this capacity is distinctive of the living being—which "does not live among laws but among creatures and events which vary these laws" ([1943] 1991, 197). That is, the normativity of the living being is not a normativity *merely* of laws, even though laws condition its existence. Rather, the living being is sensitive to laws as just one aspect of its environment, and responds to these laws with its own normative variations.

While health, for Canguilhem, consists of the generation, establishment, and maintenance of new norms, disease is characterized by the living being's intolerance of all but one kind of environment, or mode of living. This too contrasts with Goldstein's identification of health as inhering in the organism's 'adequate performance' with respect to its environment. 'Adequate'

and 'deficient' performances have the conceptual advantage of relating to the environment in which the performance in question is located, but they do not prioritize portability *between* environments as Canguilhem's concept of vital normativity does. "The patient is sick because he can admit of only one norm," Canguilhem explains. Though sickness and health are individual norms, a state of health that is dependent upon remaining within a single environment (e.g. at sea level) is not health at all. Here again, vital normativity pertains to the organism's capacity to establish and maintain—or at the very least tolerate—new conditions, new norms. This generative mode of normativity, which is characterized by responsiveness, revision, and innovation, allows for an affirmative definition of health and disease. Health is "the state which allows transition to new norms" (Canguilhem [1943] 1991, 228), while "disease is a *positive, innovative* experience in the living being and not just a fact of decrease or increase" (ibid, 186, emphases mine). As we saw in Canguilhem's analysis of glycosuria, health and disease are not divorced from quantitative alterations—but they are not fully reducible to them. Health is thus most properly defined by the normative capacity of the organism in the *generative* mode.

Canguilhem's account in *The Normal and the Pathological* serves not only to define health and disease; it also provides a novel account of normativity, the organism, and relationship between them. For Canguilhem, vital normativity constitutes "life's positing of value not only in the environment, but also in the organism itself" (Canguilhem [1943] 1991, 228). Through the normative activity of the organism, not only the concept of health, but the concept of value, is internalized and *vitalized*. Evaluation emerges as a vital capacity through which individual organisms respond to their surrounding conditions. Normativity and the organism, then, are co-implicated, emerging alongside one another and shaping each other in turn. This is the ontological

basis on which my examination of vital normativity in general, and generative normativity in particular, is built.

III. *Vital Normativity and Normative Vitality*

Thus far, this chapter has focused primarily on the consequences of the co-implication of normativity and life *for normativity*; it remains to articulate an understanding of *life* and of *living beings* that incorporates their normative character. Maria Muhle's reading of Canguilhem in her illuminating article "From the Vital to the Social: Canguilhem and Foucault—Reflections on Vital and Social Norms" is helpful in drawing out the consequences of the concept of vital normativity for a theory of life. Muhle's characterization of *The Normal and the Pathological* as describing "*the formation of organic individuality* through disease and the experience of it" shines a spotlight onto two of Canguilhem's main insights in the text: first, that one must attend to the experience of the individual organism in identifying and evaluating states as 'normal' or 'pathological,' and second, that it is the pathological state—the state of disease—that serves as the hermeneutical index of norm and pathology, health and disease. But Muhle's intervention also helps to highlight a third insight, which is more implicit in Canguilhem's work: that the formation of the 'organic individual,' or the organism, is enacted through these normative interactions. That is, it is the capacity for 'dynamic polarity,' for discrimination between different surrounding conditions, that enables the formation of the organism *as an organic individual*.

As Muhle puts it, for Canguilhem "it is disease that makes the living into the living and at the same time 'reveals' the aspiration of each biological individual to remain alive and become stronger." Muhle suggests that this account is adapted from Xavier Bichat's definition of life as

"the totality of those functions which resist death" (Muhle 2014, 2).[23] On my interpretation, though, a unique and compelling feature of Canguilhem's approach in *The Normal and the Pathological* is his foregrounding of organisms' capacity for dynamic polarity *itself*, rather than of their orientation toward survival or 'resisting death.' The fact that Canguilhem identifies the capacity for dynamic polarity, and not the exigency of survival, as the most fundamental feature of life suggests that he conceives of this capacity *not* as supervening upon survival, but as a more primitive and multivalent activity of differentiation—a *normative* activity, rather than a preservative one. In his introduction of generative normativity, moreover, Canguilhem reveals the development of the discriminatory capacity into a creative activity oriented toward innovation rather than survival. Life's *interestedness*, its lack of indifference to "the conditions in which it is possible," appears to me to be a foundational feature of life, rather than a countervailing tendency to death. One *tendency* of vital normativity may indeed be toward preserving life, but this is not presented as its primary goal.

Under either interpretation, though, it is clear that the capacity of dynamic polarity—or discrimination—is what makes 'the living into the living' on Canguilhem's account. According to Muhle's gloss on Canguilhem, "living beings 'behave normatively' by 'preferring' certain states and 'excluding' others" (2014, 3). These constellations of preference and exclusion, as we saw above, both arise with and are distinctive to each individual organism. Its orientation toward a specific constellation of preference and exclusion is precisely what both distinguishes the organism from its environment and defines it in relation to its environment. Thus the normative orientation of each individual organism vis-à-vis its environment *individuates* the organism—it makes each organism, descriptively, what it is. Dynamic polarity is also what makes the organism capable of

[23] Maria Muhle, "From the Vital to the Social: Canguilhem and Foucault—Reflections on Vital and Social Norms," *Republics of Letters 3*, no. 2 (2014): 1-12.

evaluative and generative 'normative activity.' Canguilhem makes explicit—and our review of the behaviour of protozoa confirms—that this capacity is present and active even in the simplest organisms: "Even for an amoeba, life means preference and exclusion" (Canguilhem [1943] 1991).

If "life means preference and exclusion" even for an amoeba or protozoan, then even a protozoan (as we saw above) is shaped, as it shapes its environment, by its own constellation of preference and exclusion. A *Physarum polycephalum* is a being that seeks and ingests one-third sugar, two-thirds protein, and modifies its environment by leaving twice as much sugar as protein behind. This characterizes *Physarum polycephalum*, both as an individual and as an aggregate. As Muhle explains this co-implication of normativity and the organism, "the living [being] brings forth its vital values, its norms, and its own environment—and at the same time brings forth itself in and by means of these" (2014, 3). The *Physarum polycephalum* differentiates itself from its environment, while also relating itself to its environment, by evincing and acting upon these nutritional preferences. In Muhle's elucidation of Canguilhem, then, living beings *bring themselves into being* through their own normative activity, by which "the living evaluates and devaluates and thus makes for itself new, vital values, which allow its specific dynamic to unfold" (ibid). This generative movement of evaluation and devaluation, then, creates both new constellations of values, and new living beings, new individualities.

Individuation in Canguilhem's work appears as a tendency, though, not as an achieved state. For Canguilhem, the normative activity of life constitutes a *movement toward* individuation—but a movement that is never completed to the extent that the organism is independent from its environment or autonomous from external constraint.[24] Canguilhem offers a cautionary note in *Knowledge of Life*: "individuality is not a term, if by that we mean a limit: it is

[24] As we shall see in the next chapter, this is consistent with Henri Bergson's account of the vital movement of individuation.

a term in a relation. One should not use it in the way research that aims at grasping it as a being does" (Canguilhem [1952] 2008, 49). The individuality of the organism, then, is constituted by *relatedness* with its environment. This relatedness is, as we saw above, one in which the living individual grants meaning and significance to its environment. As Canguilhem puts it, "in order for there to be an environment, there must be a center. It is the position of a living being, its relation to the experience it lives in as a totality, that gives the environment meaning as conditions of existence" (ibid, 70). While the living being is never autonomous from its environment, it is uniquely meaning-making and meaning-giving with respect to its environment. Vital normativity, then, is the motive force of life's tendency toward individuation—not in the sense that it renders the organism independent of its environment or of external constraint, but rather in the sense that it forms the living being as a constellation of preferences, which *condition* its relationship to its environment and its orientation to external constraints. It is these evaluatively normative characteristics of the organism that make the organism, descriptively, what it is. Moreover, it is the *flexibility* and *creativity* of these regimes of preference and exclusion that Canguilhem identifies most fully with life and with health.

Vital normativity, 'in the fullest sense,' thus emerges as a generative activity from which arise both new descriptive and evaluative norms, and new organisms. Muhle's analysis, though, highlights not only the *creative* capacities of generative normativity, but also its *transgressive* tendencies: "only in its deviation from the norm," she writes, "can life be normative, that is, produce new norms that are for their part directed toward a new, provisional normality. Normativity consists in 'breaking norms' (*faire craquer les norms*)" (Muhle 2014, 5). The question thus arises of how the generation of norms by living beings can be enacted through their transgression of norms. Muhle continues: "Only against the background of such a creative power

is an inner, yet ever precarious equilibrium possible: normality is based on normativity" (Muhle 2014, 5). The equilibrium between organism and environment that is produced through this process, then, is of a higher order than a 'normal' standard—it is an equilibrium of persistent, successive regeneration, rather than the maintenance of a constant state. The 'normal' organism is *consistently* productive of new constellations of normative relations. As we saw above, the healthy organism responds to its encountering of new environmental conditions by developing new descriptive states—e.g. decreased blood volume and increased red blood cell concentration—as well as new preferences—e.g. a love for hiking in the fresh mountain air.

Canguilhem's account of normativity 'in the proper sense,' 'in the vital sense,' or 'in the fullest sense' as the breaking of existing norms, and the generation of new ones, is perhaps the most original and productive aspect of his extended analysis of the concept. His placing of normativity into contact with life reveals that normativity is constituted by the double movement of the transgression of norms and the generation of new ones, not merely stipulatively or semantically, but in a deeper ontological and conceptual sense. Vital normativity is normativity *in the fullest sense*, and vital normativity is, in the fullest sense, generative—it is characterized by the production of new normative constellations.

In this chapter, I have distinguished and defined two primary modes of normativity, descriptive and evaluative, and suggested their mutual origin in life. From Goldstein's and Canguilhem's contributions to philosophy of medicine, I have derived an account that emphasizes the first-person perspective of the individual living being in relation to its environment, from which both embodied preferences, and the investment of the environment with meaning through qualitative experience, arise and form the basis of vital normativity. I have also proposed, with help from Muhle's reading of Canguilhem, that the living being is formed by normativity just as

normativity is formed by the living being. I introduced the concept of generative normativity to describe the capacity of living beings to generate *new* norms, both descriptive and evaluative.

I shall return to the concept of vital normativity, and its implications for social normativity, in the fourth and fifth chapters of this thesis. The distinctions between the three modes of normativity I have distinguished will remain significant to the discussion, but so will their *ambiguity*. I will reveal how descriptive norms, evaluative norms, and the confusion between them, have been implemented in various venues relating to contemporary social justice movements. I will make the case for the concept of generative normativity as the grounding of an alternative recasting of these issues. Before I move on to discuss the implications of vital normativity for social normativity, though, I will further ground the concept of vital normativity itself: first, by sketching a through-line from the account of vital normativity articulated in this chapter to historical and contemporary philosophical approaches to life, and second, by turning the conceptual resources developed thereby toward a justification of my preoccupation with life.

Chapter 2

"*An Unforeseeable Creation of Form*:" Vital Normativity in Philosophies of Life

In Chapter 1, I introduced the idea that normativity is co-implicated with life. In this chapter, I contextualize this claim in the history of philosophy. The distinction between *evaluative* and *descriptive* normativity continues to be important for my analysis, and the ambiguity between them is also a central problem. I will suggest in the Chapter 4 that a turn to *generative* normativity provides a possible solution to this problem. First, though, I want to convey a deeper sense of where, in philosophy, we stand. I have the writerly misfortune of finding that the proposal from which the project of this thesis arises is self-evident. I run the risk of taking for granted that living beings are the unique site of normative activity, and that normativity thus depends on life. I also find life to be a transparently fascinating subject, and a productive problem, for philosophy. Of course, these are predilections that my readers may or may not share.

My goal in this chapter, then, is to demonstrate that the main insights of Chapter 1—that is, the co-implication between life and normativity, the ambiguity between descriptive and evaluative normativity, and the conceptual potential of generative normativity—can be found not only in an alcove of philosophy of medicine that concerns itself explicitly with these matters, but also in the history of philosophy more broadly. Indeed, I intend to demonstrate that we can also trace in several formative and influential philosophical theories of life the beginnings of a theory of vital normativity. As in Chapter 1, this theory of vital normativity is complex; it includes invocations of both descriptive and evaluative normativity, and often turns on the ambiguity between them. It also suggests, at times, the possibility of generative normativity, though this possibility is never fully realized in these theories. In the first half of this chapter I identify a

persistent association of life with holism and individuality; in the second half, I identify a persistent association of life with organization and teleology. I argue, in both sections, that these conceptual associations also constitute early sketches of vital normativity.

I. *Individuality, Holism, and Vital Normativity*

Individuality entails the separability and non-divisibility of certain kinds of material bodies. Holism implies the recognition of wholes as 'more than the sum of their parts.' This describes an internal relationship between parts and whole such that neither can be understood in isolation from the other. Whereas individuality characterizes living beings' *external* relationship to and differentiation from other beings, holism characterizes their *internal* relationship and differentiation within themselves. These two ideas are often intertwined in and with theories of life; indeed, a number of theorists highlight both as fundamental to the existence of living beings.

Moreover, I will argue that these two concepts together are co-implicated with vital normativity. What I call 'descriptive normativity' characterizes conditions as typical or atypical for members of an aggregate of individual beings; both the *holism* of living beings, and their *individuality* (or at least their tendency toward individuation), are thus co-implicated with descriptive normativity. This is so for two reasons: first, as we saw in the Chapter 1, it is from the perspective of *individual* members of an aggregate that conditions can be classified as typical or atypical; the external relationship between individual and aggregate is necessary to the very concept of typicality. Second, the *holism* of these individual beings is also necessary to determining the typicality of conditions. As we also saw in Chapter 1 (recall the glycosuria and altitude examples), the whole being must be analyzed in internal relation to itself over time in order to determine whether a given condition is normal or abnormal for it.

What I call 'evaluative normativity' characterizes conditions as better or worse from the perspective of individual beings. As we saw in Chapter 1, the discriminatory capacity of the living being constitutes the perspective from which its surrounding conditions are evaluated as beneficial or harmful, better or worse. This evaluation is undertaken both in terms of the *holistic* internal relationship of the living being with itself, and in terms of its *individual* relationship to its environment. Both the holism of living beings, and their tendency toward individuation, are thus co-implicated with evaluative as well as descriptive normativity. In this section, I review several influential accounts of the co-implication of life with individuality and holism: Aristotle's, Spinoza's, and, in particular, Bergson's. I make the case that vital normativity, in both the descriptive and the evaluative mode, is entailed by each of these accounts.

I.a. *Aristotle: The Living Being as a Functional Composite*

Aristotle's *De Anima* (or "On the Soul") begins in Book I with an outline of the questions to be resolved:

> First, no doubt, it is necessary to determine in which of the *summa genera* soul lies, what it *is*; is it a 'this-somewhat,' a substance, or is it a quale or a quantum, or some other of the remaining kinds of predicates which we have distinguished? Further, does soul belong to the class of potential existents, or is it not rather an actuality? […] We must consider also whether soul is divisible or is without parts, and whether it is everywhere homogeneous or not (Aristotle 1984, 402a24-402b2).[25]

The first set of questions concerns what kind of entity soul is: whether it is a concrete particular, a kind of substance, a quality or a quantity. The second set concerns the degree of actuality of the soul: whether it is actual or merely potential. The third set concerns the homogeneity and divisibility of the soul. A review of contemporary thinking on these issues in Book I leads Aristotle

[25] Aristotle, *The Complete Works of Aristotle*, ed. Jonathan Barnes (Princeton: Princeton University Press, 1984).

to conclude that the soul, while it acts as a form for bodies that *are* potentially divisible, is an actual substance that is not, in itself, divisible. The soul, then, is an *individual*.

This determination is followed, in Book II, by a discussion of three kinds of substance: form, matter, and composites, which are constituted by form as their actuality, and matter as their potentiality (Aristotle 1984, 412a9-11). For Aristotle, living beings are a kind of composite body, distinguished from other such bodies by their capacities for "self-nutrition and growth and decay" (Aristotle 1984, 412a13-16.) The soul is the form of the kind of composite body that is (at least potentially) *living*, while the living body is the reciprocal embodiment of the soul (Aristotle 1984, 412a20-21). Aristotle holds that the fundamental capacities of living bodies such as movement, nutrition, growth, and decay "are produced by the soul," while perception and intellect "belong" to it (Aristotle 1984, 411a25-29). Importantly, these capacities are associated not with the soul independently, but rather with the *composite* of body and soul. For Aristotle, this composite can be properly comprehended only *as an indivisible whole* and not through one of its aspects alone:

> That is why we can dismiss as unnecessary the question whether the soul and the body are one: it is as though we were to ask whether the wax and its shape are one, or generally the matter of a thing and that of which it is the matter. Unity has many senses (as many as 'is' has), but the proper one is that of actuality (Aristotle 1984, 412b5-9).

The living body, a composite of body as potentiality and soul as actuality, is *unified by* the soul, but not *reducible to* it. For Aristotle, the soul is to the living body as the shape of the wax is to the wax; the wax could take on a *different* shape, but it cannot continue to exist without taking on *any* shape. In this sense, the wax and the shape of the wax are inseparable; the wax is unified and actualized by its shape. Likewise, on Aristotle's account the soul, by unifying and animating the body, actualizes it as living. Soul and body are thus best conceived of as *aspects* rather than *parts* of the composite they constitute, a body unified, animated, and actualized by the soul. Both

individuality and holism are conceptually necessary to this unity: a living body is a concrete particular, an individual that can only be comprehended as a whole.

These twin concepts play a crucial role in the comprehension of other relations as well. Aristotle soon explains that the living body is a body composed, not only of the *aspects* of actuality and potentiality, form and matter, but also of *parts* called organs (Aristotle 1984, 412b5). These organs bear a relationship of correspondence to one another, and to the living body as a whole, that bestows on each its unique functional essence:

> Suppose that the eye were an animal—sight would have been its soul, for sight is the substance of the eye […], the eye being merely the matter of seeing; when seeing is removed the eye is no longer an eye, except in name—no more than the eye of a statue or of a painted figure (Aristotle 1984, 412b18-21).

For Aristotle, sight is the form of the eye just as soul is the form of the living body; sight is the actualization of the material potentiality of the eye.[26] As above, this requires a strong correspondence between part and whole: in order for sight to be functional, the eye must be a functional part of a seeing body. The organ cannot be comprehended outside the context of the whole living body.

The relationship of parts to whole that constitutes the functionality of each organ, meanwhile, also constitutes the living body as a functional individual—an embodied unity that cannot be divided while remaining what it is. Aristotle continues: "we must now extend our consideration from the parts to the whole living body; for what the part is to the part, that the whole faculty of sense is to the living body as such" (Aristotle 1984, 412b22-24). As sight is the form of the eye, the 'whole faculty of sense' is the form of the living body. The faculty of sense, then, appears to be analogous to the soul of the living body; as the soul unifies, animates, and actualizes

[26] It's important to note that while the potentiality of the eye is not always actualized in sight, it is a potentiality of the eye nonetheless. A non-seeing eye is still an eye, and a living body without sight—or, indeed, without an eye—is still a living body. An eye, however, is not an eye unless it is part of a living body.

any composite body, the sense faculty unifies, animates, and actualizes the organ to which it relates, thus constituting the living body just as sight constitutes the eye. This correspondence between part and whole serves to further cement a holistic account of the living body as composite body, while also elaborating Aristotle's theory of individuality.

Given the conceptual schema sketched out in Chapter 1, we can interpret the faculty of sense as also constituting the 'discriminatory capacity,' or 'dynamic polarity,' that serves as the basis of vital normativity. Life's fundamental capacities of movement, nutrition, growth, and decay are all conditioned by this capacity of sense, which determines the living body's perspective on its environment. A living body, as a being animated by these faculties of sense, has a certain perspective (or 'polarity'): it perceives stimuli as beneficial or harmful, edible or inedible, assimilable or unassimilable. Perceiving conditions as beneficial or harmful, the living being responds accordingly, engaging in preferential behaviours that help to shape it as an organism, and shape its environment in turn.

Aristotle's philosophy of life, then, also accounts for the emergence of vital normativity. First, as we saw in Chapter 1, the discriminatory capacity that emerges with the living being—for Aristotle, through the faculty of sense—is a precondition for the emergence of normativity in either mode. Second, Arisotle's account of the holism and individuality of the living being also constitutes an account of the emergence of descriptive normativity. Holism characterizes the functional unity or individuality of the living body: each organ derives its form from the capacity *typically* afforded by it, which serves as the descriptive norm for that organ. In the case of the eye, this capacity is sight. Typical eyes, in the context of a functioning body, can see. Descriptive normativity is thus embedded in the very compositeness of the living being, which comprehends its holism and its individuality. Finally, this account of the holism and individuality of the living

being constitutes an account of the emergence of evaluative normativity as well. The discriminatory capacity that arises, for Aristotle, with the faculty of sense also enables its evaluative perspective on its environment—its identification of surrounding conditions as beneficial or harmful—which in turn helps to shape it as an individual. The faculty of sense, particularly through the capacities of movement and nutrition, enables the organism to develop and act on its evaluative preferences with respect to its environment. Thus vital normativity is intertwined with Aristotle's account of the compositeness, holism, and functional unity of the organism.

I.b. *Spinoza: The Regeneration of the Individual*

Many of the central arguments of Spinoza's *Ethics* also turn upon the twin concepts of individuality and holism. Spinoza, like Aristotle, approaches these concepts by way of the compositeness of substance. For Spinoza, this compositeness consists in the fundamental unity of extension and thought, or body and mind. For Spinoza, substance is both universal and singular; thus substance must be composite in order to comprehend individuality and difference. In Spinoza's metaphysics, in contrast with Aristotle's, *all* substance is composite. Like Aristotle, however, Spinoza makes sense of compositeness by way of aspects, which he calls 'attributes'—most fundamentally, thought and extension—that are not *parts* or *kinds* of substance whose interaction must be explained by some third principle, but rather facets of a singular substance whose individuality is then explained through further elaboration of Spinoza's metaphysics.

In the *Ethics* Part II, "Of the Mind," Spinoza's central argument concerns the unity of body and mind. He states that "the object of the idea constituting the human mind is the body, or a

certain mode of extension that actually exists, and nothing more" (Spinoza 1994, IIP13).[27] Thus the mind and the body, which are themselves composites, also constitute a composite body together. For Spinoza, the compositeness of bodies is iterative: composite bodies are *composed of* bodies, and in turn *compose* other bodies. He explains the physics governing compositeness as follows:

> When a number of bodies, whether of the same or of different size, are so constrained by other bodies that they lie upon one another, or if they so move, whether with the same degree or different degrees of speed, that they communicate their motions to one another in a certain fixed manner, we shall say that those bodies are united with one another and that they all together compose one body *or* individual, which is distinguished from the others by this union of bodies (Spinoza 1994, IIA2Def).

Spinoza accounts for the unity of composite bodies through the communication of motion and rest between constituent bodies. For Spinoza as for Aristotle, the form of a composite body is determined by the relationship between its constituent bodies. For Aristotle, this relationship is constituted by function; for Spinoza, it is constituted by proportions of motion and rest. A certain proportion of motion and rest between constituent bodies is a necessary condition for the unification of the composite body and must be preserved in order for the body to survive (Spinoza 1994, IVP39).

Spinoza's account of individuality supports his assertions concerning the unity of body and mind. Individuals are not fully separable from all substance, but rather, as philosopher Hans Jonas puts it, "distinct occurrence[s] in the eternal self-unfolding of infinite being" (Jonas 1965, 47).[28] Spinoza specifies as follows:

> If, of a body, or of an individual, which is composed of a number of bodies, some are removed, and at the same time as many others of the same kind take their place, the individual will retain its nature, as before, without any change of its form (Spinoza 1994, IIP13L4).

[27] Benedict de Spinoza, *Ethics*, ed. & trans. Edwin Curley (London: Penguin, (1677) 1996).
[28] Hans Jonas, "Spinoza and the Theory of Organism," *Journal of the History of Philosophy* 3, no. 1 (1965): 43-57.

Individuality, on this account, is determined not by discrete materiality or separability (which the universality and singularity of substance would disallow), but by the persistence of form throughout alteration of matter. This persistence of form, meanwhile, is determined by those very proportions of motion and rest with which Spinoza associates the unity of individuals. Growth or diminution within the individual (ibid, L5), movement of parts of the individual (L6), and locomotion of the entire individual (L7) (recall that these are also the Aristotelian capacities of living beings) is accounted for without implying the destruction of the individual.

This account of individuality can be translated, with some interpretive effort, into a Spinozist theory of the living being. While Spinoza does not offer an explicit theory of living beings or of life, much can be derived from his discussion of substance in general and individuality in particular. Jonas observes that the implications of Spinoza's metaphysics for a philosophy of living beings "are seldom noticed" (Jonas 1965, 45), due in part to the fact that "it is under the title of 'individuality,' i.e., in considering what makes an individual, and not under the title of 'living things' in particular, that Spinoza treats the phenomenon of organism" (ibid., 47). While Aristotle's explicit theory of living beings allowed him to appeal to the functions of constituent organs in the context of the living body, the absence of a theory of life in Spinoza forces us to look more closely at the physics of composite bodies for a relationship between part and whole.

Jonas' gloss on Spinoza's discussion of individuality is as follows:

> If it is the […] pattern of composition and function in which the individuality of a composite consists, then its identity is not bound to the identities of the simpler bodies of which it is composed; and the preservation of that identity through time rests with the preservation of the pattern rather than of the particular collection presently embodying it. The identity of a whole is thus compatible with a change of parts; and such a change may even be the very means by which the identity of certain individuals is sustained (ibid., 48).

Here Jonas further clarifies Spinoza's account of the relationship between holism and individuality. At first glance, particularly in Jonas' claim that the identity of a composite "is not bound to the identities of the simpler bodies of which it is composed," this relationship might appear to be characterized by functional independence rather than holism. If the identity of a whole is not bound to the identity of its parts, parts and whole would seem to enjoy independent existence. But this interpretation would contradict Spinoza's approach to the unity of universal substance. Rather, it becomes clear that under Spinoza's physics of composite bodies the interdependence between parts and whole is so *structurally* fundamental that the concept of *teleological* function (as embraced by Aristotle) is rendered superfluous. One need not appeal, as in Aristotle, to the capacity of sight to justify the existence of the eye; the eye is simply sight, embodied. This way of thinking allows for both the unity of organs and their plasticity; whatever sees, no matter its material constitution, is an eye. As long as a material threshold is maintained, the identity of the whole remains the same throughout significant alteration to its parts.

Jonas concludes above by suggesting that "such a change may even be the very means by which the identity of certain individuals is sustained." This carries us from a preoccupation, in Aristotle, with the functional teleology of organs as parts of living beings, and thus of living beings themselves, toward the beginnings, in Spinoza, of a theory of the principle of life. Jonas expresses this nascent theory by way of a metaphor:

> As, in a burning candle, the permanence of the flame is a permanence, not of substance, but of process in which at each moment the "body" with its "structure" of inner and outer layers is reconstituted of materials different from the previous and following ones, so the living organism exists as a constant exchange of its own constituents, and has its permanence and identity only in the continuity of this process, not in any persistence of its material parts. This process indeed is its life (Jonas 1965, 47).

Again, Spinoza's unique account of the physics of composite bodies, here interpreted as the physics of *living* bodies, allows for an immanently structural, rather than teleologically functional,

account of how such bodies exist and persist. In the process Jonas describes by analogy with a burning candle, the matter of the living body is continually regenerated while the structure of the body remains the same. This entails a 'continuous exchange' that constitutes a persistence of process rather than substance. As Jonas describes it, this structural account of the being of living beings highlights their capacity not only for growth, movement, and nutrition (as in Aristotle), but also for limited, though continuous, regeneration. On Jonas' interpretation of Spinoza, this process of regeneration is definitive of life.

The process of regeneration also distinguishes living bodies from one another insofar as the form of each is regenerated and self-perpetuated without thereby implying their separability from universal substance. This mode of individuality necessitates, in turn, a holistic relation between composite bodies and their constituent parts that is unique to living beings. As Jonas puts it:

> For the first time in modern speculation, an organic individual is viewed as a fact of wholeness rather than of mechanical interplay of parts […] Substantial identity is thus replaced by formal identity, and the relation of parts to whole, so crucial for the nature of organism, is the converse of what it is in the mechanistic view (ibid., 50).

Thus Spinoza's holistic approach to the unique individuality of the organism is also a repudiation both of a teleological account of the organism (through the shift from function to structure as the explanation of unity), and of a mechanistic account of the organism (through the shift from defining the whole as a sum of its parts to defining the parts by reference to the form of the whole).

Spinoza's account of holism and individuality as these concepts relate to living beings can also, like Aristotle's, be interpreted as an account of the emergence of vital normativity. An individual, as composite body, is defined both by the particular proportions of motion and rest that characterize its inner environment, and by the unique proportions of motion and rest that make up its relationships to other beings in the external environment. These proportions of motion and rest

define its individuality, though they do not separate it from universal substance. The proportions of motion and rest that ensure the persistence of individuals[29] also establish a *descriptive* norm (a typical mode of existence) for each individual.

When this account of holistic individuality is translated into a nascent theory of life, it becomes clear that the living being is defined by structural rather than functional holism. The individual is a cohesive whole by virtue of the stable proportions of motion and rest (both within the individual and between it and other bodies), rather than by virtue of its functional adequacy. This, in turn, allows for an immanent rather than teleological conception of life, according to which the organism is constituted by, and persists by means of, an exchange of constituent parts with its external environment. Life in this conception consists of continual regeneration, or the unceasing production of each individual as a cohesive whole. This immanent, structural account of the holism of the organism identifies the maintenance of its specific proportions of motion and rest as the necessary condition of its persistence. In this way, each individual's defining proportions of motion and rest also characterize its *evaluative* perspective on its environment. What is beneficial to the organism is the maintenance of these proportions of motion and rest, and what is harmful is their cessation. Thus the compositeness of all substance, its individuation in terms of specific proportions of motion and rest, and its continual regeneration of these specific proportions in the persistent form of living beings also constitutes an early account of vital normativity.

[29] Another interpretation might be that the persistence of an individual maintains a certain proportion of motion and rest. I interpret IIA2Def to imply that the right proportion of motion and rest is fundamental, but the causal relationship could go either way.

I.c. *Bergson: Duration, Indetermination, and the Movement of Individuation*

Like the theorists we have reviewed thus far, Henri Bergson presents individuality and holism as deeply co-implicated with life. For Bergson, this co-implication between life, holism, and individuality relies on a more fundamental co-implication: that between life and the temporal frameworks of 'duration' and 'indetermination.' This section will thus begin by covering these frameworks in detail before delving into their vital relation to individuality and holism.[30]

In *Time and Free Will*, Bergson sets out to rectify two main conceptual confusions that lie at the heart of many philosophical problems: between quality and quantity, and between temporality and extension. In order to help resolve these confusions, he distinguishes between two kinds of multiplicity: quantitative multiplicity, which applies primarily to material objects, and qualitative multiplicity, which applies primarily to states of consciousness (Bergson [1889] 2001, 87).[31] As Bergson sees it, problems often arise when we confuse or conflate these two kinds of multiplicity—specifically, when we treat qualitative multiplicities like quantitative ones.

Bergson argues that states of consciousness cannot be quantitatively or numerically measured, or even conclusively distinguished. Conscious states flow into one another, such that the only distinctions between them are qualitative and temporal; they cannot be represented via *quantitative* multiplicity without obscuring their true nature. To attempt to account for conscious states quantitatively would require that we conceive of them through "relations of container and contained" (Bergson [1889] 2001, 2). These relations exist between numbers (e.g. three 'contains' two and one), but not between conscious states (though I may be both sad and angry, my anger

[30] Experienced readers of Bergson may note that in developing the conceptual apparatuses I use in my own work I often build *between* Bergson's major works (most significantly, *Time and Free Will, Matter and Memory,* and *Creative Evolution*). As these same readers may recall, Bergson explicitly discouraged this approach, insisting that each of his works should be read independently. I find, however, that developing his major concepts over several works adds to their depth and utility to such an extent that I'm inclined to ignore, with apology, his clear instructions on the matter.
[31] Henri Bergson, *Time and Free Will*, trans. F.L. Pogson (Mineola: Dover Publications, (1889) 2001).

does not *contain* my sadness, nor can my sadness be subtracted from my anger). To distinguish conscious states, meanwhile, would require a clear knowledge of their boundaries which, as the last example also demonstrates, it is not possible to achieve. Despair turns to hope not as a speedometer ticks over the kilometers, but by imperceptible degrees—as Bergson puts it, states of consciousness "melt into one another" (ibid., 107).

In order to capture the distinctiveness of *qualitative* multiplicity, Bergson introduces what becomes a central concept in his work: the concept of *duration*—concrete, lived time. In contrast with the quantitatively successive moments of 'abstract time,' duration is qualitatively, simultaneously multiple, and "forms both the past and the present states into an organic whole" (Bergson [1889] 2001, 100). To illustrate the concrete experience of duration, Bergson offers the example of hearing the strokes of a clock—which, while they must be counted to be comprehended, must often be *qualitatively* synthesized for counting to be possible:

> The hour strikes on a neighboring clock, but my inattentive ear does not perceive it until several strokes have made themselves heard. Hence I have not counted them; and yet I have only to turn my attention backwards to count up the four strokes which have already sounded and add them to those which I hear. […] In a word, the number of strokes was perceived as a quality and not as a quantity (Bergson [1889] 2001, 127).

This example illustrates the distinctiveness of duration. The successive strokes of a clock—a quantitative representation of abstract time—*could* be interpreted as spatially arranged along a number line and then 'counted'; indeed, perhaps this is what one does when one attends to the strokes from the beginning. But Bergson specifies that he "does not perceive it until several strokes have made themselves heard," and thus insists that "I have not counted them." Rather, his account of turning one's attention backwards reveals a more fundamental experience of succession that *underlies* our ability to count the strokes.

At the moment when Bergson's attention is turned to the strokes of the clock, he projects it back in order to synthesize his qualitative experience of the first four strokes with the strokes he continues to hear, "melted into one another in such a way as to give the whole a peculiar quality, to make a kind of musical phrase out of it," rendering a complete impression of the event (Bergson [1889] 2001, 127). This analogy with a musical phrase alerts us to the prevalence of such experiences. When I correctly interpret a French phrase spoken by my partner to our infant without seemingly having heard or translated it, or when I feel the water of Howe Sound at the beach near our house as especially cold on a hot day, I experience these present events as imbued with, or coloured by, the immediate past. The context is not only necessary to interpret the experience, but *part of* the experience itself. It is no accident that I find spoken French more difficult to comprehend when it is not embedded in a context of recalled and anticipated actions and events.[32]

Bergson broadens and generalizes this insight to produce his concept of lived time or 'duration.' He identifies duration as 'succession without distinction,' 'mutual penetration.' The particular cold of the Sound on my skin when I have just been warmed by the sun is inseparable from the sun's lingering warmth. Duration, likewise, is "an organization and interconnection of elements, each one of which represents the whole, and cannot be distinguished or isolated from it except by abstract thought" (Bergson [1889] 2001, 101). In duration, each element "represents the whole" because each can only be meaningfully interpreted, like the strokes of the clock, in the context of all the others. Duration serves as the background against which the above conceptual

[32] This recalls—but should not be conflated with—Husserl's account of the fundamental capacity of temporal synthesis in *The Phenomenology of Internal Time Consciousness.* For Husserl, this synthesis consists of 'protention'—our anticipation of the future as it informs our perception of the present—and 'retention'—our assimilation of the past into present experience (Husserl [1928] 1964). Husserl's insight is that our perception and comprehension of the present is only made possible by this incursion of the immediate future and the immediate past—the trajectory of an event is as important to perception as its occurrence. The distinction to draw between this account and Bergson's is that while for Husserl, protention and retention involve the conscious synthesis of successive, distinct moments, Bergson's concept of duration identifies these moments as interpenetrating and without distinction.

confusions—between quantity and quality, temporality and extension—are resolved. It is time experienced in its true form, as an intensive, qualitative multiplicity of interpenetrating moments.

Through this explication of the concept of duration, Bergson demonstrates the ontological priority of qualitative experience. He does not, however, explicitly attribute the capacity for quantitative analysis to this prior qualitative faculty. It becomes clear upon reconsideration of the clock example from the conceptual perspective of duration, though, that even when one *is* attentive at its commencement, comprehension of an event unfolding over time requires the capacity to synthesize successive moments into an experiential whole. Just as my interpretation of a French phrase spoken by my partner to our infant is informed by my interpretation of its context as shaped by present as well as recalled and anticipated experiences, my *quantitative* perception of water temperature is informed by the temperature of my skin—or more precisely, by the differential between my skin temperature and the temperature of the water. In this way, it is also qualitative multiplicity—specifically, the synthesis of our experiences in duration—that makes possible our perception of quantitative multiplicity. This demonstrates the ubiquity, and the necessity, of duration: duration is the synthetic framework that makes both time and experience possible.

Bergson first presents duration as a capacity of consciousness—specifically conscious states and sensation. "Pure duration," he writes, "is the form which the succession of our conscious states assumes when our ego lets itself *live*, when it refrains from separating its present state from its former states" (Bergson [1889] 2001, 100, emphasis in original). This seems to suggest that duration is a capacity of consciousness—indeed, as implied by the verbs 'let' and 'refrain,' one over which we exert deliberate control. It soon becomes clear, though, that the synthetic interpenetration of duration is not merely a feature of conscious states, but rather the true character of temporality, expressed through consciousness. Through its incorporation of qualitative

multiplicity—which integrates multiple sensations and conscious states—the concept of duration reveals temporality as its own inviolate category of existence. In this way, the significance of duration reaches beyond (or below) consciousness to provide an ontological basis for difference and change:

> Pure duration might well be nothing but a succession of qualitative changes, which melt into and permeate one another, without precise outlines, without any tendency to externalize themselves in relation to one another, without any affiliation with number: it could be pure heterogeneity (Bergson [1889] 2001, 104).

If duration is not merely a capacity of consciousness but rather the true character of temporality, the question of its origin arises. While the full picture does not emerge until later in Bergson's oeuvre, a sketch of the theory begins to appear in *Time and Free Will*. Bergson offers the following interpretation of the clock example above: "Might it not be said that, even if the notes succeed one another, yet we perceive them in one another, and that their totality may be compared to a living being, whose parts, though distinct, permeate one another just because they are so closely connected?" For Bergson, we perceive the notes 'in one another' insofar as we perceive them as a qualitative whole, conveying meaning through their interrelation. Duration, then, constitutes a holistic correspondence of events or moments such that they can be perceived only in relation to the whole, just as organs can be perceived only in relation to the living being of which they are a part. Thus Bergson connects the holistic account of duration as outlined above with a holistic account of the organism. This connection is not just an analogy: as we shall shortly see, it is life that brings about the conditions that make duration possible.

In *Matter and Memory*, Bergson sets out to articulate an intersection between mind and matter, body and spirit: two categories that, he argues, are falsely separated by traditional philosophy. He argues that philosophy, vacillating unceasingly between materialism and idealism, tends to concern itself with the conditions of possibility of *being* and of *being conscious*, at the

expense of understanding what unites them—the conditions of possibility for *living*. "Besides consciousness and science, there is life. Beneath the principles of speculation, so carefully analyzed by philosophers, there are tendencies of which the study has been neglected, and which are to be explained simply by the necessity of living, that is, of acting" (Bergson [1896] 1988, 198).[33] Bergson's path to mediating between materialism and idealism lies between perception and action.

For Bergson, mind and matter are fundamentally, ontologically co-implicated. This co-implication occurs at the intersection of perception and action, mediated by memory. Memory, then, is the conduit of the intersection between mind and matter. Bergson distinguishes between two modes of memory. 'Pure memory' or 'memory par excellence' is "embraced in an intuition of the mind," and exists in duration. 'Habit interpreted by memory' or 'somatic memory' takes place within a definite period, namely the time it takes to rehearse or repeat a previous action (Bergson [1896] 1988, 91). When we recall a general concept, we engage in 'memory par excellence,' which produces a sense of the concept as a whole; in recalling a specific lesson (especially a somatic one) we appeal to habit, engaging in a reenactment of the lesson as learned. The former process can be undertaken in a moment or over a long period—that is, it exists in duration, or qualitative, lived time. The latter process is completed in the time it takes for us to repeat the lesson, meaning that it has an extensive, quantitative temporality. Somatic memory, like a lesson learned by heart, is "acquired by a repetition of the same effort," and reproduced in the same way (Bergson [1896] 1988, 81).

Bergson associates *both* types of memory with the fundamental character of living beings. The association of life with duration—or memory par excellence—was approached in the last

[33] Henri Bergson, *Matter and Memory*, trans. N.M. Paul and W.S. Palmer (New York: Zone Books, (1896) 1988).

section, and I will return to it shortly. With regard to somatic memory, Bergson emphasizes "the tendency of every organism to extract from a given situation that which is useful, and to store up the eventual reaction in the form of a motor habit, that it may serve in other situations of the same kind" (Bergson [1896] 1988, 167). An organism, according to this description, is the kind of material object that differentiates between the beneficial and the harmful and incorporates this distinction into its disposition toward the conditions it encounters. In this regard, Bergson's account of somatic memory anticipates Goldstein's and Canguilhem's accounts of the discriminatory capacity of the living being—defined by Goldstein as the basis of 'ordered behaviour,' and by Canguilhem through 'dynamic polarity.' For Bergson, the discriminatory capacity of the organism is expressed in particular through the temporal translation of perception into action: "Every perception is prolonged into nascent action," writes Bergson of somatic memory, "and while the images are taking their place and order in this memory, the movements which continue them modify the organism and create in the body new dispositions toward action" (Bergson [1896] 1988, 81). The differentiation between the beneficial and the harmful, and the incorporation of corresponding dispositions into the living body, is thus a fundamental activity of living beings. Moreover, for Bergson, these dispositions serve as the agent of translation between perception and action.

Bergson's temporal account of life begins with this close connection between perception and action. According to Bergson, there is no temporal distance between action and reaction in mechanical objects. This does not imply that a mechanically determined reaction cannot follow after an interval of time—rather that reaction, whenever it occurs, is predetermined by the action and the structure of the object. A toaster, for example, may allow different intervals of time to elapse (or, if defective, fail to do so) between the pressing of the lever and the popping of the toast,

but this interval is determined by the setting one chooses. With the emergence of organisms, in contrast, there emerges a temporal interval—an interval of hesitation or 'indetermination'—between perception and action, stimulus and response, during which the response to the stimulus is suspended. This interval is only possible in the context of duration or 'lived time,' in which the qualitative multiplicity of each moment permits the coexistence of divergent possibilities. Perception emerges at this point, identifying what is useful or harmful to the organism—that is, what actions the organism can take in response to what is beneficial or harmful. These potential actions impress themselves upon the organism as 'invitations,' not injunctions, to action; it is up to the organism to determine whether and how to act.

In this way, life introduces into the world a new temporal phenomenon, disrupting the steady flow of pre-organic time by means of new and unforeseeable temporal interjections. Duration is thus fully realized in indetermination (Bergson [1896] 1988, 23). Within the interval of hesitation, in turn, exists an opportunity for the organism to *choose* which course of action will be pursued—this interval constitutes the emergence of a capacity for freedom, however primitive, on the part of the organism. Freedom, which arises through indetermination, is thus first made possible by the temporal framework of duration.

The emergence of perception is conditioned both by this new temporal framework of duration and indetermination, and by a new way of relating to events. The organism, as it develops the capacity of perception, also develops a set of embodied preferences that condition the way it will respond to the stimuli it encounters. The emergence and endurance of life depend upon the organism's investment in the outcome of the events that affect it. Under the temporal framework of duration and indetermination, though, stimulus does not lead immediately to response, or perception to action. What designates a being as living is that its response to any stimulus is not

entirely determined by that stimulus or its dispositions toward it. The organism determines whether and how to respond to stimuli, even if a certain response is necessary to its survival.

Matter and Memory, then, makes clear the role of living beings in developing the temporal framework of duration and indetermination. It remains for Bergson to fully explicate his theory of life. *Creative Evolution* sets out to mediate between mechanism and teleology in evolutionary theory and articulates in the process a complex and original theory of life. The text raises the question of life's ontological continuity with matter, of its relationship to organization, and of its movement toward individuation. It also places the framework of duration and indetermination at the center of life, and introduces a new concept, the *élan vital* or 'vital impetus,' which describes the tendency of life to act on matter and bring forth new forms as solutions to environmental problems, along several divergent lines of development (Bergson [1907] 1998, 96).[34]

Bergson argues that both mechanism and teleology ignore the formative role of the temporal framework of duration and indetermination—mechanism by assuming that effects are already contained in causes, teleology by assuming that causes are brought about by pre-ordained effects (Bergson [1907] 1998, 39). In this way, both dispense with the unique temporality that is co-implicated with life, and thus mischaracterize both life and temporality. Bergson's solution to this dilemma—as well as the connected dilemma between vitalism and materiality—is, as philosopher Alia Al-Saji puts it, to "attempt to articulate the internal relation *and* difference between life and matter while avoiding two theoretical extremes: that of reducing materiality to an epiphenomenon of life and that of positing matter as an external and independent substance" (Al-Saji 2010, 163).[35]

[34] Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (Mineola: Dover Publications, (1907) 1998).
[35] Alia Al-Saji, "Life as Vision: Bergson and the Future of Living Differently," in *Bergson and Phenomenology*, ed. Michael R. Kelly, 148-73. Houndmills: Palgrave MacMillan, 2010.

Duration, as we've seen, is concrete, qualitative, *lived* time, which synthesizes qualitatively distinct moments. It is this synthesis that allows for the emergence of both perception and action. Recalling both the nature of duration and the structure of action, which carries perception (informed by the past) into action in the present, Bergson holds that "it is with our entire past, including the original bent of our soul, that we desire, will and act. Our past, then, as a whole, is made manifest to us in its impulse" (Bergson [1907] 1998, 5). Duration, then, is the agent not only of time-synthesis, but also of the translation of perception into action. Thus, as we've seen, duration along with indetermination creates the ontological basis for difference, change, and freedom.

Time and Free Will made clear the fundamental role played by duration in consciousness; *Creative Evolution* reveals the mark left by duration on matter—specifically living matter. Bergson writes that duration "is the continuous progress of the past which gnaws into the future and swells as it advances" (Bergson [1907] 1998, 4). Duration requires something of enduring materiality to sink its teeth into, to leave its mark upon. This 'something' is the organism. "The organism which lives is a thing that *endures*. Its past, in its entirety, is prolonged into the present, and abides there, actual and acting […] *Wherever anything lives, there is open, somewhere, a register in which time is being inscribed*" (Bergson [1907] 1998, 15-16, emphasis in original).

Bergson's specific application of these statements to organisms may at first seem perplexing, as they would appear to apply to inanimate objects as well as (or perhaps even to a greater extent than) living beings. A mountain, for example, *endures* for longer than the longest-lived sequoia, and the *inscription* of time on its constituent matter (in ridges and valleys rather than tree rings) is even more clear and indelible. The foregoing discussion of the framework of duration and indetermination as enacted by *memory*, however, helps to explain why Bergson takes

'endurance' and 'inscription' to apply uniquely to organisms. An organism, enabled by its capacity for hesitation, is *inscribed* with a history of past choices made, and it *endures* (rather than merely continuing to exist) because it carries its whole past in a way that informs its experience of the present. Wherever organisms exist, so exist duration and indetermination—the organism endures, and is itself the register in which time is being inscribed. The past abides in the present in a distinctive manner for living beings, and duration leaves its mark in a distinctive way on them. Likewise, organisms are distinguished by their capacity for hesitation, which allows them to depart from the determination of mechanical action and reaction.

Life, then, is the *materialization* of the principles of endurance and differentiation—duration and indetermination in the flesh (Al-Saji 2010, 156). This means that neither life nor the temporal framework of duration and indetermination have ontological priority; rather each serves, reciprocally, as condition of possibility for the other. The interval of hesitation that characterizes indetermination is embedded in the qualitative multiplicity that characterizes duration, and both are necessary in order for life to emerge. The living being, meanwhile—as the kind of matter that endures, and on which time is inscribed—is necessary in order for the temporal framework of duration and indetermination to arise.[36] Bergson suggests that "at the root of life there is an effort to engraft on to the necessity of physical forces the largest possible amount of indetermination," (1998, 114), and that indeed "the role of life is to insert some indetermination into matter" (ibid, 128). These last claims suggest Bergson's concept of the *élan vital*, which describes the tendency of life to act on matter in consistent, though developmentally divergent, ways.

As we have seen, indetermination and duration together constitute a temporal framework that provides the fundamental basis of ontological differentiation, change, and freedom. Here we

[36] Readers who have difficulty with this notion of a mutual condition of possibility will, I hope, be reassured by a return to the Bergsonian account of possibility in the second half of the chapter.

see that this fundamental basis is found in the organism. For Bergson, the expansion of indetermination into freedom is reflected in the movement toward individuation, of the organism and of the species. As an organism is born, matures and dies, as species emerge and die out, there occurs a continual process of creation and elimination—of parts, functions, individuals, and species—that expresses a constitutive openness to change. Bergson offers an analogy:

> Each of us, glancing back over his history, will find that his child-personality, though indivisible, united in itself divers persons, which could remain blended just because they were in their nascent state. […] But these interwoven personalities become incompatible in the course of growth, and, as each of us can live but one life, a choice must perforce be made (Bergson [1907] 1998, 99-100).

This poignant description of the necessity of negation in our self-construction—every choice signifying others rejected, our lives progressively shaped by paths not taken—characterizes at once the expansion of indetermination, the process of individuation, and the continuousness of change that, for Bergson, together constitute life.

Al Saji explains this process as follows: "life is a virtual multiplicity of tendencies or rhythms, at times incompossible. Due to this 'unstable balance of tendencies,' the vital impetus is divided between various directions. In actualization, only some rhythms can come into existence to the detriment of others" (Al-Saji 2007, 196).[37] Similarly, at the supra-species level, the organism is the site of many virtual forms or species, though they are not all actualized, and not all of them persist. The organism, like the child, is a site of many coexisting virtualities, but the continuing process of materialization channels these virtualities into mutually exclusive avenues of actualization or abandonment. The positive orientation of *creativity*—continuous development and the generation of virtualities—exists in opposition to the constraints of the organism's material

[37] Alia Al-Saji, "The Temporality of Life: Merleau-Ponty, Bergson, and the Immemorial Past," *The Southern Journal of Philosophy* Vol. XLV (2007): 177-206.

existence. Therefore, as Al-Saji puts it, "life is at once a continuous vital force and the discontinuous, material sedimentations of that force" (Al-Saji 2007, 196). Species evolve continuously, but some organisms survive and reproduce while others represent reproductive cul-de-sacs. Life, for Bergson, is defined both by the forward movement of its development and by the material traces of its passage—including discarded material pathways—that this development leaves behind.

Bergson also associates this accumulation of discarded alternatives—or, more importantly, the material trace that the rejection of these alternatives has left on the living entity—with the trajectory of evolution. He argues that every species, over the course of its evolution, follows a course of changes in form that represents solutions to environmental obstacles. *Individual* organisms, then, represent material solutions to problems faced by their *collective* ancestors. Each organism thus serves as a material record both of the obstacles that have been encountered by its ancestors, and of the solutions that have been developed and that the organism itself represents. In this way, organisms are a material expression of the framework of duration and indetermination: "Evolution implies a real persistence of the past in the present, a duration which is, as it were, a hyphen, a connecting link" (Bergson [1907] 1998, 22). It is precisely this 'persistence of the past in the present,' reflected in the concept of duration, that introduces indetermination.

For Bergson, the framework of duration and indetermination is realized not only in the negative movement of natural selection but also a positive orientation toward problem solving on the part of the species, which he identifies as the *creativity* of evolution. This creativity that drives evolution is made possible by the framework of duration and indetermination: "Evolution constitutes, through the unity and continuity of the animated matter which supports it, a single indivisible history" (Bergson [1907] 1998, 37). The indivisibility of history that is reflected in

duration and enacted in indetermination is here reflected in the indivisibility of the organism itself—that is, its movement toward individuality, what Bergson calls 'individuation.'

In Bergson's view, prior to the emergence of living beings, *non-living* matter is not divided into objects (Bergson [1907] 1998, 186). Rather, individual objects are carved out of the flow of matter along an outline of possible action projected onto it by the will of a living body—it is the interests of perception that extract distinct objects out of the flux of matter (Bergson [1907] 1998, 11). Bergson clarifies, however, that "while the subdivision of matter into separate bodies is relative to our perception, while the building up of closed-off systems of material points is relative to our science, *the living body has been separated and closed off by nature herself*" (Bergson [1907] 1998, emphasis mine). The individuation of matter is made possible only by the perceptual projection of living beings; living beings *themselves*, though, are constitutively oriented toward individuation. Their movement of individuation is a tendency that is never completed, however: "individuality admits of any number of degrees, and […] it is not fully realized anywhere, even in man. But that is not a reason for thinking it is not a characteristic property of life" (ibid).

Individuality entails the separability and non-divisibility of material bodies; Bergson holds that *living* bodies in particular are characterized by a (never completed) movement toward individuation. Holism implies the recognition of wholes as 'more than the sum of their parts'—that is, it implies an internal relationship between parts and whole such that neither can be understood in isolation from the other. While Bergson, like Aristotle and Spinoza, does not discuss holism directly, his account of the fundamentality of duration makes such a holistic relationship central to temporality and to life. The concept of duration highlights the fact that discrete experiences are only made possible by this mode of qualitative temporal synthesis, which forges the interrelationships between experiences that render them into a perceptible—and memorable—

whole. Because the meaning of conscious states is altered by their interrelation, duration forges a holistic relationship within consciousness. The framework of duration and indetermination is thus, for Bergson, central to the holism and individuation of the organism. The synthesis of past and present in duration provides a temporal basis for the holism of the organism, as well as determining the conditions of its growth and change and thus its individuation. The insertion of hesitation by indetermination opens up the space of virtuality in which this individuation takes place.

Bergson's association of the individuality and holism of the organism with the framework of duration and indetermination also reveals the co-implication of the organism with vital normativity. Bergson, like Aristotle and Spinoza, identifies the living being as a site of preferential activity. For Bergson, this means that perception emerges and develops into action through the living being's identification of surrounding conditions as beneficial or harmful, and the invitations to action that these conditions thereby constitute. Descriptive normativity, which characterizes conditions as typical or atypical for members of an aggregate of individual beings, begins with an account of what it means to be an individual. For Aristotle and Spinoza, a living being is a composite being whose constitutive intra-relationships define the kind of being it is. With Bergson, we see how individuation is carried out through the vital temporal framework of duration and indetermination. Thus descriptive normativity, on Bergson's account, consists of a temporal orientation that defines the organism in relation to its environment.

This, in turn, is a precondition of evaluative normativity, which characterizes conditions as better or worse from the perspective of individual beings. This evaluation of conditions is enabled by the differentiation introduced by the framework of duration and indetermination. Duration provides the synthesis of experience necessary for the organism to relate evaluatively to its environment; indetermination provides the fundamental basis of differentiation, choice, and

freedom necessary to act on this evaluation. Finally, Bergson's account, in contrast with the two previously covered, begins to suggest a *generative* mode of normativity as well: for Bergson, the tension between environmental obstacles and the *élan vital* is what generates creative solutions to environmental problems. We shall return to this point in the next section.

In the context of each theory of life covered thus far, I have suggested that the co-implication of life with holism and individuality also constitutes its co-implication with vital normativity. Descriptive normativity pertains, first, to the internal relationship of the being to itself; second, to its relationship to its environment; and third, to its relationship to other similar beings. Thus, only an object that can correctly be classified as an individual with a holistic internal relationship has the ontological constitution necessary to admit of descriptive normativity. As we have seen, this object is the living being. Evaluative normativity, meanwhile, pertains to a three-term relationship: between a being and its environment, with reference to third term—the evaluation of environmental conditions as *better* or *worse* from the perspective of that being. Thus, only an object that is a holistic individual, with a relationship to its environment characterized by preferential evaluations that are equipped to identify the *better* and the *worse*, has the ontological constitution necessary to admit of evaluative normativity. As we have seen, this object, too, is the living being. Thus, just as the living being is characterized by holism and individuality, then, it is also characterized by normativity.

II. *Organization, Teleology, and Vital Normativity*

In this section I identify a persistent association of life with organization and teleology, and argue that this also suggests a co-implication between life and vital normativity. Organization—a structured arrangement of parts with relation to a whole—has, along with holism and individuality, often been identified as fundamental to the existence of living beings. There has been divergence, however, over the identity of the agent, and kind, of organization. Some appeal—implicitly or explicitly—to an external teleology that serves as the motive principle of organization, while others hold that organization is an immanent movement of the living body itself. My suggestion is that under *both* interpretations, the organization of living beings also constitutes the emergence point of vital normativity.

Descriptive normativity characterizes conditions as typical or atypical for individual beings as members of an aggregate. As we saw in the previous section, descriptive normativity thus relies upon a holistic account of individual beings as the unit of comparison in analyses of typicality. We shall see in this section that descriptive normativity also relies upon organization. This is because in order for an individual being to be identified as sufficiently related to other beings to be compared with them, a basis must be established for relating beings to one another. For many philosophers of life, this basis is *form*. For Aristotle, form exerts a teleological pull on living beings such that they are called forth to exert the most perfect powers of which they are capable. For Spinoza, meanwhile, form is immanently regenerated by the living being itself. For Bergson—in keeping with the temporal framework of duration and indetermination—organization is a fundamental capacity of living beings expressed in a continuous creation of the new, which mobilizes the individual and genealogical history of each organism. This, in turn, constitutes each

organism's movement toward individuation. In all three cases, organization undergirds the individuality and comparability that undergird descriptive normativity.

Evaluative normativity characterizes conditions as better or worse from the perspective of individual beings. Teleological accounts of organization present teleology either as divine, or as co-emergent with living beings. In the first case, teleology is presented as applying most properly, if not exclusively, to the sphere of the living; in the second, teleology is presented as having been *introduced* by means of the emergence of living beings. Under such understandings of organization, the evaluative normativity of organization is clear: whether *of* the organism or *associated with* the organism, teleology determines the conditions that are better or worse with respect to the organism. Immanent accounts of organization are less obviously normative. Yet I will argue that such accounts, though they do not appeal explicitly to an external standard of divine or vital perfection, nonetheless include a third term of relation: namely, the very concepts of 'better' and 'worse' that also define the evaluativeness of evaluative normativity. In this way, immanent accounts of organization are also account of the emergence of evaluative normativity.

II.a. *Aristotle: Organization, Psychic Powers, and the Preservation of Species*

As we saw in the previous section, Aristotle conceives of the entity constituted by the soul and the living body as composed of two *aspects* (soul and body, form and matter, actuality and potentiality)—but also of many *parts* (organs) (Aristotle 1984, 412b5). The form of each organ is determined in relation to the living being as a whole, and this holistic relationship constitutes the living being as a composite individual. For Aristotle, this relationship between organs and living body is a functional one—each organ gains its functional essence, or form, from the whole living being of which it is a part (Aristotle 1984, 412b18-21). This means that the living being, a body

composed of organs—each with its own a functional essence that relates to the whole—is not only a composite being but also an *organized* being. Moreover, the organization of the living body, for Aristotle, is distinctly *teleological*: the organs are organized in order to support the functioning of the living body as a whole—which is oriented, in turn, toward the eternal and divine (Aristotle 1984, 415a27-b2). Finally, this teleological organization exists at the aggregate level as well: just as individual living beings are internally organized, groups of living beings—that is, *species*—are collectively organized toward their own teleological end: growth, development, and survival.

Philosopher Max Delbrück highlights the following passage from *De Generatione Animalium*: "For since it is impossible that such a class of things as animals should be of an eternal nature, therefore that which comes into being is eternal in the only way possible […] as a species" (Aristotle 1984, 731b31-35)." This passage, Delbrück points out, illuminates Aristotle's understanding of species as eternal forms. The preservation of a species is ensured through the unique *telos* of that species, as Aristotle conceives of it—that is, its movement toward divinity and eternity, represented not by individual members of the species, but by the species' *form* (which, of course, never exists without a living body as counterpart). As he puts it, "the form principle is the information which is stored in the semen. After fertilization it is read out in a preprogrammed way; the readout alters the matter on which it acts, but it does not alter the stored information, which is not, properly speaking, part of the finished product" (Delbrück 1971, 52).[38] Delbrück thus interprets 'information' stored and mobilized by form as the 'unmoved mover' of species preservation.

As we saw in the last section, Aristotle holds that the fundamental capacities of living beings—namely, movement, nutrition, growth, and decay—"are produced by the soul," and

[38] Max Delbrück, "Aristotle totle totle," in *Of Microbes and Life*, eds. J. Monod and E. Borek, 50-5, (New York: Columbia University Press, 1971).

perception and intellect 'belong' to it (Aristotle 1984, 411a25-29). For Aristotle, the form of the species, and not its embodiment in individuals, is central to its 'eternal' nature. The form of the species, in turn, is characterized by the exercise of the most 'perfect' psychic powers of which each species is capable. Aristotle's understanding of species as continually renewing expressions of eternal forms accounts for their enduring nature without requiring either that any individual living being be eternal, or that the psychic powers be attuned to the continual production of individuals of a given species. Rather, the *form* is eternal, and psychic powers are exercised toward the preservation of form.

This insight into Aristotle's understanding of species helps to show how his theory of psychic powers highlights the vital capacities that (coincidentally) ensure the preservation of species, without implying their eternal existence. The appeal to teleology remains—but it applies to the *exercise* of psychic powers, rather than the telos of eternal preservation. If species themselves are eternal and their existence is a striving for perfection, then the preservation of their form is ensured by their maximal exercise of the 'most perfect' psychic powers of which they are capable. Rather than conceiving of the preservation of species in terms of natural selection, Aristotle presents it as characterized by invariability, perfectibility and eternity.

For Aristotle, then, living beings are subject to two levels of teleological organization. First, as we saw in the previous section, individual living beings are internally organized as functional wholes—which serves the teleological end of perfecting and preserving, for a finite period, each individual living being. Second, each species—as *form*—is organized in a manner that supports the teleological end of perfecting and preserving the form of the species of which the individual living beings are members. Organization supports the perfection and preservation of both finite living beings and the eternal forms of their species.

Given that descriptive normativity pertains to the typicality of conditions for an individual being as a member of an aggregate, Aristotle's account of organization undergirds descriptive normativity in two ways, which correspond to the two levels of teleological organization just discussed. First, the internal organization of living beings is what defines each individual as an individual. Second, the external organization of individuals into species (i.e. as sharing the same form) is what defines the aggregate with which each individual will be compared in order to determine the typicality or atypicality of conditions from its perspective. Thus the organization of the living being serves, like individuality and holism, to ground descriptive normativity.

This mode of teleological organization can also be seen as constituting the emergence point of evaluative normativity. Normativity in the evaluative sense arises both from the functional account of the living body, and from the teleology that attaches to this account. First, the form of each organ (what makes each organ what it is) is also, for Aristotle, the essence of the organ (the end served by the existence of the organ, or what the organ is *for*). Evaluative normativity, then, arises from each organ's fulfillment (or lack thereof) of its functional essence. Second, the form of the living being as a whole—the soul—is also its ideal form; it bestows upon the living body its essence, its very living state. Thus evaluative normativity also inheres in the unique functional normativity of the living being—its capacity to be *more* or *less* functional, to realize its essence to a variable extent. Moreover, the teleology of existence, persistence, and survival (which exists for living beings alone) provides an ontological basis for the evaluation of conditions as *better* and *worse*. For Aristotle, the organization of living beings constitutes a movement toward the best conditions achievable, for individual organisms and for the universe as a whole. This means that living beings *themselves*, along with the mode of teleological organization to which they are subject, constitute a centre and source of evaluative normativity.

II.b. *Spinoza: Organization as Immanent Regeneration*

As we saw in the previous section, Spinoza conceives of all substance as composite—that is, as a unity of extension and thought, or body and mind, which are aspects or attributes of substance. For Spinoza, the compositeness of bodies is iterative: composite bodies are composed of bodies, and in turn compose other bodies. The unity of composite bodies—and thus, their survival—is determined by the relationships between constituent bodies, namely the proportions of motion and rest between these bodies (Spinoza 1994, IVP39). The survival of living beings, for Spinoza, is characterized by the permanence, not of form or of substance, but of the structured process of continual regeneration. The continual regeneration within particular proportions of motion and rest is what, for Spinoza, makes up an individual—here understood as a composite whole characterized by its own internal proportion of motion and rest (Jonas 1965, 47).

For Spinoza, then, composite beings are determined as much by their *organization* as by their individuality. Organization develops and maintains the proportions of motion and rest between constituent bodies that constitute composite bodies, thus ensuring the survival of these bodies. This placement of each body at a point of organization between the constituent parts of which it is composed and the larger bodies of which it is a constituent part emphasizes the living body's radical dependency upon organization, which conditions its relationship to the bodies that are parts of it and those of which it is a part. As we have seen, this delicate balance is determined through the proportions of motion and rest that exist between constituent bodies, which must be preserved in order for composite bodies to survive.

This organization, like composite beings themselves, admits of various levels of complexity. Hans Jonas highlights the hierarchy of complexity in Spinoza's theory of organization, which is formulated in terms of the variety of relations that bodies have with other bodies. As Jonas puts it,

"degrees of organization can be understood precisely as degrees of the faculty of a body to be affected more or less variously, distinctly and thus adequately by other bodies" (Jonas 1965, 53). Philosopher Warren Montag similarly describes this network of relations that constitute the composite body—here, the human body—as a set of internal and external relations between the less complex and the more complex:

> The human body thus needs other human bodies for its survival and thus is not only composed of a great many parts but must as a condition of its survival constantly interact with other bodies, composing a part among other parts of other, greater bodies, greater unities, greater assemblages (Montag 1999, 33).[39]

'Degrees of organization' may at first seem to describe the scale of difference between organisms that we customarily think of as more or less 'complex.' For example, we might be inclined to say that a marmoset is more highly 'organized' than a slime mold, even though a slime mold is distinguished by its capacity to join together with other single-celled organisms into an aggregate reproductive structure. Conceiving of degrees of organization in terms of an organism's 'capacity to be affected,' however, shifts the focus to a potentially social register, which is still deeply rooted in the vital capacities of the organism. As cooperative social animals that share responsibility for rearing young, marmosets have a greater range of interdependencies, and thus a greater capacity to affect and be affected by one another, than slime molds do.

The organization of composite bodies, then, is determined not by their functional essence but by their structural intra- and inter-relationships, which are conditioned, in turn, by their active and affective capacities—both their capacity to affect other bodies, and their capacity to be affected by other bodies. The living body's capacity to affect and be affected, for Spinoza, constitutes its power of perception, and in turn its power of acting (Spinoza 1994, IVP38). As Jonas points out,

[39] Warren Montag, "Seeing the Better and Doing the Worse," in *Bodies, Masses, Power: Spinoza and his Contemporaries* (New York: Verso Books, 1999).

this capacity to affect and be affected runs in two directions: "The phrase 'fitness to do or suffer many things' expresses Spinoza's insight into the essentially dual character of the organism: its *autonomy* for itself, and its *openness* for the world: spontaneity paired with receptivity" (Jonas 1965, 56). The power of acting, on this account, involves not only both affecting and being affected, but also both openness and closure: the living being, as composite individual, is both sufficient unto itself and radically interdependent. The organism is both *constituted* by the relations between its constituent parts and between itself and other entities, and also *enabled* by these relations. Organization both determines composite bodies as individuals, and relates them to other individuals with which they constitute a larger composite; it renders composite beings capable of both affecting and being affected.

With this account of organization, as well, arises another insight into normativity. While Aristotle's account of form is a teleological one, Spinoza's account locates form immanently, in the internal and external proportions of motion and rest that make up both individual beings and aggregates. Spinoza's immanent account of the organization of bodies, both internal and external, describes both what it means to be an individual being, and what it means for an individual being to be a member of an aggregate. In this way, Spinoza's approach to form also provides a ground for the comparison of individual beings with the aggregates of which they are component parts—that is, it is an account of descriptive normativity.

Spinoza's physics of composite bodies as conditioned by organization is also normative in the evaluative mode: it establishes an ideal state of equilibrium to be maintained, in any individual, by a particular proportion of motion and rest. The survival of a composite body such as a living being is secured by the preservation of the unique proportions of motion and rest that make up its internal environment and its external relations. These proportions define the ideal state of

equilibrium for that individual. For Spinoza, good and evil are simply "what is useful to, or harmful to, preserving our being" (Spinoza 1994, IVP39). Given that the proportions of motion and rest that are particular to each individual constitute its formal essence, what is useful to preserving its being is the preservation of its particular proportions of motion and rest, and what is harmful is the disruption of these proportions (Spinoza 1994, IVP8). The proportions of motion and rest that exist at various levels of complexity are conditioned by organization. Organization, then, is an evaluative good. Spinoza's account of organization thus manages to do something that Aristotle's account did not: it internalizes the teleology of organization so that organization *itself* is the end that is served by its movement. Those things are good which bring about organization, and those things are evil which disrupt organization. Organization is presented as an immanent, descriptively *and* evaluatively normative capacity.

II.c. *Bergson: Dynamic Organization and the Generation of the New*

As we saw in the previous section, Bergson introduces a conceptual framework that, on his account, define the temporality of living organisms: duration—qualitative, lived time, and indetermination—the interjection, into duration, of an interval of hesitation that expands into freedom. Duration is the synthesis of time; through living beings that *endure* through time, duration brings the past to bear on the present. Indetermination—arising through and made possible by duration—interrupts the steady flow of pre-organic time, and thus the mechanistic relation between cause and effect; with the emergence of living beings, indetermination arises as a temporal interval between stimulus and response, during which an organism's response to a stimulus remains temporarily undetermined.

For Bergson, the temporal framework of duration and indetermination distinguishes living beings from the nonliving along the dividing line of causal determination through time. "Unorganized bodies," Bergson explains, "are regulated by this simple law: *the present contains nothing more than the past, and what is found in the effect was already in the cause*" (Bergson [1907] 1998, 14, emphasis in original). 'Organized bodies'—that is, living bodies or organisms—are determined differently: "The distinctive feature of an organized body is that it grows and changes without ceasing" (Bergson [1907] 1998, 14), which means that "the present moment of a living body does not find its explanation in the moment immediately before" (ibid., 20). The unceasing growth and change of organized bodies take place within duration, the framework of internal differentiation that makes both change and persistence possible; this growth and change, in turn, constitutes the nascent freedom of the living being enabled by indetermination.

The interruption of the causal chain of mechanism by indetermination allows the organism a degree of nascent freedom, which is expressed in the moment of hesitation in its capacity to choose how it will act. This determination arises through duration, according to the embodied history of the organism, reaching back along its line of heredity:[40] "*all* the past of the organism must be added to that moment, its heredity—in fact, the whole of a very long history" (Bergson [1907] 1998, 20). The *whole history of the organism*, both as an individual and as a species—that is, the very constitution of the organism itself—is mobilized at the moment of indetermination. Duration thus provides the ontological framework in which the freedom introduced by indetermination can be expressed. For Bergson, this is what it means for a body to be organized.

[40] In this and other aspects of his philosophy of life, Bergson was both influenced by, and influenced, a number of biological theorists of his day. Bergson read and discussed in *Creative Evolution* such authors as J.M. Baldwin, William Bateson, Hans Driesch, Theodor Eimer, Hugo De Vries, and August Weismann (Keith Ansell Pearson, "Bergson's Encounter with Biology," *ANGELAKI Journal of the Theoretical Humanities* 10, no.2 (2005): 59-72). In turn, he was read by such authors as Julian Huxley, Theodosius Dobzhansky, Ronald Fisher and Sewall Wright (Emily Herring, "'Great is Darwin and Bergson his poet': Julian Huxley's Other Evolutionary Synthesis," *Annals of Science* (2018)).

Organization is the capacity of a body to produce new forms of being, which it exercises according to its concretization and embodiment of history—its own and that of its species.

There is an important distinction between this account of organization and those we have reviewed thus far. While for Aristotle, as we have seen, organization is internally driven by teleology, Bergson's approach resists this tendency. Bergson's critique of 'radical finalism,' as we saw in the previous section, arises from its unsatisfactory engagement with temporality: "if there is nothing unforeseen, no invention or creation in the universe, time is useless […] As in the mechanistic hypothesis, here again it is supposed that all is given. Finalism thus understood is only inverted mechanism" (ibid., 40). Spinoza, in contrast to Aristotle, presents an immanent account of organization. Yet even this immanent account presents organization as a principle of harmony, even perfection. Bergson's understanding of organization, in contrast with these accounts, is neither teleological, nor aimed toward perfection. For Bergson, while the *élan vital* or 'vital impulsion' is the *driver* of organization, it does not determine the form that organization will take; this arises from the history and preferences of the organism itself, and is realized in its creative responses to stimuli. Indetermination produces the temporal interval that serves as the condition of possibility for invention, while duration constitutes the organism's embodied orientation toward invention. Organization, then, acts to produce not the best or most harmonious conditions either within the organism or between the organism and its environment; rather, it is continuous invention. Thus "the development of life [is] an unforeseeable creation of form" (Bergson [1907] 1998, 45).

There are points in *Creative Evolution* where Bergson sets up a tension between life as a continuous current that is periodically interrupted by its realization in organic individuals, and life as a virtual principle that is only ever actualized in these individuals. He writes, for example, that

"we are not the vital current itself; we are this current already loaded with matter, that is, with congealed parts of its own substance which it carries along its course" (Bergson [1907] 1998, 239). Here Bergson expresses an uncharacteristic dualism between the *élan vital* and matter, implying that the *élan vital* may be independent from matter, which weighs it down and impedes its movement. Yet the specification 'its own substance' belies this dualist interpretation: matter and embodied beings *belong* to the vital current of life just as the *élan vital* belongs to them; there is no separation of the vital current from embodied living beings. As we saw in the previous section, this tension is also reflected in the continuing event of evolution, which, like the current of life, is constituted by two movements: the forward trajectory of the impulse of creativity and differentiation, and the limiting and subduing effect of the materiality of individual organisms. Life, supported by the temporal framework of duration and indetermination, is characterized by inventive, adaptive and creative forces that exist, to a certain extent, in opposition to the forces of matter. Yet this opposition is in itself complex and interpenetrating (Al-Saji 2010, 153). Life is propelled forward by both its own generative potency and its creative responses to the resistance presented by matter. It is the traces of this interaction of resistance and response that constitute the materialization of life.

Organization is the driver of this interaction. The living organism is the materialization of a movement of organization, individuation, differentiation, and invention. Bergson returns to Aristotle's example of the eye as discussed above, with a different interpretation. Recall that for Aristotle, the function of the eye is explained holistically: in order for sight to be 'the substance of the eye,' the eye must be a functional part of a seeing body; the organ cannot be comprehended outside the context of the whole living being. This holistic relationship, in turn, is explained teleologically: the form of each organ is also the essence of the organ.

For Bergson, in contrast, the relationship between the matter of the eye and the energy it translates (light) is a dynamic one, in which each informs the other. For Bergson, this relationship is characterized by a direct and creative *responsiveness* between the two. Noting the divergence of instances in which the eye as an organ has originated—specifically, in vertebrates and in mollusks—Bergson holds that "if the variations invoked are accidental, they do not, whether small or great, account for a similarity of structure" (Bergson [1907] 1998, 63). He insists that:

> There is no possibility that the play of chance […] should bring about in both cases the same juxtaposition of elements coordinated in the same way. But *it would be different supposing that light acted directly on the organized matter so as to change its structure and somehow adapt this structure to its own form*. The resemblance of the two effects would then be explained by the identity of the cause. The more and more complex eye would be something like the deeper and deeper imprint of light on a matter which, being organized, possesses *a special aptitude* for receiving it (Bergson [1907] 1998, 69, emphasis mine).

Bergson's suggestion that light may act *directly* on organized matter, which has a 'special aptitude' to receive this action, illustrates his understanding of the operation of organization. The organizing principle of matter is one that, beginning from the interjection of indetermination into duration, mobilizes the individual and collective history of the organism and thus produces a unique response to the action of the light. In Bergson's terms, this constitutes the organism's *creative* response to the problems posed to it by its environment. This response is both informed by the organism's embodied sedimentation of its own history, and informs the further transformations (or adaptations) of the organism in response to further changes in its environment. On this account, variation and survival are not accidental, but actively creative. While this creative response is not determined either mechanistically *or* teleologically, it is conditioned both by the organism's

embodiment of its own individual and collective history, and by the environmental conditions it encounters. Thus duration and indetermination are the ontological framework for innovation.[41]

Bergson's presentation of organization as arising from and elaborating the temporal framework of duration and indetermination characterizes organization as a principle of difference, change, and freedom. The outgrowth of this is continual invention in the form of living beings. This account of the role of organization in life, like the others we have reviewed thus far, can also be seen as an account of the emergence of vital normativity. As a principle of difference, a divider of objects, and an agent of tension between the 'current' of life and its instantiation in individual living beings, organization plays an important role in generating the individual beings to which descriptive normativity applies. Bergson's account of organization, however, differs from both Aristotle's and Spinoza's in *not* positing an external principle—perfection, harmony, or persistence—that would serve as a driver of organization. In this way, Bergson's account of the role of organization in life is the least 'evaluative' of the three we have reviewed.

As a driver of innovation, however, organization on Bergson's account begins to suggest a *generative* mode of normativity. For Bergson, as we have just seen, evolution—the very movement of life—consists of continual invention. This invention is conditioned both by the temporal framework of duration and indetermination—the organism's mobilization of its own history in the interval of hesitation—and direct responsiveness between the organism and its environment. This

[41] Readers familiar with Bergson's *oeuvre* may wonder why I neglect his last major work, *The Two Sources of Morality and Religion*, despite the fact that Bergson addresses the issue of normativity directly in this book. Briefly, there are two reasons for this. First, *The Two Sources* departs from Bergson's earlier works in presenting vital, cultural, and moral development as *teleological*, or as at least potentially complete. This departs from my project, which, as I hope to have shown, is to articulate an account of normativity which *arises from* life but is not *defined* or *delimited* by its rootedness in life—whose aims are not identical with the aims of life. Second, normativity in *The Two Sources* is presented as not only teleological but also *external*—it is realized in the 'pull' of obligation rather than through the 'push' of vital development or generativity—which means that while it resembles what I call 'evaluative normativity' in some respects, it also departs so significantly from the conceptual lineage I'm tracing here as to be more distracting than illuminating (for more on both points, see Al-Saji 2019).

combination of the creativity of the organism and its responsiveness to conditions it encounters constitutes the movement of organization. Here, this becomes a *generative* movement.

In the context of each theory of life covered in this chapter, I have argued that philosophical accounts of the co-implication of life with individuality, holism, and organization can also be seen as accounts of its co-implication with vital normativity in both the descriptive and the evaluative mode. In Bergson's approach to organization, in contrast with Aristotle's and Spinoza's, a new mode of normativity begins to emerge. This is what I have called generative normativity, which is characterized by the production of new norms—particularly vital norms, either descriptive or evaluative—on the part of living beings themselves.

Chapter 3

"*Cascades of Systemic Contingencies*:" Articulating a Truly Vital Materialism

Over the previous two chapters, I have located the concept of vital normativity in the history of philosophy and sketched out the contours of the concept as it has appeared there. I have developed, particularly through my reading of Bergson and Canguilhem, a conceptual apparatus that I will continue to make use of for the remainder of the thesis. I have identified the ambiguity between descriptive and evaluative normativity as a conceptual problematic that is deeply co-implicated with life. In Chapter 4, I will address this conceptual problematic directly, and present my proposal that a turn to *generative* normativity provides a possible solution to it. First, though, I would like to further locate my project in the current theoretical landscape by addressing other recent contributions that take a related but distinct perspective on the question of life.

Simply put, the very formulation of the concept of vital normativity assumes that there is something special, distinctive, or interesting about life—that is, that some form of philosophical vitalism is defensible. In this chapter, by putting my thesis into conversation with several thinkers in philosophy of science and feminist New Materialism, I will argue that this is indeed the case—that, as Foucault said of Canguilhem's vitalism, the issue of life remains both "a theoretical indicator of problems to be solved" and "a critical indicator of reductions to be avoided" (Foucault 1991, 18).

Vitalism has enjoyed something of a renaissance in recent years, receiving renewed attention both positive and negative. I argue that several recent engagements with vitalism ignore those very features that set the approach apart, mischaracterizing vitalism as a form of dualism. In particular, I acknowledge the important contributions of feminist New Materialism, especially

'vital materialism,' while reasserting certain advantages of historical vitalism, specifically Bergsonian vitalism, elaborated and updated in conversation with Susan Oyama's Developmental Systems approach. This temporarily suspends my discussion of the ambiguity between descriptive and evaluative normativity, while continuing my exploration of vital normativity in more recent philosophical work. In particular, engaging with these recent contributions helps me to articulate the *vitality* of vital normativity as non-dualistic, non-teleological, embodied, and generative. As I will show in the Chapter 4, this is the account of vitality we need in order to counter the coercive tendencies of the ambiguity of normativity.

I'll begin by outlining the distinctive approach to the concept of life embraced by 'vital materialism.' Vital materialism can be considered as a subcategory of feminist New Materialism, which in turn is a subcategory of New Materialism. Feminist New Materialism has emerged in the past two decades as a response to a number of contemporary tendencies in philosophy, cultural theory and the sciences, which can be cast in both negative and positive terms. Feminist New Materialists present ways forward both from what they see as the 'exhaustion' of discursive and constructivist approaches in cultural theory and phenomenological and existentialist methodology in philosophy, and from the development of new conceptualizations of matter, movement and life in physics and biology (Coole/Frost 2010, 5).[42] In this respect many feminist New Materialists have identified limitations in both feminist social constructionism and traditional philosophical interpretations of the sciences, and have placed their work in conversation with embodiment, biology, and the sciences in novel and illuminating ways.

[42] Diana Coole and Samantha Frost, eds, *New Materialisms: Ontology, Agency, and Politics* (Durham: Duke University Press, 2010).

Broadly, feminist New Materialists highlight the centrality of matter to social, political and economic phenomena, advocating a 'return' to a material approach to understanding entities and their interrelation.[43] For feminist New Materialists concerned with life, this has also motivated a re-evaluation of vitalism. Despite the differences between them, I'll refer to these theorists as 'vital materialists.' Vital materialists explore the relationship between living beings and material entities and forces, considering how matter and life interact, how material forces contribute to the agential potency of living beings, and how the fates of living and non-living things are intertwined. Vital materialists have illuminated the possibility of an ethics and a politics that gives prominence to life and the living, not as abstract principles but as concrete materialities. By focusing on the *materiality* of life, vital materialists highlight the causal and agential intertwinement of all material entities (vital and non-vital), the interrelation of ontology and ethics, and the creative and generative capacities of both matter and life.[44]

New Materialism in general and vital materialism in particular are characterized by an opposition to dualism. For vital materialists, this stance has been expressed in a reluctance to distinguish between vitality and materiality; the vital materialist approach is distinguished in part by a refusal to separate matter and the vital or ideal forces that sometimes animate, organize, or in-form it. By identifying vital tendencies in *all* matter and by blurring the boundaries between vital and non-vital matter, vital materialists problematize this traditional distinction. Vital

[43] In what sense this approach is in fact new, as well as in what sense its analyses are material, are matters of contention within New Materialism, as well as foci of external critique. Sarah Ahmed, for example, points out that formulating this approach as 'new' delegitimizes biologically oriented historical feminisms, while disagreement between New Materialist figures concerning the correct approach to material analysis puts into question the unification of the movement under the rubric of 'materiality.' For more on this dialogue, see e.g. Ahmed 2008, Cheah 2010, Tuin 2008, and the critical exchange between Washick, Wingrove, Ferguson, and Bennett, 2015.

[44] The term 'vital materialism'/'vital materialist' is most commonly associated with Jane Bennett; I use it to denote those thinkers in feminist New Materialism who are concerned, whether critically, speculatively or expansively, with the principle and problem of life. I use the term to capture this shared concern, and identify a common philosophical lineage, and not to imply doctrinal agreement.

materialists, then, tend to efface a distinguishing feature of vitalism: the recognition of vital matter as a special kind of matter. In contrast and in conversation with historical and contemporary vitalists, I hold, as Foucault does in his introduction to Canguilhem (Foucault 1991, 18), that living matter is an irreducible crux of important philosophical problems.

In this chapter, I begin by exploring the legacy of anti-vitalism, showing that the anti-vitalist attitude can often be traced to an important double critique: first, of the notion of matter as passive; second and connectedly, of the dualism of ideality and materiality. I give credit to both aspects of this critique, but argue that its mobilization against vitalism often, ironically, perpetuates a form of dualism. I continue by addressing the ambiguous vital materialist appropriation of Bergson and Deleuze. Several vital materialists—most notably, Elizabeth Grosz—cite Bergson in associating life with indetermination. However, Grosz's interpretation of the causal and temporal relationship between indetermination and life, particularly with respect to the temporal structure of possibility, sharply contrasts with Bergson's. Several vital materialists—most notably, Claire Colebrook—cite Deleuze and Bergson in their characterization of life, especially of what I will call 'disembodied life.' I demonstrate that these invocations are often more complicated than they appear. Finally, vital materialists—most notably, Jane Bennett—often imply that an ontological delineation between vital and non-vital matter leads toward a hierarchical arrangement culminating in anthropocentrism. I turn to Bergson's account of the divergent and non-hierarchical tendencies of life to argue that this need not be the case, and that indeed maintaining a distinction between vital and non-vital matter encourages the recognition of non-hierarchical ontological *and* ethical commonality.

Through my discussion of these points, I make the case for a Bergsonian vitalism, updated and elaborated through Oyama's Developmental Systems Theory, particularly her concept of

ontogenesis. This approach reconstitutes our conception of the relation between materiality and life, while also laying the groundwork for a new understanding of vital normativity as *generative*. The integration of Bergsonian vitalism with ontogenesis, I argue, presents a uniquely compelling account of both the relation *and* the distinction between vital and non-vital matter. It also presents—by way of its generative potential—a promising basis for the social application of vital normativity. This approach helps us to resolve several ontological confusions arising from leftover dualist thinking and also to maintain our cognizance of the causal and ontological intertwinement of vital and non-vital matter, all while shedding new light on the vitality of normativity.

I. *Is Vitalism A Dualism?*

The vitalist tradition has often been regarded with suspicion and even derision within philosophy and the sciences. One common theme is the characterisation of vitalism as a form of dualism, which would place vitality alongside materiality as a distinct state of being with an unknown mechanism of interaction. Another connected assumption is that vitalism presupposes an externalized teleology. Both misunderstandings of vitalism, in my view, redound to the fact that while vitalism is intended to resolve the difficulties of dualism, it is sometimes interpreted as proposing a *new* dualism through the purported introduction of vitality as a mysterious, unanalyzable supplement to materiality.

Philosopher of biology Susan Oyama hypothesizes that "what haunts biology […] and gives vitalism its delegitimizing clout is the specter of a scientific heresy as alarming as it is underspecified. It usually seems to involve an immaterial principle that creates, inhabits, and animates the body: a life force" (2010, 403). This 'haunting' of materialist discourses by immaterial forces explains both the contempt with which vitalism is often treated, and its continued

currency: that the mode of interaction between the material and the immaterial, form and matter, remains unsatisfactorily specified encourages the reemergence of novel dualisms—which often purport to be *anti*-dualist.

Oyama sets out the problem of dualism as follows: "those who have argued over the origin of ideas and of biological beings have usually agreed that form in some sense *preexists* its appearance in minds and bodies," lamenting that such "ways of thinking about form, constancy and change have been left largely undisturbed" despite resolute materiality and insistent anti-Platonism (Oyama 2000, 1-2, my emphasis).[45] The separation of form from matter in dualism, then, is not only ontological but also *temporal*—form is usually taken to *pre*exist matter, to serve as the external 'origin' of the shape matter takes. As both Oyama and many New Materialists emphasize, the conceptual impulse toward a dualism of ideality and materiality—the need for a 'form' to organize matter—arises in part from a reductionist understanding of matter, a casting of matter as brute, raw, passive or inert. "If matter is passive, incapable of organizing itself, then something else must be called up to assemble it into living beings" (Oyama 2000, 158). This "something else" has historically been found in 'form' and more recently in 'information.' We shall return to these issues shortly in my discussion of the role of the temporal framework of duration and indetermination in Bergson's account of life. Oyama, like Bergson, contests the twin assumptions that an organizing or in-forming principle must *pre*exist, and that it must be *external* to, the matter with which it interacts.

Philosopher and founding New Materialist Elizabeth Grosz has also repeatedly taken up the problem of dualism, cautioning that "the question of how we think materiality and ideality together

[45] Susan Oyama, *The Ontogenesis of Information: Developmental Systems and Evolution* (2nd edition) (Durham: Duke University Press, 2000).

remains central" (Grosz 2017, 5-6),[46] and ultimately presenting her thesis that "the ideal is not separate from materiality but materiality in its primary form" (ibid, 222). In *The Incorporeal: Ontology, Ethics, and the Limits of Materialism*, Grosz engages in an extended historical genealogy of what she calls 'the incorporeal' in a philosophical trajectory that she traces from the Stoics to Simondon. Through this genealogy, she characterizes the incorporeal as "the immaterial conditions for the existence and functioning of matter, including those configurations of matter that constitute the varieties of life" (Grosz 2017, 5). Grosz maintains the necessary dependence of the material upon the incorporeal, going so far as to insist that "every materialism, whether this is acknowledged openly or not, requires an incorporeal frame" (2017, 28). Such frames include thought, space, time, and sense.

For Grosz, the incorporeal functions as a principle of ideality that is immanent to materiality, rather than external to it. Grosz thus presents a path out of dualism, concluding that "ideality and materiality are not two substances but two ways in which the real is distributed" (2017, 251). For Grosz, the relation between ideality and materiality is not dualistic but *interactive*: "ideality is not the shadow or ghost that accompanies materiality, but the spatial and temporal frame by which materiality comes to act as well as be acted on, the incorporeality that subtends matter, that makes materiality locatable, changeable, meaningful, and capable of being spoken about" (Grosz 2017, 251). In this way, she offers a rehabilitation of ideality that corresponds with the New Materialist rehabilitation of materiality, completing a critique of these phenomena as ontologically independent principles and cementing New Materialism's repudiation of dualism.

This rejection of the notion of ideality as "shadow or ghost" bears certain affinities with an established anti-vitalist refrain. As Oyama points out, this refrain is often expressed in distinctly

[46] Elizabeth Grosz, *The Incorporeal: Ontology, Ethics, and the Limits of Materialism* (New York: Columbia University Press, 2017).

'hylephobic' terms, ironically presenting matter as inert, raw, unformed—while identifying this ironic presentation with the 'vitalism' that is being repudiated. In this vein, Richard Dawkins triumphantly proclaims that "there is no spirit-driven life force, no throbbing, heaving, pullulating, protoplasmic, mystic jelly" (Dawkins 1995, 18).[47] Likewise, Steven Pinker insists that "the stuff of life turned out to be not a quivering, glowing, wondrous gel but a contraption of jigs, springs, hinges, rods, sheets, magnets, zippers, and trapdoors assembled by a data tape whose information is copied, downloaded, and scanned" (Pinker 1997, 22).[48] These gels and jellies that glow, quiver, throb, and heave do not resemble any existing theory of life or account of vitality. But they make an appealing target for a rejection of vitalism that styles itself as uncompromisingly materialist, reductionist, even mechanicist (jigs, springs, hinges, rods).

Pinker and Dawkins offer relatively extreme versions of such attitudes. But Grosz voices her repudiation of vitalism in a similarly hyperbolic tone, insisting that "the emergence of life is not the *wild deterritorialization* of elementary matter but the magnification and intensification of open-ended, self-forming principles that also regulate material events" (2017, 214, my emphasis), and that consciousness "does not appear *magically*, an emergent property of a certain degree of complexity in the organization of matter" (2017, 221, my emphasis). In these critiques, it is *vitalism* that is charged with portraying matter as mere gunk or stuff, gel or jelly, which somehow, at some point, becomes invested with 'wild' or 'magical' vital force. As in critiques of dualism, the target in these critiques of vitalism is the unwarranted addition of a mystery principle as a supplement to matter. For Pinker and Dawkins, and also (in a surprising twist) for Grosz, matter is *always already* attended by such a principle, which is often characterized as *pre*existent—from Pinker's and Dawkin's perspective, this principle is information; from Grosz's, it is incorporeality.

[47] Richard Dawkins, *River Out of Eden: A Darwinian View of Life* (New York: Basic Books, 1995).
[48] Stephen Pinker, *How the Mind Works* (New York: W.W. Norton and Company, 1997).

It is clear from the foregoing that many critiques of 'vitalism' treat it as a kind of dualism, and thus as carrying many of dualism's problematic and limiting implications. It is assumed that 'vitality' must be an immaterial force that exists separately from matter and invests it with form, meaning, activity and interactivity—which, if true, would imply in turn that matter itself must be brute, raw, inert, and passive prior to its investment with vitality. Moreover, if true, this would throw the mode of interaction between vitality and materiality into question. If the two are separate principles and materiality is passive and inert, then it is vitality that must provide the active force—but how can an immaterial force be brought to bear on matter? This is where ironic characterizations of ghostliness, mystery and magic begin to emerge.

Oyama coins the concept of 'Biologos' in order to expose this move: "the immaterial information on which Biologos is based is seen to bear intriguing similarities to just the sort of disembodied formative powers that an aggressively materialist biology has long derided" (2010, 401).[49] The proposal that information *pre*exists its encoding in matter implies both its immateriality and its eternality, thereby opening this proposal up to charges of dualism and its problematic legacy. Oyama points out further similarities: "like the Logos of philosophy and theology, Biologos is seen to invest matter with form and significance, even with life itself." The two "spring from similar metaphysical underpinnings, intuitions, and impulses" (2016, 91),[50] namely "information as a source of creative order; a tamer of chance; the origin of value, meaning, and direction; and as a supplement to matter and energy" (2016, 92). The specter of dualism that, explicitly or implicitly, haunts many critiques of vitalism, also troubles many attempts to *escape*

[49] Susan Oyama, "Biologists Behaving Badly: Vitalism and the Language of Language," *History and Philosophy of the Life Sciences* 32, no. 2/3 (2010): 401-423.
[50] Susan Oyama, "The Lure of Immateriality in Accounts of Development and Evolution," in *Mattering: Feminism, Science, and Materialism*, ed. Victoria Pitts-Taylor (New York: New York University Press, 2016).

dualism and vitalism alike. Like the much-maligned 'vital force,' both information and incorporeality betray an unfortunate vulnerability to charges of dualism.

But if, rather than conceiving of vitality and materiality as separate principles, we conceive of them as fundamentally intertwined, then we can begin to find our way out of the morass. This is the approach purportedly espoused by several vital materialists, including Grosz. Yet despite this commitment, as we have just seen, even vital materialists continue—implicitly or explicitly—to level the charge of dualism against vitalism, and to evince an unfortunate tendency toward dualism precisely in guarding against it. This lapse arises, I believe, from the temporal structure of their claims: rather than presenting life as *emergent* from matter and continually intertwined with it, a number of vital materialists insist instead on the *omnipresence* or *preexistence* of the vital or organizing principle within matter—thus effectively erasing the distinction between vital and non-vital matter, and also, despite their own protestations, allowing assumptions of both the passivity of matter and the activity of immaterial forces to endure. As I will continue to demonstrate throughout this chapter, it seems to me that maintaining a distinction between vital and non-vital matter—one that is rooted in the temporal framework Bergson has built around the concept of life, as well as Canguilhem's account of life's discriminatory capacities and normative activity—has much to offer to vital materialism and normativity alike.

II. *Indetermination and Possibility*

Bergson, as we have seen, sets a course somewhere *between* vitalism and materialism as mutually exclusive "theoretical extremes," concerning himself with both "the internal relation *and* difference between life and matter" (Al-Saji 2010, 163). As we saw in the last chapter, Bergson associates the emergence of life with the emergence of duration and indetermination.

Indetermination, introduced by duration through life, provides the fundamental basis of ontological differentiation, change, and agency. Yet the relationship between life and the temporal framework of duration and indetermination is not simply or straightforwardly causal. Al-Saji notes that "although it is through the perceiving and acting body that indetermination finds its way into the world, indetermination is neither limited to the body, nor alien to the world" (Al-Saji 2010, 155). Indetermination and life do not constitute a unidirectional causal chain. Rather, they are ontologically and causally co-implicated, intertwined in the process of becoming (ibid, 156).

This account bears compelling affinities with Oyama's Developmental Systems Theory, which "directs us to the spatial and temporal particulars of formative interactions, and thus to organisms and their multi-scaled, mobile environments" (Oyama 2016, 94). For Oyama, focusing on the *developmental* implications of such phenomena as heredity and evolution directs us toward the temporal and interactive aspects of these phenomena and away from mistakenly preformationist, essentialist, or internalist assumptions—which often rely on dualist underpinnings. While Bergson presents life and indetermination as mutually interdependent ontological phenomena, Oyama approaches organisms, their environments, and the conditions of their relation and development as jointly constitutive features of developmental systems.

Like Bergson, Oyama accounts for this co-constitution by means of a unique temporal structure. A "developmental state," for Oyama, "is a kind of temporal slice through the life cycle. It carries the evidence of past gene transcriptions, mechanical influences inside and outside the organism, results of past activities, nutrition or the lack of it, and so on, and it has certain prospects for change" (2000, 161). Again, rather than presenting organisms as material beings on which immaterial forces such as information or organization are somehow brought to bear—or alternatively, as material 'evidence' of the immaterial forces that preexist and condition them—

Oyama's 'developmental state' is a material relation, "a temporal time slice" that exists as a bridge between the 'past' that is now a material part of the organism, and the 'future' that the organism contributes to shaping. Though Oyama does not reference Bergson, this account bears strong affinities with his. According to Bergson's temporal framework of duration and indetermination, the organism—in which the past endures and on which the past is inscribed—brings its past to bear on future action in the moment of hesitation.

For Bergson, the emergence of the framework of duration and indetermination along with life is the basis of a distinct approach to possibility. The endurance and inscription of the past on the organism, combined with its hesitation in the present, constitutes an attitude toward possibility that is constructive—or, as Alia Al-Saji has it, *generative*—rather than predictive (Al-Saji 2012a, 3).[51] While we tend to think of possibility as unrealized actuality, this is, in Bergson's view, a fundamental misunderstanding of the temporal structure of possibility: we are incorrect in thinking that in order for an event to occur, it must *first* have been possible; the most we can say is that once an event *does* occur, it *will have been* possible (Bergson 1992, 100-1).[52] We shall return to this generative account of possibility, and its affinities with generative normativity, in the next chapter.

In the present discussion, the significance of this generative account of possibility is that each time a problem is solved through evolution, each time a decision is made that forecloses on other alternatives, not only do novel avenues of development appear, radiating out from the new path taken—but new possibilities are also, retroactively, born. As a juvenile grows into an adult, as a species, through the generations, refines its responses to environmental problems, the adult

[51] Alia Al-Saji, "Creating Possibility: The Time of the Québec Student Movement," *Theory and Event 15*, no. 3 (2012a): 1-6.
[52] Henri Bergson. "The Possible and the Real," in *The Creative Mind: An Introduction to Metaphysics*, trans. Mabelle L. Andison, 107-125 (New York: Philosophical Library, (1934) 1992).

and the species are sites of expanding possibility. Yet development is always ambivalent: just as the living being carries the traces of its failures as well as its successes, development always leaves behind the material traces of paths rejected. As my one-year-old stands at the threshold of walking, it is clear that other modes of locomotion will be abandoned in the wake. Yet when tired or physically challenged, he tends to return to modes he has left behind—their traces remain beneath newly-acquired skills and habits. The expansion of possibility in some directions inevitably implies its foreclosure in others, but traces tend to remain.

This account, again, is rich in associations with Oyama's account of development, and particularly her concept of ontogenesis, which she describes as "the *inherently orderly* but *contingent* coming into being, that expresses what is essential about the emergence of pattern and form without trapping us into infinite cognitive regress" (Oyama 2000, 3, my emphases). The cognitive regress that concerns Oyama here is, again, the regress implicated in dualism—and also, too often, its critical alternatives. In order to conceive of an 'inherently orderly' and yet 'contingent' coming into being, we need a more complex account of causation than that offered by conventional approaches in either philosophy or the sciences. Like Bergson, Oyama roots this more complex account of causation in the existence and interactions of living systems. From a developmental systems perspective, "As organisms and environments alter each other, they change the conditions for further exchanges. Living beings' worlds are ordered and reordered by countless such interactions" (2010, 405). Thus the organizational or informational principles that, as some would have it, determine these material interactions, do not in fact determine these interactions because they only emerge as results of them. The principles in question are, in fact, just as contingent as the material interactions, since they also arise and are 'expressed' as a result of them.

These cyclical becomings are both orderly and contingent, and "organisms emerge in cascades of systemic contingencies" (2016, 94).

This recasting of possibility and causation, made apparent through vital systems, is generalizable to other domains as well. As with Bergson, this recognition of the contingent coming into being, complex causation, and ontogenetic interrelation within developmental systems extends to a more general critique of our conventional account of possibility. "As effects become causal factors, conditions arise that make the next moment possible. Such systemic functioning can only be appreciated if the forced choice between self-acting autonomy and lumpish passivity is refused" (2010, 417). Oyama's account of 'ordered contingency,' then, also complexifies causation and activity.

This serves as a reminder that a rejection of the passivity of matter must attend all repudiations of dualism. "What we need here," Oyama asserts, "is the stake-in-the-heart move, and the heart is the notion that some influences are more equal than others, that form—or its modern agent, information—exists *before* the interactions in which it appears and must be transmitted to the organism either through the genes or by the environment" (2000, 31, my emphasis). As crucial as the rejection of our limited understanding of materiality as passive (and ideality as active) is a recasting of the temporal relationship between cause and effect as expressed in possibility. Oyama makes this critique explicit, adding further biological insight to Bergson's account of the relation between life, temporality, and possibility:

> A view of possibility that is unduly restricted by projecting some version of the past into the future or that naively ignores the role of present structure in preparing, directing, or inhibiting change is incapable of doing justice to the peculiar combination of flexibility and conservatism that characterizes life processes, including our own (2000, 9).

The central importance of this temporal recasting of causation and possibility to overcoming dualism seems regrettably absent from vital materialist interventions into these matters. This lacuna is most striking in Grosz's work, which frequently engages with Bergson directly. Grosz concurs with Bergson in associating life with the emergence of indetermination, but insists that indetermination *predates* life, holding that "there must be something of the spark of life's indeterminacy in the operations of pre-living matter. Otherwise, life as indetermination could never have been possible" (Grosz 2011, 18, my emphasis).[53] Later, she concludes that "there is *always already* something in the organization of matter—matter at its most elementary—that contains the smallest but perhaps most significant elements of ideality" (2017, 250, emphasis mine).

These claims, while figured as Bergsonian, represent a significant departure from Bergson himself. Bergson's theory of life indeed associates it strongly with indetermination. Assuming that the conditions of possibility for the emergence of life (or organized matter) must *pre*exist in order for life to appear, Grosz concludes that indetermination—at least some facet of it, some spark—must thus predate life. But in drawing this conclusion Grosz misapprehends Bergson's crucial commitments regarding both the structure of possibility and the emergence of life: conditions of possibility need not pre-exist the entity or phenomenon they condition, and the association between life and indetermination is one of *co-emergence* and not serial manifestation.

My hunch is that these inconsistencies reflect Grosz's concurrence (whether tacit or explicit) with a conventional, rather than critical, account of possibility and causation, in which any entity or phenomenon that emerges must be preceded by something that makes it possible, and anything that acts as a condition of possibility must *pre*exist that whose possibility it conditions.

[53] Elizabeth Grosz, "Matter, Life and Other Variations," *Philosophy Today* 55 (2011): 17-27.

Bergson does not share this position on possibility, holding instead that possibility arises *alongside* actuality. If we take Bergson's and Oyama's recasting of possibility on board, the conditions that make life possible need not and *do not* exist in advance of life. Rather, life is co-emergent with its own conditions of possibility. This generative account of possibility becomes crucial, in the next chapter, to grounding the social mobilization of my concept of generative normativity.

III. *The Ontological Orientation of Vital Matter*

Several New Materialists suggest a renewed conceptualization of matter as energy or force, rather than as necessarily embodied in organized beings. Coole and Frost link this development with the sciences, observing that "in the life sciences as well as in physics, material phenomena are increasingly being conceptualized not as discrete entities or closed systems but rather as open, complex systems with porous boundaries" (Coole/Frost 2010, 15). Several vital materialists follow this tendency, calling upon various philosophical resources to construct a new vision of life as a disembodied movement of interaction, differentiation, and change. This picture of disembodied vitality is in tension with a concept of life as contained in—and perhaps constrained by—individual bodies.

Grosz highlights the inadequacy of both vitalism and phenomenology to fully account for living phenomena (Grosz 2007, 289),[54] critiquing in particular two primary philosophical foci: the *living* body and the *perceiving* body. Both of these focal points, according to Grosz, are imbued with our own anthropocentric preoccupations, prioritizing bounded embodiment and subjectivity. Claire Colebrook, meanwhile, laments the rise of 'organicism' in contemporary thought: "today,

[54] Elizabeth Grosz. "Deleuze, Bergson and The Concept of Life." *Revue internationale de philosophie* 241 (2007): 287-300.

in critical theory, identity politics, and philosophy," she cautions, "there has been an alarming retreat to the *normativity of the organism*: there is now an emphasis on the bounded living body as the foundation of all sense and relations" (Colebrook 2012, 78, my emphasis).[55] From both perspectives, the 'boundedness' of the living body is problematic. For Grosz, conceiving of life as embodied implies its *containment* within individual bodies, while prioritizing perception highlights subjectivity and sidelines other modes of interaction and interrelation. Colebrook adds to these concerns her worry about "the normativity of the organism."

It is not only the ontological prioritization of the organism, but also the fact that this ontology is presented as *normative*, that Colebrook presents as 'alarming.' For Colebrook, the term 'organicism' seems to identify both a *descriptive* and an *evaluative* normativity of the organism. First, organicism seems to suggest that many systems of sense and relations already resemble living organisms—and thus, that to be like an organism is the descriptively *normal* state of being for such systems. Second, organicism seems to suggest that these systems *should* resemble living organisms, and share in their bounded and hierarchical organization—that to be like an organism is a good way to be. I would like to suggest, instead, that we conceive of an organicism that is *generatively* normative—that models systems of sense and relation, as well as other systems in the social sphere, on the vital capacity to generate *new* descriptive and evaluative norms.

First, however, these concerns should be contextualized through a review of Gilles Deleuze's idiosyncratic vitalism. Both Grosz and Colebrook are appreciative readers of Deleuze, and present their critiques of organicism as continuations of his thought.[56] Two Deleuzian concepts are of central significance: the indefinite construction of 'a life,' and the unorganized 'anarchist

[55] Claire Colebrook. "The Art of the Future," in *Bergson, Politics and Religion*, eds. Melanie White and Alexandre Lefebvre, 75-95, (Durham: Duke University Press, 2012).
[56] Grosz, as we'll see, presents hers as the continuation of philosophical lineage reaching back to Bergson.

body' that is the 'body without organs.' 'A life' lends itself to a pre- or a-subjective account of life, and the 'body without organs' is used to support an interpretation of living matter as *disembodied*.

In "Immanence: A Life," Deleuze articulates a concept of life that does not entrench a distinction between subject and object. He calls this 'a life,' using the indefinite article to suggest singularity without individual subjectivity. Very small children" for example (he contends), "all resemble one another and have hardly any individuality, but they have singularities: a smile, a gesture, a funny face—not subjective qualities" (Deleuze 2001, 30).[57] Very small children, we could say, have not yet fully emerged as subjects: they have not yet developed many of the personal boundaries, defining projects, and relationships that constitute adult subjectivity. In this sense small children are not yet individual—but they are nonetheless *singular*. This identification of life as singular but not individual emphasizes a pre-subjective conception of vitality, which for Colebrook and Grosz allows for the decentering of the perceiving body.

Deleuze takes up this conception of vitality as impersonal power again in "To Have Done With Judgment." For Deleuze, judgment, or the imposition of externally wielded power, is opposed to "the emergence of new ways of existing," and it exercises this prohibition by means of organization (Deleuze [1992] 1998, 135).[58] Organization, then, colludes in the prohibition of 'new ways of existing.' 'Organization' in this locution has a double significance: it conveys both the hierarchical arrangement of the parts of the body in relation to one another, and the codification of these parts themselves *as organs*—i.e. as parts dedicated to the functioning of the whole. Both tendencies, for Deleuze, lend themselves to judgment. Organs indicate the points where power

[57] Gilles Deleuze, "Immanence: A Life." In *Pure Immanence: Essays on A Life*, trans. Anne Boyman, 25-33 (New York: Zone Books, 2001).
[58] Gilles Deleuze, "To Have Done with Judgment," in *Essays Critical and Clinical*, trans. Daniel W. Smith and Michael A. Greco, 126-35 (Minneapolis: University of Minnesota Press, (1992) 1998).

may be applied, and the hierarchical relationship between organs and body prefigures and facilitates the hierarchical power relations in which the body is implicated.

Deleuze introduces the cultivation of an unorganized body, a 'body without organs,' as a mode of resistance to judgment. "The body without organs is an affective, intensive, anarchist body that consists solely of poles, zones, thresholds, and gradients" (Deleuze [1992] 1998, 131). The body without organs eschews organization but retains differentiation. It maintains several of the features Deleuze associates with 'a life:' it is a location of affects that singularize the living body both by differentiating it from other bodies, and through internal self-differentiation. This differentiation, however, arises not from (extensive) organization but from (intensive) 'thresholds' and 'gradients' that texturize and topologize the body's physical existence. Colebrook explains: "Deleuze's vitalism—as passive—lodges the tendency towards difference and the splitting of any potentiality at the heart of life. There can only be an organized and bounded body (an organism) because of the relative stabilization of non-organic powers" (Colebrook 2010, 20).[59] In Colebrook's interpretation, Deleuze's account of the body without organs constitutes both a critique of organization and 'organicism,' and a claim to the ontological priority of 'non-organic powers' over the organism.

Deleuze goes on to locate this body without organs in a field of forces and powers: "it is traversed by a powerful, nonorganic vitality […] that defies organs and undoes their organization. This nonorganized vitality is the relation of the body to the imperceptible forces and powers that seize hold of it, or that it seizes hold of" (Deleuze [1992] 1998, 31). Here vitality is not contained in a body but is defined rather as a *relation* between the body and the 'imperceptible forces and powers' that it affects and by which it is affected. This relation, assisted by the "poles, zones,

[59] Claire Colebrook, *Deleuze and the Meaning of Life* (London: Continuum, 2010).

thresholds, and gradients" just touched on, helps to account for differentiation into parts, species, and individuals, but this differentiation does not imply hierarchical organization: rather, it appears to precede and enable organization, even as it undoes it. 'Nonorganic vitality' is life as impersonal power, life that does not determine itself in and through individuals but rather serves as an anarchic force of indetermination in a world dominated by determination. "The way to escape judgment," concludes Deleuze in a rare instructional moment, "is to make yourself a body without organs, to find your body without organs" (ibid).

Colebrook adapts this account of 'nonorganic vitality' and intensifies its aspirational undertone:

> When the power of imagining alienates or frees itself from the organism and sensory motor apparatus […] one can recognize that life, precisely insofar as it is organic and embodied, possesses a tendency towards disorganization (becoming a body without organs) and dis-embodiment (becom[ing] a virtual power liberated from any body whatever) (Colebrook 2010, 12).

Here Deleuze's cultivation of the body without organs is incorporated into a broader ethos of liberation from perception, subjectivity, embodiment, and organization, which is prominent in the vital materialist attitude toward life. Both 'a life' and the 'body without organs' are enlisted by a theory of life as disembodied force and virtual power. 'A life' emphasizes the priority of life over subjectivity, and the possibility of conceiving of living beings as pre- or a-subjective. This accords both with my account of vital normativity, and with the vital materialist interest in de-centering the perceiving subject. The 'body without organs,' however, goes further, valorizing resistance to organization and individuation. For Grosz and Colebrook, this allows for an account of life as 'disorganized,' "free from the organism," and "liberated from any body whatever."

This focus on freedom, liberation, and disorganization is an interesting commitment on the part of vital materialists, and one that distinguishes them from the more ambivalent treatment of

these concepts by both Deleuze and Bergson. 'A life' and the 'body without organs' indicate virtual paths of empowerment and resistance—empowerment of life's innate capacities to create and differentiate, and resistance to efforts to contain, direct and hierarchize these capacities. And yet, these concepts stop short of endorsing total liberation from embodiment or from organization; rather, they highlight the forces and powers operating at the root, or the heart, of organization and embodiment. Bergson, as we saw in the last chapter, gives a similarly ambivalent account of life. For Bergson, life is defined both by the forward movement of its development (*élan vital*) and by the resistance of matter. He writes that "we are not the vital current itself; we are this current already loaded with matter, that is, with congealed parts of its own substance which it carries along its course" (Bergson [1907] 1998, 239). Yet matter and embodied beings *belong* to the vital current of life just as the *élan vital* belongs to them; there is no separation of the vital current from embodied living beings. Life is host to inventive, adaptive and creative forces that are in some ways opposed to the forces inherent in matter; yet this opposition itself is ambivalent: the *élan vital* is powered simultaneously by its own creative potency and by the resistance presented by matter.

The vital materialist account of life as disorganized vital force is often depicted as concordant with a shared Deleuzian/Bergsonian historical tradition, which is partially justified. Deleuze indeed implies an opposition between the organized body and a disorganized vital force that is a site of non-hierarchical creative differentiation, just as Bergson implies an opposition between *élan vital* and matter. These oppositions are, however, ambivalent ones in Bergson and Deleuze alike. A reading of the vital force as liberatory from embodiment and organization is better justified in Deleuze, but even here does not constitute the level of disembodiment, let alone the ethos of freedom and liberation, that Grosz and Colebrook seem to read into it. Their view of life

is still further from Bergson's, as he locates organization (both in the development of organs and in their hierarchical arrangement) at the very emergence point of life, and associates the development of life with the divergent intensification of indetermination in organization.

For Bergson, the living being is, by definition, an organized being: "It is composed of unlike parts that complete each other. It performs diverse functions that involve each other. It is an individual, and of no other object, not even of the crystal, can this be said, for a crystal has neither difference of parts nor diversity of functions" (Bergson [1907] 1998, 12). For Bergson, as we saw in the last chapter, life is associated with a holistic relation—organization—that necessarily includes both difference of parts and diversity of functions. A crystal grows and changes, but its parts are not organized into a whole; they do not differ in kind, nor do they bear any functional relation to one another. Thus, on Bergson's account, the unique structure of a crystal fails to justify its classification as an organized individual. The crystal can be divided into parts without compromising its overall structure, which distinguishes it from all forms of life. Even the simplest of organisms, in contrast, are characterized by both difference of parts and diversity of functions, and their parts are related by reference to the whole.

As we saw in the previous section, this account of the intertwinement between organization and life helps Bergson to sidestep the slide into dualism that has plagued other approaches. If organization is emergent from matter and arises *with* life, then it need not be presented as a principle that *pre*figures life. And as we saw in Chapter 2, such an account of the co-implication between organization and life can also be read as an account of the emergence of normativity in both the descriptive and evaluative mode. That is, organization both produces the boundaries of internal and external relation that define individual beings, and serves as a motive force behind their movement away from dis-preferred conditions and toward preferred ones. Finally, Bergson's

account of organization—because it emphasizes the immanent creativity of life—suggests a *generative* potential for 'organicism': a "normativity of the organism" that would emphasize the vital capacity to generate new norms.

IV. *The Ethics of a Horizontal Ontology*

In addition to the ontological orientation discussed thus far, many New Materialists also embrace a new approach to ethics, including the recognition of novel kinds of ethical subjects, the expansion of the sphere of ethical concern, and the development of an ontological orientation within ethics as well as an ethical orientation within ontology. For vital materialists, a rethinking of ethics is critical in an age of increasing interaction between vital and non-vital entities; meteorological, climatological, and environmental forces; bodies and technologies; agency and affect. For vital materialist thinkers, then, the ontological continuity between vitality and materiality has ethical as well as ontological significance. As Grosz puts it, "Ontologies have ethical and political implications in the sense that they make a difference to how we live and act, what we value, and how we produce and create" (2017, 3). This movement has two main aspects. Some espouse the expansion of the ethical sphere to include more kinds of entities, both as subjects and as objects. For others, the expansion of ethics pertains more to orientation than to object, enmeshing ethics with ontology or ontogenesis and proposing ways of being and modes of becoming as a basis of ethics (Grosz 2017, 1).

Jane Bennett is one vital materialist who makes such an argument for the expansion of the ethical sphere. In Bennett's view, the sphere of ethical subjects should be opened up to permit the inclusion of non-vital entities. She hopes that this new orientation toward the non-human world will also expand our ethical consciousness at the human level, offering an alternative to the

limitations of limited Kantian morality by prioritizing 'shared materiality' above 'shared humanity' (Bennett 2010, 18).[60] Given a history of ethical systems that have excluded many from ethical concern with unconscionable results, vital materialists tend to widen the net of ethical concern as far as possible. In support of this move, Bennett advocates for the recognition of matter's vital properties: "I will try to give voice to a vitality intrinsic to materiality, in the process absolving matter from its long history of attachment to automatism or mechanism" (Bennett 2010, 3). This ontological move carries ethical implications in her suggestion of 'onto-sympathy' as "a way to name a cross-species rapport or exchange, wherein things engage on the basis of affinities of shapes that are 'inaccurate replications' of each other" (Bennett 2017, 2). She proposes this onto-sympathy particularly between humans and plants, but also extends the principle to embrace "all material things," concluding, with Thoreau, that "there is nothing inorganic" (Bennett 2017, 4).

A perplexing aspect of the vital materialist expansion of the ethical sphere is the suggestion that ethics must begin not at the (historically problematic) level of shared humanity, nor at the level of shared vitality, but at the level of shared *materiality.* In this area, vital materialist arguments appear at times to conflate two attitudes: *anthropo*centrism (a human-centred perspective) and *bio*centrism (a life-centred perspective). Much of New Materialism is motivated,

[60] 4. Mel Y. Chen approaches these issues from a more eclectic perspective (they call this approach 'feral'), in which they combine queer theory, postcolonial studies, disability theory, and linguistics, as well as several other methodologies, to generate an analysis of what they call 'animacy.' "The anima, animus, animal, and animate are, I argue, not vagaries or templatic zones of undifferentiated matter, but in fact work as complexly racialized and indeed humanized notions" (Mel Y. Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham: Duke University Press, 2012), 7). Less explicitly engaged with ethics than Bennett or Grosz, Chen nonetheless poignantly illustrates the ethical implications of our vital ontologies, and in particular exposes some of the material consequences of the hierarchical arrangement of such ontologies. The maintenance of a scale of 'animacy,' they reveal, is deeply implicated within other hierarchies, including hierarchies of race, gender and sexual identity, (dis)ability and embodiment, humanity and animality. I am in enthusiastic agreement with Chen that these implications should give us pause when encountering and mobilizing 'vital' discourses. Nonetheless, I hold that it is possible to engage in discussions of vitality without deploying such hierarchies.

as historical materialisms have been, by the decentering of the human subject as the sole focus of ontological and ethical consideration and prioritization. But why decentering the human requires decentering the *living* remains unclear. Anthropocentrism and biocentrism may share a common logic—e.g. the generation of hierarchies of vitality, development or health. It is undeniably the case that *both* logics have historically been implicated in hierarchical thinking. Yet if this historical co-implication entails the rejection of biocentrism along with anthropocentrism and other hierarchies, vital materialists have not yet demonstrated that this is so. Shared materiality is maximally inclusive, but it also relinquishes the ethical significance of properties that are distinctive to living beings: not only causal potency but agency; not only causal interdependence but the more ethically charged interdependence of endurance and thriving. What is added to ethics by means of this expansion does not seem, to me, to justify the loss to the coherency of the ethical sphere.

The second aspect of this vital materialist reconception of ethics—the adjustment of our ethical attitude to embrace ontogenesis—seems more promising. Grosz asserts, as we've seen, that "life is not some mysterious alternative force, an other to matter, but the elaboration and expansion of matter" (Grosz 2007, 292). She develops the ethical dimensions of this suggestion, proposing an 'ontoethics' which "involves an ethics that addresses not just human life in its interhuman relations, but relations between the human and an entire world, *both organic and inorganic*" (2017, 1, my emphasis). Grosz asserts that conceiving of ethics this way "has numerous philosophical implications, among them that there is no definitive break between animals and humans or between animals, plants, and inanimate objects" (2017, 13). Under Grosz's ontoethics, the continuity between vital and non-vital matter in the ontological sphere justifies their ethical indistinctness.

These ethical orientations within vital materialism are intriguing and promising for my project of articulating a concept of vital normativity. In recognizing that *all* living beings as engaged in normative activity—at the most fundamental level by means of what Canguilhem calls 'dynamic polarity' and I have called a capacity of discrimination or embodied preferences—the approach I have been developing expands the sphere of ethical relevance to include all living beings. This means that regardless of whether all living beings are valu*able* (though I think that they are), they all participate in the normative sphere through the preferential, discriminatory activity of valu*ing*. I am concerned, however, by an approach that would expand the sphere of ethical relevance so far as to efface a distinction between living and non-living beings. Moreover, Grosz's ontoethics and Bennett's ontosympathy are both, I think, better served by an ontology that recognizes a non-hierarchical relationship between different tendencies of *life*, than by one that erases the distinction between living and non-living matter.

Bergson presents such an ontology through his account of vital tendencies. He associates all living beings with consciousness, but maintains that this takes different expressions, and is realized at distinct levels of intensity, in different kinds of organisms. In *Creative Evolution* Bergson gives an account of consciousness as neither mind nor a mental capacity, but a state of being between activity and passivity—the point at which mind is inserted into matter. As we saw in the last chapter, consciousness emerges in the temporal 'interval' of indetermination between representation and action, between potential acts and their realization. Consciousness introduces a degree of freedom or choice, and its intervention becomes more significant as its interruption of action becomes more pronounced. Consciousness both generates the creative force by means of which indetermination is expanded, and develops itself along with this expansion. For this reason, the degree of overlap between representation and action is correlated with the level of

consciousness realized by the organism. When an action is completely adequate to its representation, that action is habitual or rote, which renders consciousness 'null.'

Bergson draws a distinction between 'absent' and 'nullified' consciousness, giving two examples to illustrate. A falling rock has no consciousness at all, while a 'somnambulist' or someone performing a habitual action has equal parts consciousness and inhibition, produced either by sleep or by the performance of the represented action, which taken together neutralize and thus 'nullify' one another. Plants, meanwhile (with some exceptions, such as carnivores) have 'nascent' consciousness, Like nullified consciousness, nascent consciousness is neutralized through opposing forces, but in this case inhibition is produced by the rigid (non-locomotive) bodily structure of the plant (Bergson [1907] 1998, 143-4). As the temporal distance between a represented act and its realization (indetermination) grows, so does consciousness. (Bergson [1907] 1998, 144-5).

Bergson also posits two modes of consciousness, realized in divergent proportions by different kinds of beings, both with their proper pinnacles of evolutionary achievement. These two forms of consciousness are *intelligence* and *instinct*, the latter of which has a capacity for further evolutionary development that culminates in *intuition*. These divergent forms of consciousness present themselves as disparate responses to challenges posed by evolution. As the fabricator of organs, *instinct* is a form of consciousness that is continuous with organic growth and evolution. Instinct "only carries out further the work by which life organizes matter—so that we cannot say, as has often been shown, where organization ends and instinct begins" (Bergson [1907] 1998, 165). Instinct is the representation of a need, and the development and activity of the organ that fulfills that need, in one. Along with its perceptive awareness of the objects around it and the range of its potential actions on those objects, *intelligence* develops tools in order to better advance its

goals. Each form of consciousness has knowledge of a kind—the knowledge of instinct is manifested in action while the knowledge of intelligence is expressed in thought (ibid, 161). *Intuition*, though it arises from instinct assisted by intelligence, functions differently. Its object is not to solve determinate problems or pursue particular goals; it is the creativity of evolution unloosed.

For Bergson, both instinct and intelligence are subject to constitutive limitations. The tendency of instinct to act its knowledge, and the tendency of intelligence to think it, each lead toward developmental cul-de-sacs. Intelligence has the requisite removal from the vital labor of organization and individuation to freely form representations on which it can act, but caught in its habits of reification and objectification it is incapable of picturing to itself the immanent movement of life (Bergson [1907] 1998, 165). Instinct, meanwhile, has immanent, embodied knowledge of the movement of life, but it is too absorbed in this movement to be able to cognize it. This allows instinct a privileged mode of access to life. Instinct includes the capacity for sympathy with other living beings, which it uses to its advantage in the natural world (ibid). Yet this vital immediacy is also what engenders the stagnation of instinct's capacities of conscious reflection, for its absorption in vital processes keeps instinct from broadening its perspective.

"But it is to the very inwardness of life that intuition leads us—by intuition I mean instinct that has become disinterested, self-conscious, capable of reflecting upon its object and of enlarging it indefinitely" (Bergson [1907] 1998, 176). Intuition shares in the form of instinct, but not in its limitations, combining instinct's immediate immersion in life with the wider perspective made possible by intelligence. The distance that intelligence takes from life affords it broader abilities of reflection and representation, which in intuition, in keeping with its origin in instinct, retain their sympathetic proximity to life. Bergson gives a genealogical account of intuition's potential:

> Consciousness, in shaping itself into intelligence, that is to say in concentrating itself at first on matter, seems to externalize itself in relation to itself; but, just because it adapts itself thereby to objects from without, it succeeds in moving among them and in evading the barriers they oppose to it, thus opening to itself an unlimited field. Once freed, moreover, it can turn inwards on itself, and awaken the potentialities of intuition which still slumber within it (Bergson [1907] 1998, 181).

This account reveals how intuition can develop from instinct, through the very limiting habits of externalization, immobilization and objectification that characterize intelligence. It is the attentiveness of intelligence to matter, its ability "to externalize itself in relation to itself," that constitutes its capacity to look beyond the boundaries it draws around individual objects and open itself to the infinite continuity of material existence. Intelligence concerns itself with matter, but intuition concerns itself with the movement of consciousness—that is, the movement of life.

For Bergson, the living organism is the materialization of a movement of individuation, organization, invention, and differentiation. Consciousness, developed through the emergence and intensification of indetermination, is an artifact of this movement. Intuition, not the pinnacle of evolution but the integration of its divergent paths, is the mode of consciousness that allows for the further advancement of evolution—not through the development of new and more successful species of organisms, but through the intensification of consciousness in all organisms. The continuation of evolution along the line of instinct is realized through the further development of consciousness, and this further development occurs, not through the sharpening of the intellect, but through the fostering of intuition.

One of the most crucial insights of New Materialism is its insistence that we move beyond the epistemological and ontological limitations of anthropocentrism. Yet as Bergson shows, this is made possible not by denying the ontological distinctiveness of life or by resisting 'organicism,' but by exploiting the perspectives that these divergent tendencies of life make possible—specifically, by finding a way, through intuition, to continue the evolution they have begun. It has

not been demonstrated that biocentrism amounts to anthropocentrism. Rather, a return to vitalism here allows simultaneously for the repudiation of anthropocentrism and the ethical foregrounding of all forms of life. Thus Bergson helps us to posit a horizontal ontology comprised not by the entirety of material existence, but by all *living* beings.

Vital materialists have much to offer—politically, ethically and ontologically. They alert us to the significance and efficacy of interactions between human and non-human, vital and non-vital entities; they highlight the active role that matter plays in constituting beings and events; they encourage us to attend to the resonance between our ontologies and our ethics. They recall us to the problem of life: its ineluctability and potency. Yet in eliding these explorations of vital and non-vital matter, in equating one with the other, vital materialists miss what is particular to each, and also fall into precisely the habits of dualist thinking to which they object. In presenting life as a force liberated from embodiment and organization alike, they dispense with the movements of organization and individuation that constitute the creativity of life. Finally, in flattening the ethical and ontological distinctions between vital and non-vital matter, they occlude the areas of ontological, ethical and political import signified by these distinctions.

I hope to have demonstrated both the value of a theoretical exploration of life and the advantages of Bergson's theory of life, elaborated and updated through Oyama's Developmental Systems Theory. The approach I've articulated addresses several of the concerns of vital materialism while also redressing some of its oversights. Given that my project of articulating a vital normativity concerns itself with the question of life as an indicator of "problems to be solved" and "reductions to be avoided," it is crucial to establish that a philosophical vitalism is not, necessarily, a form of dualism. Indeed, Bergson's illumination of the intertwinement of matter and life through indetermination, combined with Oyama's concept of ontogenesis, successfully resists

the slide into dualism that has troubled so many other accounts of the same phenomena. These accounts add the temporal details necessary to explain the perplexing emergence of life from non-vital matter, overcoming the temporal and causal misconceptions that continue to mire us in dualism. Moreover, both Bergson and Oyama explain evolution and development without recourse to anthropocentrism or teleological argumentation.[61]

I also hope to have demonstrated the advantages of Bergson's account of vital organization and individuation over the disembodied account of life embraced by some vital materialists. Given the account developed between Chapter 2 and this chapter, it is clear that organization and individuation are central to the creativity of life, and thus to the generative mode of normativity that in fact resists the external imposition of hierarchization and judgement. Finally, by turning to Bergson's account of the divergent tendencies of life, the approach I have articulated in this chapter succeeds in offering a horizontal ontology of life that is compatible with a greatly expanded web of ethical concern and a deeper sense of 'ontoethics,' and yet preserves the distinctions that make an ontology useful and an ethics coherent. Having made the case for my preoccupation with life, I return in the next chapter to the ambiguity of normativity, and consider the problematic legacy of this ambiguity—and of vitalism itself—in the social sphere.

[61] Bergson makes a brief foray into anthropocentrism at the end of his chapter on the different modes of consciousness, when he associates the animal brain with mechanism and the human brain with consciousness (or supra-consciousness) (Bergson [1907] 1998, 184). His prompt reiteration of the more important distinction between instinct and intelligence, and the insufficiency of both, seems to confirm this as a lapse.

Chapter 4
"*The Possibilities for Action in a Social Situation*:"
From Vital Normativity to Social Normativity

Over the last three chapters, I have grounded my examination of vital normativity in the history of philosophy and in more recent discussions of the question of life. I began by defining and distinguishing between two primary modes of normativity that I identify as *descriptive* and *evaluative,* and proceeded to introduce a third mode of normativity that I call *generative*. I traced the philosophical treatment of descriptive and evaluative normativity along two axes: first, the intertwinement of individuality, holism, and vital normativity; second, the association between organization, the question of teleology, and vital normativity. Then I examined more recent theoretical approaches to the question of life and in doing so justified the preoccupation with vitality from which the concept of 'vital normativity' arises. This extended examination has helped to flesh out the account of 'vital normativity' that I developed in the first chapter, and to demonstrate the distinctiveness of generative normativity. In the present chapter, and the following one, I explore the consequences of applying this newly elaborated concept of vital normativity to the social sphere. In particular, I demonstrate that the confusion between descriptive and evaluative normativity is the author of a range of pernicious social effects. I argue, however, that the concept of *generative* normativity provides a uniquely fertile and productive ground for social normativity, particularly as applied to contemporary social justice movements.

In a brief essay entitled "From the Social to the Vital," written twenty years after the first publication of *The Normal and the Pathological* and included in the second edition of the text, Canguilhem outlines several preliminary lines of correspondence between vital normativity and social normativity. His intent is to further illuminate vital normativity through comparison with, and by extension to, social normativity; his focus, then, remains with what the social can reveal

about the vital. My interest in the remainder of the thesis will cut in the opposite direction: that is, I intend to illuminate social normativity by comparison with, and as arising from, vital normativity. In this chapter, I redeploy the account of vital normativity—in particular, *generative* normativity—that I have developed thus far in order to determine its viability in the social sphere.

My use of the phrase 'social sphere' is by no means intended to imply a strong distinction between the social and the vital, or between social and biological life. Rather, it is meant to highlight a shift of focus between two overlapping spheres. This shift in focus moves from the emergence and development of vital normativity in the context of the individual organism in relation to its environment, to the activity of this same vital normativity in groups of organisms—particularly human organisms—as part of one or more collectives. I have argued that generative normativity is a distinctive mode of vital normativity that emerges with organisms and conditions their functioning in relation to their environment. The proposal I explore in the remainder of the thesis is that generative normativity conditions the functioning of organisms in social collectivities in a similar way. My focus is on human social collectivities, but this preoccupation is not meant to equate the social with the human. Of course, human beings are not the only social organisms; rather, they are the organisms whose social context I happen to share, and with whose social projects I thus happen to be most concerned and familiar.

Philosopher and commentator Maria Muhle suggests that in *The Normal and the Pathological* "it is precisely the necessary intertwining, synthesis, or, rather, amalgamation of the social and vital norms that sheds light on the nature of the social" (Muhle 2014, 1). Muhle presents Canguilhem's work as tending, on the whole, to subordinate social normativity to vital normativity. In "From the Social to the Vital," however, she proposes that the relationship between the vital and the social becomes one of 'mimesis' rather than hierarchy (Muhle 2014, 1). As

Canguilhem puts it, "the phenomena of social organization are like a mimicry of vital organization in the sense that Aristotle says that art imitates nature. Here to imitate does not mean to copy but to tend to rediscover the sense of a production" (Canguilhem [1974] 1989, 253). For Canguilhem, the social does not reproduce the vital, but rather 'rediscovers' its production. The social, then, is not *genetically* related to the vital in the sense it reproduces the features of living beings; rather it is *genealogically* related in the sense that the two share a common origin. This allows for a freedom of relation between the vital and the social, yet without implying either a reduction of the social to the vital or a determination by the vital of the social.

In this chapter I reveal the social functioning of vital normativity in all three modes—descriptive, evaluative, and generative. I begin by reviewing the literature on the social functioning of descriptive and evaluative normativity—and in particular, their ambiguous co-deployment in 'normalization.' Philosopher and social theorist Michel Foucault identifies the coercive role this ambiguity of the norm plays in deploying and consolidating the mechanisms of biopower, and philosopher Mary Beth Mader reveals the central role of statistical instruments like the ratio and the average in this exchange. Both Mader and philosopher Ladelle McWhorter demonstrate the role of normalization in assembling and enabling structures of domination and oppression centred on racialized, gendered and sexualized individuals and populations. In each case, normalization is enabled by the very ambiguity of the normal as highlighted by Goldstein and Canguilhem. In the social sphere in contrast with the vital, however, this ambiguity—what Mader calls a 'conceptual sleight'—is not an equivocation to be corrected, but rather a site of power in itself.

Following this discussion, I turn to the social potential of generative normativity. I hold that both living beings and the social sphere arise, ultimately, through the vital capacity to generate new norms: new forms of descriptive and evaluative relation between individuals and their

environments. This resonates with Canguilhem's claim that "social organization is, above all, the invention of organs—organs to look for and receive information, organs to calculate and even make decisions" (Canguilhem [1974] 1989, 253). As we saw in the last chapter, this characterization of social organization resonates strongly with Bergson's account of vital organization under the mode of instinct. The juxtaposition of 'organs' (often figured as biological entities alien to human agency or intention) and 'invention' (usually associated with advanced intentional action in human society) captures the mode of functionality of generative normativity in both the vital and the social sphere. I argue that we humans are vitally, *generatively* normative beings.

Canguilhem's reflection on his own foundational work is influenced by how this work has been taken up by Foucault, particularly in the formulation of the Foucauldian concepts of normalization, normation, and biopower. The influences between the two thinkers are reciprocal and recursive: Canguilhem's concept of vital normativity, and the ambiguity of the normal that this concept comprehends, provide a stimulus and a resource for Foucault's formulation of these concepts; likewise, Foucault's critical approach to these concepts serves as an incitement for Canguilhem's incursion into the social—and Foucault's introduction to the second edition of *The Normal and the Pathological* acknowledges and advances this complex cross-pollination. In this chapter, I begin in the middle of the conversation, with a review of Foucault's complex and difficult account of normalization, normation, and biopower in *Discipline and Punish* as well as in his lecture courses, "Abnormal," "Society Must Be Defended," and "Security, Territory, Population." I then explore the application of these Foucauldian concepts to social life before returning to Canguilhem's essay "From the Social to the Vital" to see what can be further gleaned in light of Foucault's conceptual apparatus.

I. *Foucault: Normativity and Normalization*

Foucault's approach to the normal and the abnormal is clearly instigated by Canguilhem's intervention into the concepts of normality and abnormality in *The Normal and the Pathological*, and is also responsive to Canguilhem's postscript to the text two decades later. In his introduction to the second edition of the text, Foucault highlights three of Canguilhem's main insights in this postscript: first, the proliferation of the power of what Foucault has termed 'normalization' in a range of institutions including schools, hospitals, factories, and the military; second, the origin of the norm as a site of coercive power *as well as* an instrument of description and evaluation;[62] and third, the status of the norm as a concept that "brings with it a principle of both qualification and correction" (Foucault [1999] 2003b, 49-50).[63] The first of these insights identifies the ubiquity of normalization in contemporary social life, while the second and third insights specify the consequences of this ubiquity with regard to descriptive and prescriptive normativity respectively.

The power of normalization, indeed, inheres in the fact that merely by describing, one is always already prescribing; description, simultaneously *qualifying* and *corrective*, invests the norm with coercive force. As philosopher Mary Beth Mader puts it, "The brilliance of Foucault's account of the norm […] is that he refuses the common separation of the norm into these two senses or sorts, descriptive and prescriptive. […] Foucault's insight is that it is intrinsic to this new notion of 'law,' that is, to the norm, that it combine prescription and description" (Mader 2011b, 49).[64] Through the concept of normalization, then, Foucault exposes the folly of attempting any

[62] Because I concur with this Foucauldian insight about the social role of the norm, and in order to be terminologically consistent with my interlocutors in this chapter, I will hereafter speak of 'prescriptive' rather than 'evaluative' social normativity. I encourage my readers to treat the two terms as largely synonymous, with the qualification that (social) prescriptive normativity implies a behavioural obligation or pull that (vital) evaluative normativity may not.
[63] Michel Foucault, *Abnormal: Lectures at the* Collège de France, *1974-1975,* eds. Valerio Marchetti and Antonella Salomoni, trans. Graham Burchell. New York: Picador, (1999) 2003b.
[64] Mary Beth Mader, *Sleights of Reason* (New York: SUNY Press, 2011b).

conclusive separation of the strands of vital normativity so painstakingly disentangled thus far—at least, *as they function in the social sphere*. This represents a crucial disanalogy between vital normativity and social normativity (however continuous these two spheres may be). While a distinction between descriptive and evaluative normativity in the vital sphere is crucial to revealing the co-implication between normativity and life and to specifying the nature of illness and health, this distinction is complicated and problematized by its elaboration in the social sphere. Because the social function of the norm in normalization is always both descriptive *and* prescriptive, a distinction between these two modes can be drawn only to expose this double function.

Mader calls this entanglement between descriptive and evaluative normativity a 'conceptual sleight' (Mader 2011b, vii). In her essay "Foucault and Social Measure," Mader helps to illuminate this twofold function of normalization, and the magnification of this function through the sleight of its conceptual foundation. Important to this clarification is the distinction, in Foucault's work, between two modes of biopower: disciplinary power and regulatory power, and two modes of conceptual sleight: *normation* and *normalization*. While both modes of conceptual sleight work in tandem, their methodologies are distinct. Disciplinary power is concerned with direct control of individual bodily movements, and functions through what Foucault calls 'normation.' Regulatory power is concerned with obtaining, aggregating and deploying biological information about populations, and functions through what Foucault calls 'normalization.'[65]

Under disciplinary power, there is no external, empirical basis for the direct control of bodily movements through normation—the power held by authority figures (priests, teachers, etc.) arises from the position of authority itself, and is expressed directly through command. The mid-

[65] Though Foucault's return to the concept of normalization in "Security, Territory, Population" centres on this distinction between normation and normalization, it is clear throughout his discussion of the concept that normalization is the primary concept, and that his brief account of normation serves to further clarify normalization.

19th century, however, sees the introduction of the concept of the statistical norm: an empirically-derived—though still abstract—value that is both average and ideal. When human traits such as height and weight within a population are plotted along a line graph, the resulting line tends to be bell-shaped, with the most frequently-occurring values at the largest part of the curve and the least frequently-occurring values making up the bottom edges of the curve. A single value at the mid-point of the curve becomes the statistical norm, in both the 'average' and the 'ideal' sense. This development of the statistical norm as it pertains to human traits can be credited to Adolphe Quételet's transfer of the normal curve (or bell curve) from the natural sciences to the emerging social sciences, and his reinterpretation of the most frequently-occurring values (i.e. those located at the mid-point of the curve) as ideals to be emulated. It is this statistical norm that is codified as 'normal' and, simultaneously, installed as an ideal value to be emulated. Regulatory power appeals to this external, empirical, *descriptive* norm in order to ground and justify its *prescriptive* impositions. This, for Foucault, summarizes the historically distinct contribution of normalization.

The distinction between these two modes, then, inheres not only in their respective provenances and applications, but also in the relationships between descriptive and prescriptive normativity they arise from and reflect. As Mader puts it, "with *normation*, the norm or model comes first, and the division into normal and abnormal follows" (Mader 2007, 11).[66] That is, the prescriptive norm is established as a background against which the normal and abnormal are distinguished.[67] With *normalization*, meanwhile, "the identification of normal and abnormal *precedes* the identification of the norm" (Mader 2007, 12). That is, the process begins with the identification of a descriptive norm, from which a prescriptive norm—through a dynamic,

[66] Mary Beth Mader, "Foucault and Social Measure," *Journal of French Philosophy 17*, no. 1 (2007): 1-25.
[67] This account recalls Goldstein's critique (reviewed in the first chapter) of the evaluative norm as necessarily *external* and *teleological*. Goldstein's objection consists of the observation that an evaluative norm conceived of prior to any investigation of the organism and its internal preferences must depend on teleology for its formulation.

reflective, and recursive movement—is derived. Normalization is thus characterized by an "interplay of differential normalities" (Foucault [2004] 2007,[68] 63, quoted in Mader, ibid). It is this very interplay—the sleight of the concept—that gives normalization its coercive power. Every description is always already a prescription, and a prescription expressed in descriptive terms carries a uniquely powerful pull toward the norm. In a move reminiscent of Canguilhem's designation of generative normativity as 'normativity in the fullest sense,' Foucault calls this latter concept 'normalization in the strict sense.' It is this concept that is most often treated in his work, and with which I am primarily concerned in this chapter.

Foucault's lecture series "Abnormal," in which he works through many of the ideas that appear in the better-known *Discipline and Punish*, is concerned first with tracing the origins of the contemporary concept of criminality and the criminal individual, and second with exposing the underlying apparatus that supports these twin concepts and in turn undergirds both medical and legal power. This apparatus is the concept of *abnormality*: the deviation from 'normal' functioning or behaviour that comes to characterize both mental illness and criminality, and thus to conflate the two concepts (Davidson 2003, xix). It is in this text that Foucault first introduces the concept of normalization, which here characterizes the relationship between medico-legal institutions and the abnormal individuals they both construct and administer.

In "Abnormal" Foucault explains that "expert medical opinion does not address itself to delinquents or innocents or to those who are sick as opposed to those who are well. It addresses itself […] to the category of 'abnormal individuals'" (Foucault [1999] 2003b, 41-2). Thus, medical expertise is concerned—or at least purports to be concerned—with *descriptive* and not *prescriptive* normativity. Taking the abnormal individual as object, however, generates a 'power of

[68] Michel Foucault, *Security, Territory, Population: Lectures at the* Collège de France, *1977-1978*, ed. Michel Senellart, trans. Graham Burchell (New York: Picador, (2004) 2007).

normalization' within the medico-legal framework (ibid, 42), which transforms the purportedly descriptive role of medical expertise into an avowedly prescriptive one. This is because normalization comes to comprehend both the medical prerogative of categorization, comparison, and prescription, *and* the judicial prerogative of judgement, prescription, and punishment. That is, normalization performs a conceptual sleight that combines these prerogatives.

Moreover normalization, like sexuality, is a fundamentally *positive* power; it functions through production and proliferation—in this case, of abnormality and abnormal individuals, as well as normality and normal individuals—rather than repression (Foucault [1999] 2003b, 43). Finally, normalization both pertains to and produces continuities in the social field. First, normalization produces continuities of population, insofar as it functions through a mechanism of social inclusion rather than exclusion. Second, normalization produces continuities of (ab)normality, insofar as the concept of abnormality includes all degrees of deviation, developing ever more precise levels of specification in order to inscribe them onto a continuous scale (ibid, 46-7). Thus in a very real sense, normalization *produces* the objects on which it exerts its power.

In this discussion of the construction of aggregations of individuals called populations and agglomerations of behaviours called abnormalities, a corresponding construction can become obscured: the construction of the individual herself. "Abnormal" begins with what Foucault calls the 'doubling' of the crime in a newly-created individual: the criminal (Foucault [1999] 2003b, 16-17) who "resembles his crime before he has committed it" (ibid, 19). This construction of the individual enables the mobilization of continuity in two further respects: first, it generates a temporal continuity by which an individual, once determined to have committed a crime, can be found to have *always already* been a criminal; second and more fundamentally, it identifies such a broad range of behaviours as potentially determinative of criminality that virtually *any* individual

can be found to have a criminal nature by virtue of their purportedly criminal behaviour. This latter continuity—the continuity of criminality that begins with mere 'deviations' of behaviour—comes to define the continuity of abnormality itself. To deviate even minimally from 'normal' behaviour, which is conceived of here in terms of both descriptive *and* prescriptive normativity, is to be abnormal; to be abnormal is to be adjudged as criminal, and thus subject to adjustment and/or correction. This enables, Foucault observes, the creation of a field of distinctions that are also relations, and defines both collectivity *and* individuality as always subject to classification, qualification, and correction under biopower (Foucault [1999] 2003b, 46-7).

Mader likewise highlights the functioning of the norm through the creation of continuities. In "Foucault and Social Measure," she is specifically concerned with statistical measurement as a technology of continuity: "the continuities posited or created in statistical measurement are a source and support of the social continuities imposed in social standardization" (Mader 2007, 44). As we have just seen, continuities of 'population' and behaviour are purportedly descriptive constructions that alter the meaning of what they describe through both distinction and relation. As Mader puts it, "it is the continuous nature of some statistical distributions, and the statistical use of basic mathematical notions such as the ratio and the average, that ground the continuity of both individuals and collectivities in Foucault's account of modern biopower" (Mader 2007, 2-3). First, the production of continuities between individuals forms those individuals into cohesive units called populations; second, an average value is derived that relates each individual to the same point of reference; third, that average value is (re)distributed among individuals and formulated—implicitly or explicitly—as a standard against which individuals are related, compared, and classified as normal or abnormal. All of these steps are carried out under the auspices of descriptive normativity—the relation of continuity *itself* constitutes the coercively

prescriptive pull of the descriptive norm inherent in biopower. As we have seen, both individuals and collectivities are subject to this transitive conversion from description to coercion.

Foucault approaches the individualization of biopower more concretely in *Discipline and Punish*, through his discussion of the physical distribution of 'docile bodies.' He specifies four techniques mobilized in support of this distribution: the *enclosure* of bodies within a circumscribed space; the *partitioning* of this space so that "each individual has his own space, and each space its individual;" the coding of *functional sites* that identify the uses to which each space should be put; and the spacialized, hierarchical *ranking* of bodies as individuals within an aggregate (Foucault [1975] 1977, 141-5).[69] Here Foucault describes in concrete, architectural terms a concept outlined in "Abnormal": the relation-by-distinction within the continuity of the social collective that defines what it means to be an individual within that collective. Disciplinary power "individualizes bodies by a location that does not give them a fixed position, but distributes them and circulates them in a network of relations" (ibid, 146), and "has as its correlative an individuality that is not only analytical and 'cellular', but also natural and 'organic'" (ibid, 156). In this way, "discipline 'makes' individuals; it is the specific technique of a power that regards individuals both as objects and as instruments of its exercise" (ibid, 170). Regulatory power likewise individualizes, distributes, and circulates bodies—here in relation to a descriptive norm or statistical average that is also implicitly prescriptive—and thus, it likewise makes individuals. Both act on the body as a specifically *living* body, predicating themselves upon as well as exploiting its vital capacities.

Thus, for Foucault, the norm is finally specified as a technique of biopower that represents both a "functional regularity" and a "rule of conduct" (Foucault [1997] 2003a, 162).[70] This

[69] Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage Books, (1975) 1977).
[70] Michel Foucault, "*Society Must Be Defended": Lectures at the* Collège de France, *1975-1976*, eds. Mauro Bertani and Alessandro Fontana, trans. David Macey (New York: Picador, (1997) 2003a).

duality—or duplicity—of the norm recalls Canguilhem's insight which served as the centrepiece of the first chapter: the fundamental ambiguity of the normal. For Goldstein and Canguilhem in the context of vital normativity, distinguishing between senses of normativity was crucial. For Foucault—and for a post-Foucauldian Canguilhem—the norm is a concept that is always both descriptive *and* prescriptive. The very ambiguity of the normal generates a potent mechanism for transforming descriptions into prescriptions and prescriptions into coercions—ultimately, for turning knowledge into power. At the same time, the implementation of this ambiguity through normalization produces individuals: as Foucault puts it, "it is not that the beautiful totality of the individual is amputated, repressed, altered by our social order, it is rather that the individual is carefully fabricated in it, according to a whole technique of forces and bodies" (Foucault [1975] 1977, 217). Here it begins to be possible to recognize the individual as an artifact of normalization—an effect of the social application of normativity, through the conceptual sleight of normalization.

Foucault's tendency in these discussions is to maintain that he is describing *techniques* of power, and not speculating about the motives, intentions, or objectives of the powerful that call for the deployment of these techniques (Foucault [1997] 2003a, 28). In the section of *Discipline and Punish* on 'panopticism,' however, he indulges in some circumspect discussion of the possible intentional underpinnings of individualization. "Discipline fixes; it arrests or regulates movements; it clears up confusion […] it establishes calculated distributions," apparently *because* "It must […] master all forces that are formed from the very constitution of an organized multiplicity; it must neutralize the effects of counter-power that spring from them and which form a resistance to the power that wishes to dominate it" (Foucault [1975] 1977, 219). While this passage describes the function of normation under disciplinary power, it could apply as well to the

function of normalization under regulatory power. Individuation and continuity function to distinguish and relate individuals as members of discrete populations in ways that bolster dominance under existing power relations.

Consider, as an instance of individualization at work in the context of regulatory power, the relatively recent introduction of a greater range of gender and pronoun options for self-representation on both social media platforms and government forms. In 2014, Facebook added over 50 options to its drop-down menu under 'Gender,' and a third option—'They/Them'—under 'Pronouns' (Oremus 2014).[71] In 2018, the Government of Canada added a third option—'another gender'—to the 'Sex' field on many government forms (Government of Canada 2018).These moves represent necessary adjustments within ubiquitous institutions. Moreover, they do not only communicate but also contribute to shaping and delimiting gender (and other) identities. The removal of such barriers to inclusion is a crucial step in ensuring equitable representation, and in conveying a commitment to recognition and inclusion more broadly. At the same time, these inclusive gestures ensure that the power held by these institutions is ever more finely articulated and attuned to the individual, and that the prerogative of recognition and representation remains with the institutions themselves. In the case of the Government of Canada, this prerogative is expressed primarily in the persistent *limitation* of options for self-representation to three: male, female, or 'other.' In the case of Facebook, the prerogative is expressed through more complex interactions between the increasingly granular categorization of individuals and Facebook's main source of revenue, targeted advertising whose target is the categorized individual. In both cases individualization serves the ends of power through fixing identities and "clearing up confusions."

[71] Will Oremus, "Here are All the Different Genders You Can Be on Facebook," *Slate*, February 13, 2014. https://slate.com/technology/2014/02/facebook-custom-gender-options-here-are-all-56-custom-options.html.

In the final lecture of "Society Must Be Defended," Foucault returns to the distinction between disciplinary and regulatory power—and thus between normation and normalization—here highlighting the different roles played by these discourses in establishing social power-over-life. "Unlike discipline, which is addressed to bodies, the new nondisciplinary [i.e. regulatory] power is applied not to man-as-body but to living man, to man-as-living-being; ultimately, if you like, to man-as-species" (Foucault [1999] 2003b, 242). Regulatory power, then, as the mode of biopower that addresses itself not to the movements of bodies but to populations and their vital statistics, is also the mode of social power that applies most properly to humans as *vital* beings. As Foucault reformulates the point, "one is a technology in which the body is individualized as an organism endowed with capacities, while the other is a technology in which bodies are replaced by general biological processes" (ibid, 249). Given that regulatory power's mode of application is normalization, which consists of the 'interplay of differential normalities' or the recursive interaction between descriptive and prescriptive normativity, Canguilhem's location of 'the ambiguity of the normal' at the emergence point of life gains new significance. If the origin of life is also the origin, not only of both modes of normativity, but also of their fundamental ambiguity, then this ambiguity *itself* provides a uniquely potent application point for social power-over-life.

"In more general terms still," writes Foucault,

> we can say that there is one element that will circulate between the disciplinary and the regulatory, which will also be applied to body and population alike, which will make it possible to control both the disciplinary order of the body and the aleatory events that occur in the biological multiplicity. The element that circulates between the two is the norm. The norm is something that can be applied to both a body one wishes to discipline and a population one wishes to regularize (Foucault [1997] 2003a, 253).

The dynamic relationship that obtains between descriptive and prescriptive norms within normalization under regulatory power, then, *also* obtains between normation and normalization,

regulatory and disciplinary power, more broadly. The norm functions in both fields and at both levels, precisely inasmuch as the object to which it is applied is a living being. Given the co-implication between life and normativity, this means that it is to human beings *as living* that the power of social normativity is addressed and applied. Control is exerted over human beings either as individuals or as (individual members of) populations—but always as living. The 'circulation' of the norm between these two registers of existence is facilitated by the very vitality of the human. A turn to the concrete functioning of vital normativity in the social sphere will help to illustrate, and elaborate, this point.

II. *Mader & McWhorter: Genealogies of Normalization*

Ladelle McWhorter's *Bodies and Pleasures: Foucault and the Politics of Normalization* and *Racism and Sexual Oppression in Anglo-America: A Genealogy*, as well as Mary Beth Mader's "Modern Living and Vital Race: Foucault and the Science of Life," investigate how discourses of normality produce both identities and totalities such as sexuality and race. Exploring the genealogies laid out in these works illustrates both the pitfalls and the productive potential of applying the principle of vital normativity to social life. In *Bodies and Pleasures* McWhorter approaches normalization from a predominantly first-person perspective, showing how the subjective desire for intelligibility leads one to affirm and reinforce the very normalizing discourses that marginalize people through relegation to abnormality. She writes:

> I wanted to know the truth about my sexuality, but what Foucault gave me was a genealogy of my wanting to know the truth about my sexuality [....] what Foucault's text knows about sexuality is that knowing, including the text's own knowing, is an effect of power and is thus contingent upon a certain arrangement of force relations. (McWhorter 1999, 50).[72]

[72] Ladelle McWhorter, *Bodies and Pleasures: Foucault and the Politics of Sexual Normalization* (Bloomington: Indiana University Press, 1999).

Here 'knowing' signifies both the concept of power-knowledge, and its more specific articulation in the related notions of self-knowledge, self-disclosure, and self-definition. As Foucault demonstrates in *The History of Sexuality vol. 1*, these notions have, since at least the late 19th century, circulated especially actively around the concept of 'sexuality.'[73] Our contemporary discourses of sexuality retain this late-19th-century preoccupation with self-knowledge, self-disclosure, and self-definition, though these preoccupations have, of course, been expressed through different social scripts over time. The significance of the 'coming out' narrative in the late 20th and early 21st centuries represents one such script, while the significance of self-ascription by means of highly granular identity categories—as we saw in the Facebook example—is one expression of the present iteration of self-knowledge, self-disclosure, and self-definition discourse, which is assisted by the exigencies and affordances of virtual social life.

The centrality of sexuality to the ontology of our present era permits simultaneously its use as an instrument of division and classification that culminates in a normalizing and eugenic hierarchy of sexual 'identities,' *and* the mobilization of subaltern identities and their visibility as a mode of resistance and counterattack. The example provided above of the proliferation of available terms for the self-representation of identities begins to illustrate this tension: Facebook's provision of a greater range of gender terms both resists the limitation of a binary conception of gender, and cedes certain powers of individualization—and, thus, of identification and evaluation—to Facebook itself. Here, however, McWhorter draws out a further implication of this tension: identity categories *themselves* are complicit in the hierarchization—the social valuation and devaluation—of human beings. That is, the very classification of people into 'kinds' in terms

[73] Foucault identifies the late 19th century as an important historical turning point, which represents the shift from externalized power-over or 'sovereign power,' to power exerted *through* control over populations or 'biopower.' Because the target of regulatory power is the activities of populations pertaining to what are now known as 'vital statistics'—births, marriages, deaths, disease—sexuality becomes an especially important locus of power at this point.

of their presumed racial, sexual, or gendered characteristics enables their normalization and marginalization under a system of regulatory and classificatory hierarchy (see Hacking 1995, 1999, 2002).[74] Rather than the availability or unavailability of identity descriptors, McWhorter's analysis targets the social recognition of people *as kinds*—gay or straight, cis or trans, neurotypical or neurodivergent. Each of these distinctions facilitates hierarchy and evaluation as well as recognition and inclusion.

Performing a genealogy of sexuality and of sexual identity, then, serves both to disrupt the presumed ahistoricity of these systems of classification and hierarchy, *and*—at a more fraught register—to destabilize the unity of subaltern identities and the political salience of organizing around them. Rather than advocating—as pundits, politicians, and popular writers are wont to do—a move 'beyond identity politics,' however, McWhorter suggests a change of focus (McWhorter 2010).[75] From the valorization of identity that has been undertaken toward transforming power relations, McWhorter turns toward an understanding of identity, in particular sexual identity, that recognizes its imbrication with power. Power, she writes, "exists only in its exercise. [....] Power does not hold us in its grip; rather, we emerge historically within repeating circuits of events. We are events of power" (McWhorter 1999, 77). Given this account of power and identity, McWhorter turns to behaviours, practices, and relationships that knit together an ethics of living.

In *Racism and Sexual Oppression in Anglo-America: A Genealogy*, McWhorter's engagement with normalization and its role in promoting a totalizing vision of humanity becomes

[74] Ian Hacking, "The Looping Effects of Human Kinds," in *Causal Cognition: A Multidisciplinary Debate*, eds. Dan Sperber, David Premack, & Ann James Premack, 351–394 (Oxford: Clarendon Press/Oxford University Press, 1995).
Ian Hacking, *The Social Construction of What?* Cambridge, MA/London, UK (Harvard University Press, 1999).
Ian Hacking, "How 'Natural' Are 'Kinds' of Sexual Orientation?" *Law and Philosophy 21*, no. 1 (2002): 95-107.
[75] Ladelle McWhorter, "Normalization and its Discontents: An Interview with Ladelle McWhorter," *Upping the Anti: A Journal of Theory and Action 11*, November 19, 2010. https://uppingtheanti.org/journal/article/11-normalization-and-its-discontents-an-interview-with-ladelle-mcwhorter.

more thorough. Here she grapples with Foucault's characterization, in "Abnormal," of modern (post-19th-century) racism as "racism against the abnormal." She first encounters this statement as "methodologically and politically suspect" (McWhorter 2010), but it leads her to the central insight of the book. Drawing from a formidable body of historical research, she holds that "the modern conception of race would have been unthinkable without the historical emergence of notions of normality—normed and normal development" (ibid). This is because the post-19th-century 'scientific' conception of race is based not on an opposition *between* racial groups, but on the vision of a total, genetically perfectible 'human race.' Thus the story of the rise of scientific racism "is a story about how race became a form of embodiment perpetuated by sexual reproduction and of how some forms of embodiment as well as some forms of sexuality came to be viewed as mortal dangers to modern society" (McWhorter 2009, 61).[76] The scientific account of race presents it as something that can—and should—be managed through control of sexual reproduction.

This modification takes on the normalization of populations as its explicit goal. The turn of the 20th century saw a rise of both anti-miscegenation laws and explicit eugenics programs, which survived and thrived despite the widespread horror with which Nazism, as a similar project, was popularly regarded. Indeed, the characterization of such programs as targeting the normalization (rather than, e.g., the 'purification') of human populations did much to conceal their deep affinities with the dark reality of eugenics (McWhorter 2009, 222). McWhorter tracks the rise to preeminence of 'developmental' discourses across the sciences along with this scientific concept of race. "Reality was development—patterns of change that could be measured, projected, and normed […] Normalizing management amounts to harnessing developmental force and bending it in the direction desired" (McWhorter 2009, 199). Thus as we saw in Mader's "Foucault

[76] Ladelle McWhorter, *Racism and Sexual Oppression in Anglo-America: A Genealogy* (Bloomington: Indiana University Press, 2009).

and Social Measure," the conceptual and statistical instrument of continuity plays two significant roles in normalization: first, it projects a continuity between individuals, which forms them into a cohesive whole—in this case, the human race; second, it establishes a descriptive norm for this whole and relates individuals to it by means of their degree of conformity or deviation. The conceptual framework of development, when combined with the notion of a human race, suggests the explicit application of this descriptive norm as a prescriptive one, in order to "bend development in the direction desired."

Combining this analysis of early-20th century developmental discourses with the genetic and reproductive preoccupations that characterize scientific racism, McWhorter concludes that:

> Race [is] not merely analogous to sexuality as a *dispositif*;[77] in fact, the two are utterly inseparable. It is simply impossible to understand racism in the United States without some understanding of how sexuality functions to normalize individuals and regulate populations. It is impossible to understand sexism or heterosexism in the United States without some understanding of how race functions to humanize and dehumanize individuals and to produce and reproduce populations (McWhorter 2009, 14).

Here the double movement of normalization—"to normalize individuals and regulate populations"—is exposed as a system that humanizes some individuals and dehumanizes others, all in the service of 'improving' that total population called the 'human race.' Anti-miscegenation laws and eugenics programs are central to this project. As always, the mechanism of normalization is supported by the ambiguity of its functions: it purports to identify a descriptive norm, installs this purportedly descriptive norm as a prescriptive norm, and obscures this prescriptive application, all in one fell swoop. The establishment of a single, continuous human race, combined with the mechanisms of normalization, permits the dehumanization of the members of the human race who are deemed 'abnormal' in the service of purifying the race. Thus abnormality becomes

[77] A *dispositif*, for Foucault, denotes an institutional assemblage of knowledge or discourses that maintains and reinforces the instruments, exercise, and distribution of power.

both a cipher for race *and* a justification of racism. Meanwhile, the new invention of 'sexuality,' through its implication in the project of developmental purification and social normalization, becomes *racialized*. Abnormality, standing in for race in the project of white supremacy, becomes the purportedly neutral basis of hatred and hate-based policy.

> Exclusion, oppression, hatred, and fear of abnormality as practiced and perpetuated in our society have everything to do with race, no matter which group of "abnormals" are the targets. Modern racism is about racial purification; it defines the abnormalities it identifies as racial impurities or as threats to racial purity. Modern racism is not really about nonwhites; modern racism is really all about white people (McWhorter 2009, 35).

Social affects such as hatred and fear, as well as practices such as exclusion and oppression, are enabled by the 'interplay of normativities,' or the 'conceptual sleight,' of the norm. The coding of purportedly *descriptive* abnormality as *evaluatively* bad promotes the social repudiation of abnormality and abnormal individuals, which is expressed at both an individual and a collective register. As McWhorter puts it, a large majority of us believe "that abnormal people are inferior to normal people, and that many abnormalities (like mental deficiency, mental illness, or sexual deviance) are reliable indicators of moral worth" (McWhorter 2009, 292). Thus the question of the *statistical probability* of a fetus' chromosomal *abnormality* has come to replace questions of 'fitness' and 'defect' in prenatal testing, not only as a matter of terminology, but in an implicit acknowledgement of the conceptual sleight between normality and fitness, abnormality and defectiveness. That this evaluative belief is expressed as a descriptive fact does much to conceal the origins of racism and other vital hierarchies, as well as their functional mechanisms and effects.

Mader's "Modern Living and Vital Race" again develops a Foucauldian account of racism, here identifying the modern concept of race as one that pertains to a new kind of governmental power—that is, one that differentiates between individuals who may be killed by the state "with

alleged legitimacy" and those who may not (Mader 2011a, 98-9).[78] The alleged legitimacy of killing by the state relies, again, upon the presumed continuity of all individuals that Mader here calls 'the biological continuum.' In this way, she draws a connection between Foucault's account (in *The Order of Things*) of the emergence of a science of life by means of the invention of its primary object, the living being, and the construction of a mathematical continuity called the population. It is the biological continuum of the human race, along with the individualization and newly postulated heritability of race, that permits the killing of individual members in the service of the improvement of the race. Because "biological race and racisms are essentially forms of race and racism that concern the notion of life and its attendant notions," Mader calls these concepts 'vital race' and 'vital racisms' (Mader 2011a, 99). Again, it is *as living* that human beings are subject to these twin mechanisms of production and modification—the production of continuities and identities, and the modification of populations through killing and letting die. As Mader puts it,

> the new and developing evolutionary accounts of life introduce a new kind of biological continuity, the continuity of life itself, as a distinctly supra- and trans-organismic reality that ontologically prevails over living beings taken as individuals, populations, species or any other supra-individual biological category (Mader 2011a, 103).

Under McWhorter's analysis, the 'supra- and trans-organismic reality' that prevails over individual human beings is the new concept of 'the human race'; with Mader we see this construction of continuity carried out over an even broader field—the field of life itself. In both cases, the construction of continuity enables both distinction and relation, both normalization and dehumanization. In both cases, the survival of some requires the sacrifice of others, and the perfectibility of the biological continuum depends on this excision. Here the application of

[78] Mary Beth Mader, "Modern Living and Vital Race: Foucault and the Science of Life," *Foucault Studies 12* (2011a.): 97-112.

biopower to human beings as vital beings becomes explicit. It is not only the new scientific racism and its instrument of power—normalization—but also the specification of human beings as vital beings that permits the development of state power-over-life articulated as the power to kill.

> [G]iven the conception of the human being as necessarily and fundamentally related to life itself, a state must justify its killing in terms of the human being's own relation to life. The rationale for killing is thus introduced into life itself. It is introduced into life itself because to kill a human being in the era of the domination of life is to realize a necessary condition of living beings, namely, to activate their intrinsically temporary nature, that is, relative to the continuous and everlasting nature of the continuous reality that is life itself (Mader 2011a, 107).

This power to kill wielded by the state is not merely an artifact of the turn of the 20th century; it remains identifiable in the attitude of policing institutions toward Indigenous, Black, and brown people, as well as other minority groups, as has been well highlighted by the Black Lives Matter movement since 2015. The translation of vital normativity into the social sphere has yielded, in normalization, an ineluctable interplay of normativities, a duplicitous conceptual sleight, that simultaneously serves as the basis of modern biopower *and* lies at the heart of modern racism, now articulated as the totalizing, and totalitarian, apparatus of 'racism against the abnormal,' which stands as a cipher and as a justification for state killing. Moreover, this apparatus is one that works primarily on the very vitality I have sought, through an elaboration of vital normativity, to rehabilitate. Here the project of this thesis reaches its point of maximal misgiving.

III. *From the Vital to the Social (Bypassing the Normal)*

I would like to suggest, however, that in the very vitality of the human lies a possible path of resistance to normalization. In the wake of Foucault's exposure of biopower, many readers of Foucault (and of Deleuze) have expressed criticism, concern, or suspicion toward vitalist legacies in philosophy. Some have suggested an expansion beyond 'merely biological' engagements with

life, either to emphasize the constructed nature of the concept (Revel 2009),[79] to explore its ethico-aesthetic potentialities (Hynes 2013),[80] or, ultimately, to 'dissolve' the concept of life altogether (Thacker 2010).[81] Others, as we saw in the last chapter, have suggested a 'new vitalism' consistent with New Materialism, which locates a vital principle in *all* matter (Bennett 2010, 2017) or attempts to transcend the 'dualism' of vitalism and materialism (Grosz 2007, 2011, 2017). While I share the concern with conceiving of life as more than 'merely biological,' as well as the objective of articulating a non-dualistic vitalism that is consistent with materialism, my response to Foucault's provocations in the domain of normativity and biopower is more direct. I seek to articulate a mode of vital normativity that is also a social normativity—and yet *resists* rather than facilitates the conceptual sleight of the interplay of normativities activated by the mechanisms of normalization. Specifically, I want to suggest that this mode of normativity that realizes the promise of vital normativity and yet resists the social coerciveness of the conceptual sleight is *generative* normativity.

Recall the brief discussion of Canguilhem's "From the Social to the Vital" (and Muhle's "From the Vital to the Social") at the beginning of this chapter. There, Muhle highlights Canguilhem's account of the 'mimetic' relationship between the social and the vital. Under Muhle's interpretation of Canguilhem, though, this mimicry of the vital by the social is impoverished. She writes: "It is precisely this fact that for Canguilhem distinguishes social from vital norms: in the case of the vital, that which is regulated through the norm—living processes and organisms—relates to the norm on its own; by contrast, in the realm of the social, the object

[79] Judith Revel, "Identity, Nature, Life: Three Biopolitical Deconstructions," *Theory, Culture, & Society 26*, no. 6 (2009): 45-54.
[80] Maria Hynes, "The Ethico-Aesthetics of Life: Guattari and the Problem of Bioethics," *Environment and Planning 45* (2013): 1929-43.
[81] Eugene Thacker, *After Life* (Chicago/London: University of Chicago Press, 2010).

of the norm must first of all be brought under the norm or, rather, related to it" (Canguilhem [1974] 1989, 253; Muhle 2014, 7). That is, while the vital relation to normativity constitutes a complete system, the social relation to normativity is routed through normalization and its attendant coercions. In the sphere of the vital, as we saw in the first chapter, the organism relates to norms of health and disease *directly* by experiencing certain states as 'easy' or 'dreadful.' In the sphere of the social, meanwhile, human beings *are related* to norms such as 'neurotypical' or 'neurodivergent' by means of their classification under these categories (see Hacking 1995, 1999). A review of Foucault's account of normalization reveals that while the ambiguity of the normal in the vital sphere is resolvable through careful analysis of the distinct modes of normativity at work in any given context, the interplay of normativities in the social sphere—that is, normalization—represents both a device and an application point of power and coercion.

Canguilhem's postscript clearly acknowledges this, identifying the very ambiguity of the normal as that which enables normalization to arise. "The normal is then at once the extension and the exhibition of the norm," he writes. "A norm draws its meaning, function and value from the fact of the existence, outside itself, of what does not meet the requirement it serves" (Canguilhem [1974] 1989, 239). This pertains to both descriptive and evaluative normativity. Descriptive normativity draws its meaning from outside the individual organism, to the typical state of being for its species; evaluative normativity draws its meaning from outside the organism's present state of being to a better or worse state. Either mode of externalization—and in particular the conceptual sleight *between* these two modes of externalization—facilitates the incursion of normalization. "To set a norm, to normalize, is to impose a requirement on an existence. […] It is, in effect, a polemical concept which negatively qualifies the sector of the given which does not enter into its extension while it depends on its comprehension" (ibid). Because the *application* of a norm comes

from outside the object to which the norm is applied, this object is subjected to the norm even as it is excluded from satisfying it. *Qualification* always comes with *correction*.

Muhle recapitulates Canguilhem as follows:

> The difference between social and vital norms may be summarized succinctly in the following way: whereas vital norms, in their interplay, build an (organic) totality—the parts of which are immanently tuned to one another, its rules operating without intention and calculation—the coherence of the social norm, in contrast, forms a *dispositif* or diagram (Muhle 2014, 6).

Again, the 'organic totality' of vital normativity is contrasted with the externalization of social normativity. Characterizing social normativity as a '*dispositif* or diagram' seems to equate it with the coercive machinations of normalization. Indeed, Muhle concludes that "Canguilhem deals with social phenomena exclusively under the concept of normalization—and not under the concept of normativity—highlighting that the social has no share in a genuinely normative (i.e., creative) dynamic" (ibid, 5). Here we should read 'genuinely normative (i.e., creative)' as *generatively* normative—on my reading, Muhle refers here to Canguilhem's concept of vital normativity 'in the fullest sense,' as the capacity to generate new norms. As Muhle characterizes the concept I term 'generative normativity,' "life is normative when it calls into question the established norms and creates new ones, that is, when it pursues a creative impulse" (ibid, 2). The question, then, is whether this mode of normativity can be realized in the social as well as the vital sphere.

Canguilhem appears to acknowledge, alongside his illumination of the social role of 'the ambiguity of the normal' in enabling the imposition of power and coercion, another potentiality for the extension of vital normativity into the social sphere. "In dealing with human norms we acknowledge that they are determined as an organism's possibilities for action in a social situation rather than as an organism's functions envisaged as a mechanism coupled with the physical environment" (Canguilhem [1974] 1989, 269). While this locution seems out of character for

Canguilhem, who rarely portrays vital norms as acting on 'a mechanism' or anything else so deterministic, it also raises the possibility of a different mode of acting upon normativity that would be unique to social (e.g. human) beings. The "possibilities for action in a social situation," he implies, are of a greater range and flexibility—one might even say, they allow for a greater expression of creativity—than the possibilities for action in the 'physical environment.'

This is because, for Canguilhem, "the [human] organism is not thrown into a society to which he must submit, but he structures his environment at the same time that he develops his capacities as an organism" (Canguilhem [1974] 1989, 284). For Canguilhem, then, whereas the normative innovations available to the non-human organism are limited by its relationship to its environment—which appears here as something that is 'given' or into which the organism is 'thrown'—the *human* organism, as a social organism, has the capacity to 'structure its environment' in the form of its social environment. Indeed, Canguilhem seems to present this capacity as a more complete realization of vital normativity 'in the fullest sense' (i.e. generative normativity) than non-human organisms are capable of.[82]

Canguilhem thus critiques the contemporary valorization of 'adaptation' or 'adjustment' with respect to the relationship between human beings and their social environments, referring to both as forms of "instrumental subordination" (Canguilhem [1974] 1989, 284). Just as all organisms have a capacity for generative normativity with respect to their environments, human beings have a capacity for critical and creative responses to their social environments:

> The psychosocial definition of the normal in terms of adaptedness implies a concept of society which surreptitiously and wrongly assimilates it to an environment, that is, to a system of determinisms when it is a system of constraints which, already and before all relations between it and the environment, contains collective norms for evaluating the quality of these relations. To define abnormality in terms of social maladaptation is more or less to accept the idea that the individual must subscribe

[82] In my view, we need not—and I do not—endorse this account of human exceptionalism in order to take this general insight about the structuring of social environments on board.

> to the fact of such a society, hence must accommodate himself to it as to a reality which is at the same time a good (Canguilhem [1974] 1989, 282-3).

Of central importance in this passage is Canguilhem's appeal to "collective norms for evaluating the quality of [social] relations." Recall that before introducing the concept of generative normativity, Canguilhem identifies evaluative normativity as pertaining to norms 'in the normative sense'—that is, as the *proper* sense, if not 'the fullest sense,' of normativity. Evaluative normativity refers to the vital capacity to evaluate conditions as 'better' or 'worse' from the perspective of individual organisms. Canguilhem suggests that living beings are the originators of this capacity, which is expressed through the 'dynamic polarity'—or what I have called the 'discriminatory capacity'—of living beings. In the passage above, "evaluating the quality of social relations" is identified as a *collective* capacity of social organisms—specifically, human beings. This clearly implies not only an analogy, but a genealogical relation, between vital and social normativity—that is, vital normativity and social normativity share a common source. In social normativity the evaluative capacity becomes *collectivized* and thus reflects its origin in a new way.

While his prioritization of vital normativity tends to shift attention away from his social insights, Canguilhem's analysis of the impact of social norms on categories of existence normally conceived of as 'vital' or 'biological' is significant for the social sphere as well. Taking average height as an example, Canguilhem points out that this supra-individual norm reflects social norms as much as it does vital responsiveness to environmental demands. To adapt his example: the average height in Québec is several inches higher than the average height in Hawai'i. This is not, as some evolutionary biologists might be tempted to suggest, because the harsh environmental conditions of Québec require a longer-limbed body than Hawai'i's tropical climate, but rather due to social and political conditions such as colonization and attendant patterns of migration, matrimony (including social and legal control of matrimony), and reproduction. In human

societies, such patterns are governed by economic, political, and power relations as much as by the relationship between organism and environment or the survival conditions for the species.[83]

"From the human point of view, […] social norms interfere with biological laws so that the human individual is the product of a union subject to all kinds of customary and matrimonial legislative prescriptions" (Canguilhem [1974] 1989, 159). This characterization of social norms as 'interfering' with biological laws is not intended to imply that one category of normativity is more licit, or more fundamental, than the other—indeed, they work in tandem. Canguilhem concludes this discussion as follows:

> If it is true that the human body is in one sense a product of social activity, it is not absurd to assume that the constancy of certain traits, revealed by an average, depends on the conscious or unconscious fidelity to certain norms of life. Consequently, in the human species, statistical frequency expresses *not only vital but social normativity* (Canguilhem [1974] 1989, 160, emphasis mine).

Here Canguilhem illustrates a situation in which a descriptive norm—the typical condition for an individual member of a subset of the human species (e.g. residents of Hawai'i or Québec)—in the vital sphere is modified by a set of descriptive *and* evaluative norms—e.g. migration patterns and matrimonial customs (incentives and proscriptions)—in the social sphere. This interaction occurs more or less consciously, more or less deliberately. The extent to which the interaction between vital and social normativity is explicit bears significantly (as we saw in the last section) upon both the nature of the interaction, and its effects. Canguilhem, then, presents social normativity as arising from and interacting with vital normativity to such an extent that neither remains unaltered. Moreover, this interaction is conditioned by a more fundamental interaction: between descriptive and evaluative normativity. Social values shape vital bodies, and vice versa. This can occur under regimes of normalization, or in a more implicit or 'organic' way, as in the example above. While

[83] The conflation of these two kinds of conditions in the scientific concept of race represents another aspect of its use of conceptual sleight. Canguilhem's critique of this conflation resists the concealment this sleight enables.

the latter example is clearly less pernicious than the explicitly human perfectionist projects of the last section, in both cases the 'merely' descriptive is shaped by the evaluative, and the structures and strictures of racism are clearly influential.

Here we return to what Canguilhem identifies as our collective capacity to "evaluate the quality of social relations." The possibility arises of responding to our social environment in a normative mode, not by adapting to it as a 'system of determinisms' but by acknowledging our capacity to act upon and alter it. The direction of responsiveness is crucial: norms, whether vital or social, should not modify human beings, for example through adaptation or adjustment; rather, human beings must set out to modify social norms. This modification of social norms must be undertaken not, as in the white supremacist project, in the service of modifying descriptive norms for our species—we should have no interest in raising the average height, and to the extent that we wish to alter statistical regularities of moral or evaluative significance, we should undertake to do so not on descriptive, but on moral or evaluative grounds. Generative normativity functions through the development of *new* and *different* evaluative norms; it is in this way that the vital capacity for generative normativity is realized as a collective social capacity.

Muhle develops a similar suggestion:

> One can infer that the social corresponds to a new form of life that is not subordinate to the vital life but instead pursues the same normativity, which produces new norms and values through deviations […] normalization indeed produces a normality in the sense of a homeostatic rationalization, but at the same time it *also* opens a normative perspective in the possibility of creating deviating (social) norms, similar to the way the living do in their milieus (Muhle 2014, 9).

Through Canguilhem's postscript, Muhle explores the possibility that social normativity could be conceived of as *genealogically* rather than *genetically* related to vital normativity: as deriving from the same source, without reproducing the same features. Here 'deriving from the same source'

pertains to generative normativity, the capacity to produce new norms in response to new environmental conditions. With Canguilhem's added insight that the environmental conditions of the social environment are distinctly subject to alteration by human beings, this capacity to mobilize generative normativity becomes particularly promising. Muhle characterizes this capacity as "producing new norms and values through deviations."

As a collective social capacity, generative normativity may even have the potential to mobilize resistance against the coercive power of normalization. If normalization is characterized by conceptual sleight, by the interplay of normativities—that is, by the coercively prescriptive function of descriptive normativity—then the rerouting of normativity toward the production of *new* norms could potentially short-circuit this interplay. It remains, then, to develop a positive account of generative normativity in the social sphere that allows it to do the kind of work we might want it to do. A return to Bergson's work on vital temporality helps to flesh out this account.

IV. *Bergson: Duration, Indetermination, and the Generation of New Norms*

As we've seen, Bergson associates life with the temporal framework of *duration*—qualitative, lived time, and *indetermination*—the interjection, into this qualitative temporal field, of an interval of hesitation, which opens up the potential for difference, change, and the production of the new. As I've argued, the co-implication of these unique temporalities with life also constitutes life's co-implication with normativity. Here I would like to suggest that these vital temporal innovations also permit the emergence of *generative* normativity, and that this vital conditioning of generative normativity expands its potential for application to the social sphere.

Recall that duration, for Bergson, is first of all the interpenetration of past and present in concrete, lived time. Duration is 'succession without distinction,' 'mutual penetration'; it is the

contractive and enduring capacity that allows conscious states to flow into one another, maintaining the presence of the past by means of qualitative experience. As well as a capacity of consciousness, duration is also a mode of existing. Duration "is the continuous progress of the past which gnaws into the future" (Bergson [1907] 1998, 4), and the matter on which it leaves its mark is the living being. Duration leaves a material mark on the living being because it is the kind of being that carries its past with it through memory and, through memory, brings its past to bear on future experience. "The organism which lives is a thing that *endures*. Its past, in its entirety, is prolonged into the present, and abides there, actual and acting" (Bergson [1907] 1998, 15-6). For Bergson, this endurance of the past comprehends not only the past of an individual organism, but also the collective past of a species—each organism is a record of problems encountered, divergences followed, and solutions embodied.

As living beings, then, we embody our vital pasts; as *human* beings, we embody our social pasts as well.[84] We embody our social pasts, but we are not determined by them; this is because along with duration comes indetermination. Indetermination is enabled by what Canguilhem would call the 'dynamic polarity' of the organism: the unique capacity of each living being to distinguish between beneficial and harmful elements of its surrounding environment (Bergson [1896] 1988, 23). This discriminatory attitude of the organism toward its surroundings, which Bergson identifies as the most rudimentary mode of perception, serves as the basis for the ermergence of an interval of 'hesitation' during which the organism's response to the stimuli it encounters remains temporarily undetermined. What designates a being as living is precisely that its response to any stimulus capable of affecting it is not determined by that stimulus. Rather, the

[84] This is not to say that non-human beings don't also embody their social pasts—or, even more improbably, that non-human beings are never social. It is simply to say that human beings *are* social animals, and that the past is significant to them in this way.

stimulus constitutes an invitation to a response, which interacts in undetermined ways with the dispositions held by the organism. These dispositions condition, via perception, the actions the organism will take in response to these stimuli. The rootedness of this response in the discriminatory capacity of the organism means that the response is never selected at random; rather, it is an expression of the organism's embodied preferences vis-à-vis its environment. The organism thus decides whether and how to respond to stimuli, even if a certain response is required for its survival. The interval of hesitation expands along with the expansion of the capacity of perception, and the organism continues to develop its own set of preferences, which continue to define it as an organism.

The temporal framework of duration and indetermination, then, acts as a condition of possibility for the emergence of normativity in the generative mode. The dynamic polarity of each organism defines both the descriptive normativity for that organism (its typical mode of being as a member of its species) and the evaluative normativity of that organism (what constitutes better or worse conditions for it). From the dynamic polarity of the organism arises indetermination, the interval of hesitation into which perception emerges and, through a bringing to bear of embodied preference onto perception, expands into a nascent agential capacity. This agential capacity consists first of the ability of the organism to implement its own evaluative norms, and second of its ability to develop *new* norms in response to the environmental conditions it encounters. Through indetermination, then, living beings develop the capacity for *generative* normativity—the ability to respond to environmental conditions in novel ways, and thus to develop new descriptive and evaluative norms of relation with these conditions. Generative normativity as a capacity of *human* beings, meanwhile, is reflected in their capacity to respond to social conditions in new ways, and to alter our social environments in keeping with newly developed norms.

The rootedness of indetermination in duration ensures that the expression of indetermination in generative normativity is always deeply informed by the past—the past of the individual, and the past of the collective of which that individual is a member. In the moment of hesitation that allows for the development of new norms of action, "*all* the past of the organism must be added to that moment, its heredity—in fact, the whole of a very long history" (Bergson [1907] 1998, 20). It is the past of each organism, as well as the pasts of its ancestors, that form it into the kind of organism that it is. Likewise, our social pasts individual and collective (our own and those of our ancestors) shape our social lives in the present, and inform our normative engagements and innovations, both evaluative and generative. The past is sedimented in our bodies intergenerationally as well as individually. The contraction of the past in duration, however, does not *determine* our normative orientations; these always emerge through indetermination. Because indetermination holds open our future permutations of the past (inasmuch as no response is predetermined, even by the past), our mobilizations of the past continually transform its meanings. Contraction of the past in duration thus informs and interacts with our generation of new norms.

Bergson's account of the temporal orientation of living beings also yields a distinctive interpretation of the notion of 'adaptation.' Bergson identifies adaptation with continual change; however, he insists that this change must be understood not merely as a matter of 'the survival of the fittest,' but rather as *positively* oriented (Bergson [1907] 1998, 56). That is, Bergson shifts the focus to the ways in which adaptation is *actively* creative or generative, rather than simply an accidental result of the selective persistence of certain characteristics as inherited from successfully reproducing progenitors. Rather than thinking of the long-necked giraffe as simply the offspring of the most successful browsers of tall trees, Bergson's account leads us to see them also as productive, embodied solutions to the problem of reaching edible foliage up high. There

are other potential solutions available (wings, for example), and Bergson encourages us to notice the inherent *creativity* of the solution adopted in any given case.

On Bergson's account, adaptation is conditioned by the temporal orientation of living beings, which is characterized by the mobilization of indetermination and duration. Indetermination produces the temporal interval that enables the development of new responses to stimuli, and duration constitutes the organism's embodied orientation toward the development of these new responses. Thus "the development of life [is] an unforeseeable creation of form" (Bergson [1907] 1998, 45). Vital development is a 'creation of form' because it consists of the mobilization of the temporal framework of duration and indetermination toward the generation of new beings, new normativities. This development is 'unforeseeable' because the nature of this vital temporal framework is to hold open a virtual space into which that which is not yet determined can emerge. Reinterpreted for the social sphere, this 'unforeseeable creation of form' can be seen as a mobilization of generative normativity that allows for the emergence of unforeseeable social configurations. For Bergson, this consists of a dynamic interaction between humans and their social environments, producing *new ways of being* along with new norms.

V. *Al-Saji: Generative Possibility and Collective Change*

In a brief essay on the Québec Student Movement of 2012, Alia Al-Saji mobilizes Bergson's account of vital temporality to shed light on the production of the new through social movements. She draws from Bergson's collection of essays entitled *The Creative Mind: An Introduction to Metaphysics*, and in particular his essay "The Possible and the Real," in which he accounts for "the continuous creation of unforeseeable novelty" by means of the framework of duration and indetermination (Bergson [1934] 1992, 107). I touched on this account of possibility in the last

chapter, but here a fuller account is called for. Bergson holds that "in duration, considered as a creative evolution, there is perpetual creation of possibility and not only of reality" (ibid, 20, cited in Al-Saji 2012a, 2). This means that *what is possible* changes—even retroactively—as a corollary of actual events. Al-Saji terms this a 'generative' account of possibility:

> In order to understand this generative sense of possibility, we must cease thinking of the possible as an irreal thing that prefigures the real; rather, the movement of possibility has an inverse directionality. It points to a non-linear opening of time, a way of holding open present and past for future inscription" (2012a, 3).

This distinguishes 'generative possibility' from the more familiar notion of 'logical possibility,' which takes a predictive or actuarial approach to projecting the future, assuming that in order for an event to occur, it must *first* have been possible. Generative possibility, taking into account duration and indetermination, acknowledges that the present always contains the past and is oriented toward the future—yet without being determined by the past, or determining the future. It is thus that generative possibility "holds open present and past for future inscription."

Moreover, Al-Saji clarifies, "this inscription is not a mere addition of events to the past; rather, it is a reconfiguration of the directionality and sense of the past" (Al-Saji 2012a, 3). This means that as the living being mobilizes *all* of its past—including its inherited past—in its responses to stimuli and to events, it also *reconfigures* its past, giving new sense to past events as they are reactivated in shaping its responses in the present. This opportunity for reconfiguration is central, for instance, to the recent struggle over Confederate monuments in the United States. Many of these monuments were erected long after the Civil War, and thus play an important role in recasting the Confederate role in that conflict through the 'lost cause' narrative—that is, as one of doomed heroism in defense of a 'way of life' rather than insurrection aimed at maintaining the system of chattel slavery. The move to take down these statues, meanwhile, is also a move to reconfigure the more recent past as one that repudiates slavery and violent insurrection alike. This

reconfiguration applies to both the *sense* of the past, in terms of the accepted narrative, and also its *directionality*—the recognition of the tenacity of white supremacy in the present motivates a reevaluation and retelling of the past, acknowledging the supremacist basis of the previous telling.

As Al-Saji puts it, "the past is thus recast by the present in a nonchronological time—while, concurrently, this virtual and reconfigured past continues to push on the present, actualizing itself differently there" (ibid). In the social sphere, this means that as well as being responsive to discrete contemporary events, social movements are always informed by a 'very long history' over which past events have been sedimented in the collective and individual bodies of those who have experienced them. This explains the phenomenon of what sometimes seems to those who have not shared such experiences like an 'overreaction' to discrete events, such as white people invoking police power over Indigenous, Black and brown people to settle minor disagreements. Given the embeddedness of consciousness in duration, no event is discrete. While social movements are, by their nature, unforeseeable in their present unfolding, they are also a continuation of the prior unfolding of past events. This also means that in participating in collective movements in the present, we give new meaning to events in our collective past—by continuing their unfolding, we reconfigure them in 'nonchronological time.' Al-Saji explains that "this present, in other words, exists in the mode of the future anterior, as that which will have been, precisely because it is open to and awaits future searching and elaboration" (Al-Saji 2012a, 3). On Bergson's account, as we saw in the last chapter, possibility does not precede what it conditions—rather, possibility arises at the moment it is actualized in an event.

This account of generative possibility helps to inform the concept of generative normativity as I have developed it throughout the thesis thus far. New normativities, like new possibilities, become actual as they emerge in the world. They are deeply rooted in, and yet not determined by,

the past. They recast the meaning of the past as they shape events in the present, and it is through this recursive movement that they shape the future. Generative normativity does not pursue a new descriptive stasis or a teleological end. Rather, it holds open toward the future. New normativities arise from individual human beings in relation to the social collectives of which they are a part, and condition the emergence of these individuals in turn. This normative production of individualities is not, however, routed through power in the manner of normalization. This is because under the mode of generative normativity, individuals produce *themselves* through their (individual and collective) normative activity, rather than *being produced* through the coercively prescriptive pull of the descriptive norm. As Canguilhem points out, the coercive pull of both descriptive and evaluative normativity arises from their *externalization*—their imposition on the organism from the outside, here the social sphere. Generative normativity reverses this directionality and *internalizes* the norm, turning its transformative pull toward the social sphere itself. This internalization of the norm does not, of course, in itself render the norm non-ambiguous or non-coercive—rather, it resists the *coercive pull* of its ambiguity by relating the norm to the organism itself rather than to the world, and turning the prescriptive pull of the norm toward the world. Thus, generative normativity reclaims normativity for living beings, drawing upon its vital origin without foundering in its ambiguities.

Though this account of generative normativity begins with the individual internalization of the norm, it is crucial to note that individual human beings (and many other organisms) exist always in relation to the social collective of which they are a part. The 'internalization' of a norm as just described does not imply its incorporation, like a foreign body, from 'outside.' Rather, it implies a shift of the directionality of normativity from an external average or ideal, to the generation of new ways of being; from a synchronic comparison of several organisms (or social

collectivities) to a diachronic comparison of one organism (or social collectivity) with itself. To return to the example of Confederate monuments: the call for their removal is not unprecedented in history; indeed, such removals have been used to erase, rather than repudiate, an abhorrent past such as the Tiananman Square massacre (Tsoi 2021).[85] But the meaning of this call in the United States is distinctive to the United States, due to the unique location of the institution of chattel slavery, and its aftermath, at the political and economic foundation of the country. This historical development, then, represents a diachronic reckoning of a social collective *with itself* rather than a synchronic comparison between distinct social collectives.

As opponents rightly point out, the evaluative norm that dictates the removal of Confederate monuments is indeed *new*, as is the descriptive norm of supporting the aims of the Black Lives Matter protests of summer 2020 (though this support had become less 'typical' by the fall) (Thomas and Horowitz 2020).[86] This norm was *generated* in response to the increasing visibility and influence of neo-Nazi and far-right organizing enabled by the rise of Donald Trump, alongside the popular upswelling of anti-white-supremacist organizing that had been growing since the middle of the last decade. Given that many other responses to these developments were available (and others were pursued), this particular norm—that we no longer publicly celebrate the racist insurrectionists of the civil war, or their resurrection in Jim Crow and civil-rights-era propaganda—was 'unforseeable,' an evaluative norm that emerged, generatively, through the temporal structure of generative possibility.[87] Given its emergence through this temporal structure,

[85] Grace Tsoi, "Pillar of Shame: Hong Kong's Tiananmen Square Statue Removed," *BBC News*, December 23, 2021. https://www.bbc.com/news/world-asia-china-59764029.
[86] Deja Thomas and Juliana Menasce Horowitz, "Support for Black Lives Matter Has Decreased Since June but Remains Strong Mmong Black Americans," *Pew Research Center*, September 16, 2020. pewresearch.org/fact-tank/2020/09/16/support-for-black-lives-matter-has-decreased-since-june-but-remains-strong-among-black-americans/.
[87] To call such a development 'unforeseeable' does not imply that it is the first of its kind in history. Rather, it implies that it arose out of historical, social, and normative conditions that could have resulted in any of many other possible outcomes, and is emergent from these conditions.

this new norm is deeply rooted in duration—the interpenetration of past and present in concrete, lived time—and thus in the past, 'actual and acting.' The generativity of normativity allows us to see the past differently, and realize this difference in the creation of new norms, both descriptive and evaluative. The introduction of these new norms transforms both *what is the case* (our understanding of the past) and *what is acceptable* (in terms of how we portray the past).

In this chapter, I have begun the translation from vital normativity as treated thus far to a social normativity in keeping with this concept. While Canguilhem concerns himself with what the social can reveal about the vital, I have been concerned with what the vital can reveal about the social. An important disanalogy, with regard to normativity, between these two spheres is that while in the vital sphere the ambiguity between descriptive and valuative normativity is a confusion to be disentangled, this ambiguity is foundational to the role of both modes of normativity in the social sphere. I have provided a brief genealogy of the role of normativity in social life, which has revealed in the interplay of descriptive and prescriptive normativity, identified by Foucault as 'normalization,' a dense and deeply problematic application point for biopower. I have attempted to illustrate the consequences of this social application of normalization in the production of totalizing and oppressive schemas of identity and difference.

I have proposed a new approach to normativity as a productive response to this problem—that is, the problem of the oppressive structures produced by this interplay of normativities. I suggest that generative normativity, which arises with life and which represents the capacity of living beings to generate new norms of relation between themselves and their environments, may be productively applied in the social sphere. Generative normativity may not only *not* fall into normalization, but may represent a tool for resisting it. I argue that this capacity is itself generated

by the vital temporal innovations introduced by Bergson, and that these temporal innovations constitute a kind of generative possibility that in turn makes generative normativity possible.

In the next chapter, I will continue my elaboration of this concept of generative normativity in the social sphere. I will also return to the related concepts of identity, individuality, and individuation, which have received widely divergent treatments thus far, but that provide a central index of problems to be addressed by the approach I've developed. This will necessitate a turn—or a return—toward the centrality of internal meaning-making, experience, and evaluation. In particular, I'll turn to Sylvia Wynter's idiosyncratic phenomenology of Blackness, rooted in Frantz Fanon, as well as to the critical phenomenologies of Linda Martín Alcoff and Alia Al-Saji, which provide crucial grounding in the temporal and embodied aspects of our normative orientations. These critical phenomenologies elaborate and, to a certain extent, rehabilitate the concept of identity so problematized by Mader and McWhorter's Foucauldian interventions. These insights and analyses help to particularize and corporealize the notion of generative normativity. I argue that this adds to its power to ground social uprising.

Chapter 5

"*The Only Entity for which these Specific Feelings Exist*:" Temporality, Experience, and Generative Normativity

In Chapter 4, I proposed the social deployment of generative normativity as a possible response to the coercive tendencies of the 'interplay of normativities' identified by the Foucauldian concept of normalization. I specified that this new normative approach would be rooted in the concept of vital normativity. This means that the social manifestation of generative normativity partakes of the modes of temporality—in particular, duration and indetermination—that characterize the emergence of life. I suggested that the emergence of these unique temporalities with life also constitutes the emergence of normativity in all three modes—descriptive, evaluative, and generative—and that this vital conditioning of generative normativity expands its potential for social mobilization. The framework of duration and indetermination as expressed through generative normativity, I held, constitutes our capacity as human beings to respond to social conditions in new ways, and to alter our social environments in keeping with newly developed norms, while remaining deeply informed by the past—the past of the individual, and the past of the social collective of which that individual is a member.

This situates the living, social being in a temporal position that is both open to the future and informed by the past. Alia Al-Saji identifies this as a position of 'generative possibility' that accounts simultaneously for the "continuous creation of unforeseeable novelty" (Bergson [1934] 1992, 107) and for the recursive 'reconfiguration' of the past (Al-Saji 2012a, 3). The present as understood through the concept of generative possibility has a 'future anterior' structure: it is "that which *will have been*" (ibid, 3). The vital temporal innovations introduced by Bergson, then, constitute a kind of generative possibility that in turn makes generative normativity possible.

In this chapter, I build on these insights and also return to a central feature of vital normativity as conceived of by Goldstein and Canguilhem: the *experience*, on the part of even the 'simplest' organism, of conditions as either beneficial or harmful. This rootedness of vital normativity in experience, combined with its situatedness in a unique temporality, requires the adoption of resources from critical phenomenology and affect theory, which complement what has been, so far, a largely Foucauldian approach to the social deployment of vital normativity. These distinct approaches to questions of identity, normativity, and experience, long held in tension, have begun to be reconciled in recent years, and this reconciliation is promising for my project.

I begin by synthesizing and recapitulating my discussion of the question of experience through Goldstein and Canguilhem in Chapter 1. By connecting this discussion to Bergson's approach to individuation in Chaper 2, I develop an account of identity and experience that is rooted, not in the social or the phenomenological, but in the vitality of the organism. Finally, through insights drawn from Linda Martín Alcoff, Frantz Fanon, Sylvia Wynter, Shannon Sullivan, and Alia Al-Saji, I translate this account of identity, normativity, and experience from the vital to the social sphere.

I. *Goldstein, Canguilhem, and Bergson on Experience, Temporality, and Individuation*

Kurt Goldstein's innovation was to conceive of disease as a 'dreaded' state of being from the perspective of the qualitative, subjective experience of the sick individual, rather than deriving from the mere presence or absence of symptoms (Goldstein [1934] 1995, 329). From this account of disease arises Goldstein's revision of the concept of normality, as internal and experiential rather than external or quantitative. A 'normal' organism, on his account, is one that exhibits 'ordered behaviour,' which describes both the unified, integrated functioning of the organism itself, and the

adequacy of its behaviour to ensure a stable relationship with its environment. For Goldstein, "an organism that actualizes its essential peculiarities, or—what really means the same thing—meets its adequate milieu and the tasks arising from it—is 'normal'" (ibid, 325).

Ordered behaviour is identifiable through the organism's experience of its own behaviour; it comes "with a feeling of smooth functioning, unconstraint, well-being, adjustment to the world, and satisfaction" (Goldstein [1934] 1995, 325). For Goldstein, no phenomenon can be evaluated with respect to an individual organism—let alone an aggregation of individuals—without first accounting for the meaning of that phenomenon to the organism itself. Biological phenomena are not 'self-evident facts' but "must first prove their 'significance' for the organism" (Goldstein [1934] 1995, 306). The organism analyzes the conditions that obtain between itself and its environment, and evaluates them experientially, in relation to remembered phenomena and remembered states; only through this process can 'ordered behaviour' emerge. Experience, then, is the interaction between self and world through which meaning and significance are generated—this account has much in common with the phenomenological approach to experience.

Georges Canguilhem, like Goldstein, highlights the organism's qualitative experience of health and disease, treating the distinction between the normal and the pathological as a qualitative alteration in the experience of the organism. Canguilhem, however, takes this insight into the centrality of experience somewhat further: his account in *The Normal and the Pathological* illuminates not only the individual organism's qualitative experience of disease, but its formation as an organism by this experience (Muhle 2014, 2). In contrast with Goldstein's positive account of the experience of 'ordered behaviour,' Canguilhem contends that "the awareness of the body consists in a feeling of limits, threats, obstacles to health" (Canguilhem [1943] 1991, 91) and observes that vital norms are most often expressed as an aversion to what the organism identifies

as a 'dreaded,' or pathological, state (Canguilhem [1943] 1991, 126). For Canguilhem, the 'dynamic polarity' between preference and aversion (which I have called a 'discriminatory capacity' and identified as the basis of normativity) is highlighted as a fundamental feature of life, which is revealed through pathology. Thus the experience of disease is central, as Maria Muhle puts it, to "the formation of organic individuality," (2014, 2). As discussed in Chapter 1, these accounts of meaning, significance, and experience pertain to organisms in general, and not only to human beings. However, as we shall shortly see, this appeal to experience has particularly complex implications in the human context.

For Canguilhem, the experience of disease is at the centre not only of organic individuality but also of generative normativity. In his introduction of the latter concept, Canguilhem explains that one "*feels* in good health—which is health itself—only when he *feels* more than normal—that is, adapted to the environment and its demands—but normative, capable of following new norms of life" ([1943] 1991, 200, emphases mine). Thus Canguilhem presents normativity as a productive, differentiating, *generative* activity that is identified through the organism's affective investment in its own bodily states. This generative mode of normativity, which he identifies with responsiveness, revision, and innovation, allows Canguilhem to articulate the following definition: "disease is a positive, innovative *experience* in the living being" (Canguilhem [1943] 1991, 186, emphasis mine). The generatively normative capacity is thus defined as deeply rooted in experience.

This rootedness in experience also implies a grounding in the subjective or pre-subjective, the individual or proto-individual. For Henri Bergson, as we have seen, organisms are a material expression of the framework of duration and indetermination; this situates them in a temporal position of openness to possibility even as it molds them through past experience. This provides

for Bergson's account of 'creative evolution': "Evolution implies a real persistence of the past in the present, a duration which is, as it were, a hyphen, a connecting link" (Bergson [1907] 1998, 22). For Bergson, this illustrates not simply the negative movement of natural selection but also a positive orientation toward problem solving on the part of the organism, which he identifies as the *creativity* of evolution. This creativity is rooted in the temporal synthesis of duration and enacted through the moment of hesitation that characterizes indetermination. For Bergson, "evolution constitutes, through the unity and continuity of the animated matter which supports it, a single indivisible history" (Bergson [1907] 1998, 37). The indivisibility of history highlighted by the framework of duration and indetermination is reflected in the indivisibility of the organism itself—that is, its movement toward individuality, what Bergson calls *individuation*. For Bergson, as we've seen, living beings are constitutively oriented toward individuation, though this tendency is never completed.

When we weave together the origin of normativity in the discriminatory capacity, its continued elaboration through duration, indetermination, and generativity, and the grounding of this trajectory of development in the experience of the organism and its movement toward individuation, conditioned by the *creativity* of evolution and the *generativity* of normativity—the pattern of a complete theory begins to emerge. The concept of generative normativity, due to its basis in vitality, stakes out a position *prior* to the interplay of normativities in the social sphere. Generative normativity likewise grounds itself in a productive temporality that, while always conditioned by the past, holds open the future and makes space for innovation. Finally, generative normativity avoids the assumption of a pre-existing individual or an already-constituted subject, while yet accounting for how individuation and subjectivity emerge, through the experience of the organism in its own creatively productive, generatively normative activities.

These approaches to experience and to individuality are distinct from other philosophical approaches that foreground identity and experience, such as existentialism and phenomenology (Foucault 1991, 20). While these latter approaches customarily begin either from the perspective of the experiencing subject or with its formation, Canguilhem and Goldstein analyze the *pre*-subjective experience of the organism, while Bergson accounts for a *tendency* toward individuation that is never completed. This grounding of normativity in the pre-individual and in pre-subjective experience permits a social application of the concept of normativity that takes vitality, rather than consciousness, as the basis of normativity, emphasizing the *generativity* of normativity, rather than subsiding into the 'interplay of normativities' exemplified by normalization.

II. *Scott and Alcoff on Experience, Identity, and Subject Formation*

Experience is, of course, at the centre of the phenomenological method, and also of social and political applications of phenomenology such as those gathered under the rubric of 'critical phenomenology.' At the same time, experience has also been at the centre of a tension within critical and ameliorative sub-fields of philosophy—feminist theory in particular—for several decades. In feminist theory, this tension has manifested in a debate between broadly Foucauldian critiques of experience, identity, and subject formation, and critical phenomenological approaches to the same concepts. This debate is exemplified by an extended exchange between Joan W. Scott and Linda Martín Alcoff, which I summarize here. This prepares the ground for a turn, in the following section, to the critical phenomenology of Frantz Fanon, Sylvia Wynter, and Alia Al-Saji and the affect theory of Shannon Sullivan.

Historian Joan Scott's influential essay on "The Evidence of Experience" initiates this exchange. In this essay Scott addresses the increasingly prevalent practice of incorporating

marginalized perspectives into historical narratives in order to expand their inclusiveness. She takes Black queer writer and literary critic Samuel R. Delany's first-person account of his first visit to a gay bathhouse in 1963 as an illustrative example. Delany describes this experience as transformative, constituting his revelation of the fact "that there was a population—not of individual homosexuals […] not of hundreds, not of thousands, but rather of millions of gay men, and that history had actively and already, created for us whole galleries of institutions, good and bad, to accommodate our sex" (Delany 1988, 174, cited in Scott 1991, 774).[88] Given Delany's reference to the revelatory effect of mere numbers, this may at first read as an example of quantitative, descriptive normativity at work. Indeed, Scott deftly employs Delany's expression of this realization as a metaphor for a certain approach to historical scholarship: one that purports to provide a broader representation of history through a quantitative expansion of the range of perspectives represented.

As Scott characterizes this approach,

> The challenge to normative[89] history has been described, in terms of conventional historical understandings of evidence, as an enlargement of the picture, a corrective to oversights resulting from inaccurate or incomplete vision, and it has rested its claim to legitimacy on the authority of experience, the direct experience of others, as well as of the historian who learns to see and illuminate the lives of others through his or her texts (Scott 1991, 776).

This 'enlargement' of the historical picture is, of course, not merely descriptively quantitative: it is intended as an evaluative corrective designed to recognize and include previously excluded

[88] Joan Scott, "The Evidence of Experience," *Critical Inquiry 17*, no. 4 (1991): 773-97.

[89] This is another example of a common use of the term 'normative,' which I discussed briefly in Chapter 1. Here it is important to note that this use calls forth both descriptive normativity (i.e. it describes correspondence with a typical state of being) and evaluative normativity (i.e. it invokes a situation in which the descriptive norm is *assumed* to be 'better' than the alternative, but in which the approach or concept in question *resists* this evaluation or even *subverts* it). My intuition is that the common use of this sense of 'normative' in critical discourses constitutes a shorthand critique of the mechanism of normalization—but I would also argue (though I lack the space to do so here) that due to the conceptual sleight that this shorthand critique occludes, it has an unfortunate tendency to support, rather than subvert, normalization.

perspectives. It is the dependence of this approach upon "the authority of experience," however, to which Scott takes exception. As a reader of Foucault, she is concerned that such approaches "take as self-evident the identities of those whose experience is being documented and thus naturalize their difference" (Scott 1991, 777). That is, Scott shares Foucault's analysis of the production of 'individuals' with determinate 'identities' as a crucial aspect of the functioning of disciplinary power. As we saw through Foucault's analysis of the 'criminal' in *Abnormal*, this production has at least two naturalizing effects that are of particular significance here: first, it generates a temporal continuity by which an individual, once determined to have committed a crime, can be found to have *always already* been a criminal; second, it identifies such a broad range of behaviours as characteristic—at least potentially—of criminality that virtually *everyone* can be found to engage in behaviours that betray their purportedly criminal nature. Thus through both temporal and ontological universalization, the criminal becomes a 'natural' kind of person (see Hacking 1995, 1999).

In Scott's view, this naturalization of individuals by means of what might be termed the reification of identities effectively erases the social mechanisms by which these identities and individuals are constituted and codified. "Questions about the constructed nature of experience, about how subjects are constituted as different in the first place, about how one's vision is structured—about language (or discourse) and history—are left aside" (Scott 1991, 777). For Scott, then, even the explicitly corrective approach of soliciting and incorporating previously marginalized perspectives diverts attention from a more important project: a historical analysis of the very construction of these perspectives and their codification as identities. In Scott's view, moreover, "it is precisely the questions precluded—questions about discourse, difference, and subjectivity, as well as about what counts as experience and who gets to make that determination—

that would enable us to historicize experience, to reflect critically on the history we write about it, rather than to premise our history upon it" (ibid, 790).

For Scott, then, doing history as a critical enterprise requires a shift, not wholesale away from experience, but rather from *incorporating* experience to *historicizing* it. In her view, this shift requires "a change of object"—from experience taken, under her interpretation, as a raw datum, toward the linguistic and discursive *construction* of experience, and the concomitant *constitution* of individuals. "It is not individuals who have experience, but subjects who are constituted through experience" (Scott 1991, 779). What is called for, in Scott's view, is to "insist on the productive quality of discourse" and thus to illuminate the constitution of subjects as a 'discursive event' that is "collective as well as individual" (ibid, 793).

Scott offers a reinterpretation of Delany's account that emphasizes the significance of this construction, supporting her interpretation through further citations of his work, which figures "all categories of analysis as contextual, contested, and contingent" (ibid, 796). Specifically, Delany "makes entries in a notebook, at the front about material things, at the back about sexual desire" (Scott 1991, 795). Delany writes:

> That the two columns must be the Marxist and the Freudian—the material column and the column of desire—is only a modernist prejudice. The autonomy of each is subverted by the same excesses, just as severely […] If it is the split—the space between the two columns (one resplendent and lucid with the writings of legitimacy, the other dark and hollow with the voices of the illegitimate)—that constitutes the subject, it is only after the Romantic inflation of the private into the subjective that such a split can even be located (Delany 1988, 29-30, cited in Scott 1991, 795).

On Scott's interpretation, Delany's suggestion that the subject is constituted in the 'split' or the 'space between' desire and material conditions, illegitimacy and legitimacy, the private and the public, betrays the fact that the significance of experience is accessed through analysis of language and discourse. A subtler point can be discerned in Delany's work, however. It is precisely pre-

conceptual experience, experience at the cusp of the sayable, that often plays the most central role in subject formation, *prior* to the emergence and dissemination of the discursive categories that codify that experience and determine its role in constructing identities. Delany's revelation in the bathhouse is not one of a vast community of others who share his own 'self-evident' and 'natural' identity. Rather, it is a recognition that architectural and institutional spaces had been established to facilitate a range of practices, *before* those practices were recognized as determinative of identities or constitutive of kinds of individuals—let alone socially accepted identities or individuals. This recognition gives Delany an experience of 'power,' but also of contingency. Moreover, it has the 'future anterior' structure of generative possibility: once one discovers such architectural and institutional spaces, it *will have been the case* that they help to enable the formation of one's distinct subjectivity. Delany's experience, then, is collective while yet being *pre*-subjective, inasmuch as it is a crucial moment in the *formation* of his subjectivity.[90]

Philosopher Linda Martín Alcoff has produced several thoughtful responses to Scott, and to post-structuralist feminist engagements with the concept of experience more generally. Alcoff begins by observing that "post-structuralist feminism has largely negated the *cognitive* importance of experience on the grounds that experience and subjectivity are produced through the interplay of discourses" (Alcoff 2000, 39).[91] Alcoff reviews the history of this negation, beginning with post-Enlightenment critiques of the overvaluation of reason and its severance from embodied experience, and continuing with 1970s 'consciousness raising' around women's experiences and

[90] Somewhat ironically given Scott's avowed theoretical orientation, Delany's account of experience as formative of his subjectivity without being determinative of it—as conditioned by discourses while yet emerging outside of them—has less in common with Scott's definition of experience than with Foucault's definition of experience in *The History of Sexuality Vol. 2*: "the correlation between fields of knowledge, types of normativity, and forms of subjectivity in a particular culture" (Michel Foucault, *The History of Sexuality Vol. 2: The Use of Pleasure*, trans. Robert Hurley (New York: Vintage Books, (1984) 1990) 4). See below for a further discussion of this Foucauldian account.

[91] Linda Martín Alcoff, "Phenomenology, Post-Structuralism, and Feminist Theory on the Concept of Experience," in *Feminist Phenomenology*, eds. Lester Embree and Linda Fisher, 39-56 (New York: Springer, 2000).

the incursion of these new perspectives into such disciplines as psychology, sociology, and anthropology. The central problem, as Alcoff presents it, is the ambivalent character of experience in this context: it is based in "women's own understanding and interpretation," but it is also "the object and site of gender ideology" (Alcoff 2000, 43). Thus, she acknowledges, "the feminist turn toward post-structuralism was motivated by the felt need for a deeper methodological critique of the roots of sexism and patriarchal assumptions in all existing domains of knowledge than an experiential-based feminism could provide" (ibid).

Alcoff, however, proposes that the wholesale rejection of 'experiential-based feminism' in favour of theoretical analysis of the social and political conditions of that experience is in fact based on a 'false dilemma' (Alcoff 2000, 45). She identifies several problematic implications of Scott's position. First, the suggestion that experience is not merely conditioned, but rather *constructed*, by language effaces significant and formative experiences that do not yet fall under an existing concept. For Alcoff, a central example of such experiences is sexual violence—in particular, experiences of marital or 'date rape' prior to the recognition of these acts *as* rape (ibid, 46). Second, Scott's exclusion of experience as "an authoritative source for knowledge" leaves unanswered the question of the precise role *of experience itself* in the production of *dispositifs* of power-knowledge. In sum, in insisting upon a strong distinction between theory and experience, the post-structuralist feminist approach ignores an entire field of inquiry and methodology—phenomenology—whose theoretical basis *is* experience.

In a more recent exploration of the role of experience in accounting for and ascribing meaning to sexual violations, Alcoff mediates explicitly between popular, phenomenological, and Foucauldian accounts of experience, demonstrating that Foucault has more to offer a feminist account of the experience of sexual violation than some Foucauldians imply—though a

phenomenological supplement to this enriched Foucauldian approach is still called for. Here Alcoff poses the question, central to phenomenological analysis, of how meaning comes to infuse the content of our perceptions (Alcoff 2018, 56).[92] This can be seen as another, more phenomenologically-informed way of posing the questions Scott grapples with above: How do discourses come to shape our experiences? And how are our subjectivities thereby constituted?

In addressing this question, Alcoff calls our attention to Foucault's somewhat uncharacteristic incursion, in *The History of Sexuality vol. 2*, into the question of experience. Here he defines experience as follows: "the correlation between fields of knowledge, types of normativity, and forms of subjectivity in a particular culture" (Foucault [1984] 1990, 4). Though this definition may at first appear highly rarefied and technical, Alcoff reveals through an appeal to pragmatism that it in fact accords well with a popular understanding of 'experience.' This popular understanding figures experience as pertaining both to *what* happened and *how* it was perceived in relation to oneself. For example, I could say both that I once 'experienced' the Northern lights and also that I 'experienced' this event as life-altering. These everyday usages recognize 'experience' as constituted by an interaction between self and world such that experience is neither an exact 'recording' of events, nor merely contained 'in one's head' (Alcoff 2018, 57). Moreover, Foucault's three-part definition of experience does justice to the interactions between self, norms, and knowledge that concern Scott in her critique of experience.

Alcoff demonstrates how the different parts of this definition can be brought to bear on how an experience *feels* to the experiencer. Knowledge, she explains, can help to construct the hermeneutic backdrop against which we regard our experiences. Domains of knowledge—or what Ian Hacking calls 'classificatory kinds' such as 'heterosexual' or 'mentally ill' (Hacking 1995,

[92] Linda Martín Alcoff, "The Thorny Question of Experience," in *Rape and Resistance: Understanding the Complexities of Sexual Violation*, 56-75 (Medford: Polity Press, 2018).

1999)—can provide an interpretive frame both for what happens, and for how we feel about it. Norms also bear on whether we consider an event to be, for example, an unenjoyable romantic experience or a sexual violation. By the same token, norms also condition whether such events feel merely regrettable or traumatizing. The 'norms' at work here are presumably both descriptive and prescriptive, with the conceptual sleight between these two registers, as usual, intensifying their effects. Given that sexuality is, as we saw in Chapter 4, a particularly dense locus of normalization, whether we think a behaviour is 'typical' has much to do with whether we think it is good or bad, benign or traumatizing.[94] Finally, 'forms of subjectivity' or as Alcoff puts it 'relations to one's self' can produce distinctive habits of self-interrogation and self-judgement that interact with the previous two frames to produce an amalgam of experience that is informed by all of these social and subjective frames at once.

In her 2000 essay responding to Scott, Alcoff provides a brief history of phenomenological approaches to the question of experience, focusing primarily on Husserl and Merleau-Ponty. The significance of Husserl's approach for Alcoff lies in his identification of consciousness as "positional, intentional, inherently and incessantly open to the world and yet constitutive of the meaning of that world and of our experience within it" (Alcoff 2000, 48). Consciousness is not, for Husserl, either a passive receptor of sense data or an independent producer of experience, but rather always cooperates in constructing the world and constituting its own reception of it. Merleau-Ponty builds on this insight into the nature of consciousness, adding his own insight that, as Alcoff puts it, "knowledge is always unfinished and incomplete, precisely because of the open-ended nature of experience and of meaning" (ibid).

[94] Writers who have recently and repeatedly pointed out that sexual and romantic behaviours now deemed unacceptable are in fact commonplace (e.g. Merkin 2018, Roiphe 2018, Weiss 2018, Weiss 2017) often appeal implicitly to the intuition that the commonness of a given behaviour renders that behaviour less bad, or *should* render its effects less traumatizing.

For Merleau-Ponty, this means that the world and its meanings both exist prior to our individual experience of them, and are yet shaped by our interpretation. Moreover, as Alcoff highlights, this shaping is not only ontological but *normative*—in interpreting, we shape not only meaning and significance but also value (Alcoff 2000, 49). This ambivalent character of the world as both fundamentally, subjectively interpreted and yet inexhaustible by this subjective interpretation is reflected in our embodied relationship to the world through habit, comportment, and perception. Though language and discourse play a role in shaping these modes of embodiment and in imbuing them with meaning, the meaning they carry is often non- or pre-discursive. As Alcoff puts it, "on this view, meaning is not outside culture and history, but meaning is produced through the embodied actions of consciousness in the world," which means that "subjectivity cannot be theorized apart from its lived, embodied experience" (Alcoff 2000, 50).

In her more recent engagement with the question of experience, Alcoff draws on the Hegelian concept of *Erfahrung* or meaning-laden experience, which recognizes that experience is never "merely discursive nor completely ahistorical," and that "just as experience is mediated by concepts, so too are concepts interpreted through our experiences" (Alcoff 2018, 68). To return to the example of sexual violation: the #MeToo movement, in drawing parallels between different kinds of sexual violation, has doubtless affected how many people interpret potentially boundary-crossing behaviours. But the #MeToo movement would not have emerged were it not for the widespread recognition of sexual violation—broadly construed—as an *experience* that most women, and many men and non-binary people, have had at some point in their lives. These shared experiences inform the concept that is then used to interpret further experiences.

This temporal framework, in which the past infuses present experiences, interpretations, and normative evaluations, thus generating new possibilities in the present, should by now be

familiar to us. It is reflected in Bergson's account of the framework of duration and indetermination that arises with life. Alcoff likewise emphasizes the temporal nature of experience as "a crucial constitutive condition forming the way in which a given event becomes contentful for us" (Alcoff 2018, 70). This is why, as we saw in Chapter 4, instances in which white people invoke police power over Indigenous, Black, and Brown people to settle minor disagreements, or in which a male boss suggests that his female subordinate meet him in a hotel dining room to discuss a work issue, can strike some people as benign and others as red flags.[95]

Thus Alcoff demonstrates that not only is the choice presented between theoretical analysis and embodied experience a false dilemma, but theorizing that *begins from* embodied experience is in fact necessary to recognizing *how* discourses come to play a role in the formation of the subject, and vice versa. The relationship between the behaviours enabled by an architectural environment like a bathhouse and the bodily comportments developed by subjects in such an environment is one example of the feedback that circulates between embodied beings and their phenomenal worlds, and the concepts that exist within a given discourse can be seen as similarly productive of behaviours and comportments. None of this implies, however, that it is *only* the architecture or the discourses that produce these comportments, even if they do endow them with a particular complement of meanings, value, and significance.

My contention is that Alcoff's response to the post-structuralist critique of experience not only provides a richer account of experience and its role in subject formation, but also explains what might otherwise appear as a disconnection between constitutively related discourses,

[95] That still others, such as the feminist provocateurs cited in the previous note, suggest that such situations constitute such *obvious* red flags that women who would accept such a dinner invitation should not complain about what happens afterward, is evidence of just how deeply subject- and habit-forming we take these kinds of historical experiences to be. As Alcoff puts it, "norms exist in embodied habits; rendering this apparent is what makes it possible for experience to become a ground of knowledge" (2018, 71).

identities, and individuals. In proposing that identities are discursively constructed and individuals discursively constituted, the post-structuralist account often remains limited by Foucault's avowed focus on describing *techniques* of power, rather than illustrating the experiences these techniques produce in the subjects they help to construct, or speculating about the motives, intentions, or objectives of the powerful that call for the deployment of these techniques (Foucault [1975] 1977, 28).

Alcoff thus makes a persuasive case for the supplementation of a Foucauldian analysis of the techniques of power with a phenomenological account of the effects of these applications of power. Having explored at length the origin of normativity in the embodied preferences of individual organisms *and* the concomitant formation of organisms by these constellations of embodied preferences, we are in a position to see more clearly the connection between these techniques of power and the phenomenology of subject formation that they engender. This yields, in turn, the foundation of an account of the constitutive relationship between discourses—including gender and racial schemas—identities, and individuals. This allows us to view generative normativity as generating not only norms, but kinds of normed subjects—as producing not only evaluative, but ontological innovations.

III. *Fanon, Wynter, Al-Saji, and Sullivan on the Normativity of Racialization*

Philosopher and literary theorist Sylvia Wynter provides another perspective on the role of experience in subject formation—specifically, in the interactions between first-person experiences and social discourses—from a critical phenomenological perspective. Her work, through Fanon, on the first-person experience of racialization reveals this kind of normatively-invested first-person

experience as the missing link between normalizing discourses and their material effects—that is, the production of subjectivities.

First, it is necessary to explain how Wynter thinks subjectivities are *discursively* constructed. In her essay "Unsettling the Coloniality of Being/Power/Truth/Freedom," Wynter "redefines Marx's class struggle in the terms of a 'politics of being': that is, one waged over what is to be the descriptive statement of the human, about whose master code of symbolic life and death each human order organizes itself" (Wynter 2003, 319).[96] Wynter's reference to 'symbolic life and death' here appears to pertain both to the alleged legitimacy of killing by the state—justified, as discussed in Chapter 4, by the posited continuity of biological being—*and* the category of 'social death' under which human beings are sometimes designated as mere (living) objects.

In order to 'unsettle'—or render contingent—our current concept of humanity, Wynter provides an extensive historical account of the emergence and transformation of the concept of 'man' in the Western context.[97] According to Wynter's account, the dominant Western conception of 'man' arose during the Enlightenment and has undergone a significant shift over the course of its brief history. To highlight this transformation, she divides the concept into Man_1, the political subject, and Man_2, the bio-economic subject. While the Western invention of 'man' during the Enlightenment was meant to draw a boundary between Judeo-Christian and secular modes of self-understanding and thus foregrounded rationality in its justificatory structure, Wynter holds that a shift occurred around the 18th century, during which the trope of natural selection gained conceptual ascendency. Thus Man_1 appealed to rationality as a marker of inclusion in the dominant

[96] Sylvia Wynter, "Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation—An Argument," *The New Centennial Review 3*, no. 3 (2003): 257-337.
[97] It is worth noting that in using the term 'man' rather than 'human'—and in specifying that her explicit goal is the 'unsettling' of this concept—Wynter is pointing out rather than participating in the politics of exclusion that the use of this term implies.

ethnoclass, while Man_2 took and continues to take the notion of natural selection as its central organizational principle. Man_2, then, appeals to a *continuity* of biological being as discussed in Chapter 4—one in which the 'perfection' of the 'human race' stands as the primary objective, by which the killing of non-'normal' members is justified. To be 'normal' and to be 'human' thus stand as near-synonyms.

Man_2 also opens up the possibility of conceiving of different humans as occupying different positions within this continuous biological field: as 'developed' or 'undeveloped,' 'selected for' or 'dysselected.' As Wynter points out, this understanding of 'man' makes the non-bourgeois identity both 'natural' (i.e. biological) and emergent from socioeconomic conditions: "the individual could not know if s/he had indeed been so selected except by attaining to the optimal status of being a middle-class Breadwinner […] to not be middle class was/is to have to accept one's ostensible dysselection" (Wynter 2003, 354). Here human success as a species is assumed to be a matter of biological selection, and the stark differences between human groups with respect to survival and thriving are explained by economic selection—thus 'bioeconomic man.' As in all versions of the concept of 'man,' bio-economic man is defined by what it excludes.

Wynter's earlier essay "Towards the Sociogenic Principle: Fanon, Identity, the Puzzle of Conscious Experience, and What It Is Like to Be 'Black,'" attempts to approach the construction of the human from a first-person, experiential perspective, exploring, in the mold of Thomas Nagel's "What is it like to be a bat?", 'what it is like' to be human. For Wynter, this exploration is uniquely illuminated by the question of what it is like to be a racialized subject under white supremacy. She begins here with two interlocking puzzles: first, the puzzle of consciousness as a phenomenon that is organically grounded, and yet irreducible to this basis (which 'what it is like' always exceeds), and second, the puzzle of approaching first-person experiences of racialization,

given the descriptive *and* evaluative overdetermination of those experiences by racist ideologies. These puzzles are in tension, Wynter explains, because:

> One can […] speak here of a world governed by biologically determined assumptions—assumptions verified by the objective facts of what it is like to be a member of the human species. This is not the way, however, that he will experience this self, this body, in this specific culture-historical world in which he must necessarily realize himself as human, through his interaction with 'normal' others, who are, necessarily, white (Wynter 2003, 40).

In this passage, Wynter provides a *precis* of her approach in the article. As we have just seen, a particular account of the human—'bioeconomic man'—holds sway in our present era. This account assumes not only that the human is reducible to the biological, but also that the *biology* (or, we could say, the *vitality*) of the human implies a continuous relation between humans that renders them all part of a single 'human race.' As we saw in Chapter 4, it is this ascription of a continuous, and adaptively perfectible, human race that permits the designation of a descriptive norm for the species, and thus what McWhorter calls 'racism against the abnormal.'

What Wynter adds in this article is an exploration of how this particular discursive formulation of the human is *experienced*, first-personally, by those who are brought under its description—or, more revealingly, those who are excluded from it. For Wynter, the key to both puzzles of consciousness is Fanon's notion of 'sociogeny.' Psychiatrist and philosopher Frantz Fanon introduces the concept of sociogeny in *Black Skin, White Masks* to identify the specifically social mode of development of human beings (Fanon 1967, xv).[98] Fanon's insight is that human development takes place not only along the axes of evolution at the species level (phylogeny) and maturation at the individual level (ontogeny), but also through the interaction between these two axes by which the social influences the organic and vice versa. He calls this latter phenomenon *sociogeny*. Wynter, in turn, modifies the concept in order to highlight the role of the contemporary

[98] Frantz Fanon,. *Black Skin, White Masks*, trans. Charles Lam Markmann (New York: Grove Press, 1967).

discourses of genetics, evolution, and adaptation in sociogeny—calling this the 'sociogenetic principle.' Her insight is that under Man_2, these discourses of continuity, competition, and selection have become central to delineating the category of the human.

Wynter draws an unlikely parallel between contemporary Anglo-American (characteristically third-person) approaches to the irreducibility of consciousness, and Fanon's existentialist, phenomenological project of rendering legible the first-person *experience* of consciousness, particularly under the sway of racialization. Drawing these projects together yields a novel analysis of the interactions between experience, subjectivity and the social world that takes full account of the normative force of these interactions. This analysis relies upon a similarly unlikely synthesis of contemporary discourses of adaptation and natural selection with ethnography and phenomenology of racialization. Ultimately, Wynter holds that our normative evaluation of certain behaviours arises from the exigency of adaptive advantage for our species as a whole—but that in order for this to be the case, our *individual* subjective experiences of behaviours as 'good' or 'bad' must provide the link between (evaluative) social norms and our (descriptive) instantiations of those norms. In Wynter's view, as in Fanon's, these interactions play out in a distinctive way among humans because we are—at both the individual and the species level—constitutively social as well as organic beings.

The normative social systems Wynter is concerned with are contingent; they are shaped by temporal, geographical, socio-cultural and economic conditions. As she highlights through her account of Man_2, our current discursive construction of the human involves both its continuity with all life, and the continuity of individual humans with an entire 'race' of which they may or

may not be considered 'normal' examples (Wynter 2001, 35[99]). As Wynter illustrates through her interpretation of Fanon, moreover, the *experience* of being human—specifically, of the evaluative pull of such descriptive designations—varies widely as well. As Fanon so poignantly illustrates, 'what it is like' to be a Black Caribbean in the Caribbean is very different from 'what it is like' to be a Black person having come of age in the Caribbean and subsequently made the journey to France. The racial schema in play—the system of social scripts that serve to shape, evaluate, and interpretively frame one's behaviours—is similar in both contexts. Yet how one is located, and locates oneself, within this schema may be very distinct.

Analyzing Fanon's description of his own transformation, and similar transformations experienced by Black French Caribbeans, upon first arriving in France, Wynter writes that the Black Caribbean's sense of self, as long as she remains in the Caribbean, "is, as Fanon shows, *produced as normal* and thereby as a 'white self'; […] his 'black skin' thereby literally wears a 'white mask,' but it is a contradiction that, as long as he remains in the Caribbean, he is not compelled to confront (Wynter 2001, 34, emphasis mine). Recalling McWhorter's analysis of 'racism against the abnormal,' Wynter's equivocation 'normal and thereby white' gains an additional valence: whiteness is not only the neutral or unracialized position, but the putatively *descriptively* normal or 'typical' position, which is further encoded as *evaluatively* normative. Fanon's confrontation of this contradiction, then, is also an immediate confrontation of the devaluation of his race and the concomitant erasure of his (human) being.

It is not that Fanon was *not* embedded in the French racial schema, or that he was unaware of his own embeddedness in this schema, as a young man in Martinique. Rather, he was able, while

[99] Sylvia Wynter, "Towards the Sociogenic Principle: Fanon, Identity, the Puzzle of Conscious Experience, and What It Is Like to Be 'Black,'" in *National Identities and Sociopolitical Changes in Latin America*, eds. Mercedes F. Durán-Cogan and Antonio Gomez-Moriana (New York: Routledge, 2001).

remaining in Martinique, to "maintain the contradiction" of inhabiting a different position in that schema than the one ascribed to him in France. For Fanon, such a contradiction (black skin, white mask) can only be maintained as long as one's social world supports it. No matter the content of one's own self-ascription or the tenacity with which one upholds it, one's experience of racialization is always co-produced with, and realized in the specific cultural context of, one's social sphere. This co-production involves both ontological and normative features. Fanon reveals how behaviours that were preferred, and thus coded as 'white,' in his original Caribbean context, are differently coded in the French context. The French racial schema relies less on behaviour than on phenotypical features such as skin color, accent and use of French/Creole, and reevaluates all behavior from the perspective predicated on these features. Thus the systems of evaluative normativity that classified Fanon as 'good' and therefore 'white' in one context classifies him as 'Black' and therefore 'bad' in another.

To offer a less familiar example of such an interaction: as a child of European descent growing up in rural Hawai'i in the 1990s, my experiences of racialization, and my sense of my own racial identity, was very different from my experiences as an undergraduate in Vermont, in my late 20s in Tennessee, or in my 30s in Québec and British Columbia.

With its relatively recent history of colonization, its unique patterns of immigration, and its uneasy status as the 50th US state, Hawai'i has a distinct racial culture, incorporating both the white supremacy of the mainland and a complex system of casual and relatively benign prejudice that cuts in many directions. Hawai'i tends to picture itself (to outsiders and to itself) as a melting pot, a post-racial utopia. But though Hawai'i residents are ethnically diverse, they also tend to be acutely race-conscious. The primary classificatory structure of race in Hawai'i is a binary: local vs. *haole*. 'Local' means anyone whose family has been in the islands for more than a generation

or so, but it is usually reserved for people perceived to be of Hawaiian, Filipino, Japanese, Portuguese, and/or Chinese descent; *haole* (loosely translated as 'breathless') means anyone foreign or new to the islands, but it is usually reserved for people perceived to be of Northern European descent. Whether one can be 'local' thus depends on race or ethnicity as defined by phenotype—including language use (locals generally speak Hawaiian Pidgin, *haoles* generally do not)—or family heritage. The implications of this classificatory structure are analogous to those of structural racism on the mainland, in this case systematically disadvantaging 'locals' in areas like housing, education, and employment, political and social representation, and criminal justice.

Yet unlike the white supremacy found in most areas on the mainland, the racial schema in Hawai'i carries additional prejudices that divide, classify, and evaluate along other axes, especially among children. This was formative of my own experience of race as a child. The race that I and many *haole* kids were in the '90s was defined by foreigness: the eater of strange foods; the performer of the wrong hygienic practices; the embodiment of uncouthness. This sense of my own unacceptability (itself by no means an unusual childhood experience) was so strong by the time I finished high school that it took me years in overwhelmingly white Vermont before I fully understood that I was recognized as 'white' in the mainland sense, and years more in Tennessee before I fully realized the privilege that my whiteness entailed (indeed, I'm probably still realizing it). I take this ignorance to be both analogous to, and distinct from, the ignorance experienced and cultivated by many white Americans toward their racialized privilege. I was certainly aware that a racial schema existed and that I played a role in it; simply put, the role I thought I occupied was different than the one I was correctly recognized as occupying.

As Fanon and Wynter illustrate, the *experience* of race on the part of the subject is heavily mediated by discursive forces—as Foucault would have it, by the knowledge and normative frames

available to them. Fanon, as a Black French Caribbean, was able to maintain his self-ascription simply as French (or as French *and white*, or as French and white and *therefore good*) only as long as he remained within the Caribbean context. Somewhat analogously, I was able to maintain my own self-ascription as *haole* (thus enjoying the advantages of white privilege while remaining ignorant of my own whiteness, my own privilege, *and* the colonial conditions that constituted both my whiteness and my privilege) only as long as this ignorance was supported by my geographical, social, and personal context. I came slowly into contact with my whiteness when I came to the mainland, much like Fanon came suddenly into contact with his Blackness, and the meaning of his Blackness, upon arriving in France.

These experiential transformations are diametrically opposed, of course, with respect to relations of power and visibility. The abjection (the negative social valuation) of Blackness became visible to Fanon as his race became visible to him. But the very *invisibility* of my whiteness on the mainland prolonged my ignorance of the privilege (the positive social valuation) of whiteness that had in fact been active throughout my life. In both Fanon's case and mine, though, the original position of ignorance was *affectively* rewarded by a self-ascription of evaluative 'goodness' that *felt* good.

Wynter summarizes her appropriation of Fanon as follows:

> Fanon's thesis, that besides phylogeny and ontogeny stands sociogeny, reveals that the cultural construction of specific 'qualitative mental states' (such as the aversive reaction of white Europeans and of blacks ourselves to our skin color and physiognomy), are *states specific to the modes of subjective experience* defining what it is like to be human within the terms of our present culture's conception of what it is like to be human (Wynter 2001, 46, emphasis mine).

Here Wynter highlights the fact that social valuation does not end with third-person recognition; 'what it is like' to be oneself from the first-person perspective is also mediated by the normative systems of the social world. These normative systems mold the 'qualitative mental states' that

make up our subjective and *affective* experience. That is, the normative systems that shape, for example, racial identities, and determine what behaviours will be evaluated as 'normal' or 'abnormal,' 'good' or 'bad,' also determine whether these behaviours will *feel* good or bad when performed by particular racialized individuals in particular socio-cultural contexts. Thus for Wynter, the construction of identities, as well as the normative systems that shape these identities, is never merely social, institutional, discursive, or biological: these systems and forms of embodiment also have *affective* and *experiential* components and effects, which arise from their socially-embedded normative orientations and condition the formation of subjectivities.

My own experiences illustrate this as well. From the marker of uncouthness that my whiteness was during my childhood in Hawai'i, it became a cloak of invisibility in Vermont; a symbol of privilege in Tennessee; an Anglophone giveaway in my Francophone neighborhood in Montreal; a mark of exception in my East Asian neighborhood in Vancouver. 'What it is like to be white' has changed for me along with my geographic and social location, and different behaviors have been socially and affectively penalized or rewarded in different locations. The deference and cultivation of invisibility that got me through elementary and high school struck others as odd when I began university in Vermont, but in the majority Black city of Memphis, I re-accustomed myself to my own conspicuousness. Those old habits of deference and self-effacement have been less out of place again since I've lived in Canada, in part due to my role as an obvious outsider in the Montreal and Vancouver neighborhoods where I've lived.

Wynter takes on the considerable challenge of explaining just *how* such third-person impositions as the negative social valuation of Blackness or the positive social valuation of whiteness succeed in producing affects and subjectivities that reflect these valuations. Wynter's explanation of this phenomenon is derived from contemporary empirical work on the neural

pathways of internal chemical reward systems, as well as theoretical work on the reproduction of genetic material. In line with Richard Dawkins' theory of the selfish gene, she suggests that the ultimate objective of the reproduction of the racial (and other) schemas that govern behaviour is "the long term good and stable reproduction of the genes which comprise its genome, genes for whose reproductive imperative the organism is only a vehicle" (Wynter 2003, 49).[100,101] Wynter presents this 'reproductive imperative' as requiring different organisms—that is, in this context, differently racialized subjects—to experience different kinds of affects attending their performance of various socially- and racially-coded behaviours whether these behaviours or affects are beneficial to them as individuals or not. She proposes that the affects that support this reproductive imperative are in turn supported by an internal reward system along the lines of the opioid system identified by neurobiologist Avram Goldstein.

Goldstein writes that this system "seems to represent the necessary process by which an [individual] animal learns to seek what is beneficial and avoid what is harmful [to it]" (Goldstein 1994, 60, cited in Wynter 2001, 50).

For Wynter,

> It is therefore this *objectively* structured biochemical system that determines the way in which each organism will perceive, classify, and categorize the world in the adaptive terms needed for its own survival and reproductive realization as such an organism. Yet, it is only through the mediation of the organism's own *experience* of what *feels*

[100] This Dawkinsian view has been subject to widespread critique on both moral and biological grounds, and this controversy would have been current during the preparation of Wynter's essay. Her adoption (or *adaptation*, if you will) of the 'selfish gene' hypothesis appears, however, largely uncritical. My speculation is that this has to do with her eagerness to inquire into the chemical, biological, and reproductive effects of racism for an explanation of its sociogenic mode of reproduction—that is, she is so interested in the interactions between the individual and the collective, the social and the biological, that even a problematically causal account of these interactions becomes appealing. Both I and Shannon Sullivan (as we'll see shortly) share this eager interest, but caution and criticality are called for nonetheless.

[101] For an excellent and distinctive critique of the Dawkinsian view, see Mary Beth Mader, "Foucault's Metabody," *Bioethical Inquiry* 7 (2010): 187-203. Her critique focuses on the reliance of this view on a 'strange temporality' of the gene, which contributes to qualifying it as what Foucault would call a 'fabulous metabody'—that is, an imaginary, hereditary body that stands as a purportedly *material* explanation of morbidities experienced by actual bodies. The concept also, to a great extent, shares its logic—and its proposed interventions—with the mode of temporal and conceptual continuity that (as discussed in Chapter 4) Foucault exposes at the heart of the concept of 'abnormality.'

> good *to* the organism and what *feels* bad to it, and thereby of what it feels like to *be* that organism (*the only entity for which these specific feelings exist*), that the specific repertoire of behaviours that are of adaptive advantage both *for* that organism and for the reproductive transmission of its genetic information, will be stably motivated and displayed (ibid, emphases in original).

One should not misread Wynter here as implying that whatever feels good to the organism confers "adaptive advantage both for that organism and for the reproductive transmission of its genetic information." Rather, she posits here that whatever confers adaptive advantage will feel good—often enough, and to a sufficient number of organisms, that "the specific repertoire of behaviours" that produce that good feeling "will be stably motivated and displayed." It is adaptively advantageous for the species that one not abandon one's offspring; thus (by what mechanism is in question) I and many other parents find my offspring deeply delightful to be with.

The fundamental orientation of the organism toward distinguishing between beneficial and harmful conditions should recall us to what Canguilhem calls the 'dynamic polarity' of the organism. Dynamic polarity names the unique capacity of each living being to distinguish between beneficial and harmful elements of its surrounding environment. I have also referred to this as a 'discriminatory capacity' which, importantly for my analysis, is the basis of normativity. Wynter's specification that this dynamic polarity or discriminatory capacity defines 'what it is like' to be a particular organism—"the only entity for which these specific feelings exist"—should recall us to Muhle's insight, derived from Canguilhem, that the fundamental normative activity of any organism contributes to shaping the kind of organism that it is. Wynter's account of the organism, specifically the socially-mediated *human* organism, parallels Canguilhem's to a notable extent.

For another concordant perspective on the role of affective experience in mediating "specific repertoires of behaviours," especially racially-coded behaviours, we might turn to philosopher Shannon Sullivan's account of affect and psychophysiology in *The Physiology of Sexist and Racist*

Oppression. In this book, Sullivan calls for a reorientation of feminist and critical race theory toward embodied—specifically, physiological and biological—experiences of racism, both in the bodies of Indigenous, brown, and (in particular) Black people and in the bodies of white people. This entails the dissolution of certain key dualisms that have been entrenched in philosophy and medicine alike—most importantly between body and psyche, social and individual. This dissolution yields a distinctive account of affect (which Sullivan adapts from Catherine Malabou): "the broad, invested attunement with/in the world of a live organism" (Sullivan 2015, 10).[102]

While Sullivan does not elaborate in this text on the implications of this definition of affect for organisms in general or for a theory of life, this "broad, invested attunement with/in the world"—which she later calls 'interested comportment' (ibid., 46)—could easily stand in for what Canguilhem calls 'dynamic polarity' and I have termed the 'discriminatory capacity.' As Sullivan puts it, "Affect could be thought of [as] caring in that an organic body cares about itself as it engages and forms attachments and aversions with/ in the world" (ibid). The fundamental discriminatory capacity that, I argue, is distinctive to living organism is an interested, *invested* attunement: an immanent relatedness with (and in) the world that is oriented toward its potential for benefit or harm. Sullivan identifies this as the basis of affect.

Along with Muhle and Wynter, Sullivan presents this invested attunement as one that helps to shape the organism into the kind of organism it is. Affect (i.e. invested attunement) helps to form habits, and habits, along with physiological functions, become constitutive of individual organisms and subjectivities: "Because they are plastic, physiological functions and habits help constitute the self, and their constitution makes the self something that endures over time as the particular, recognizable self that it is" (Sullivan 2015, 13). Sullivan further specifies that her

[102] Shannon Sullivan, *The Physiology of Sexist and Racist Oppression* (Oxford: Oxford University Press, 2015).

account of 'constitution' here is not merely discursive, but rather recognizes "a dynamic, transactional relationship between the social and the biological in which the two are inextricable" (ibid., 18). Affect, then, shapes organisms both synchronically and diachronically, both as individuals and in relation to their social environment.

While Sullivan is quick to point out that this co-constitution of the social and the biological is well-recognized within biology and related sciences (Sullivan 2015, 4), this text is distinguished by her inquiry into the *physiological* components of racism and sexism, such as nausea, clenched stomachs, tight muscles, and bowel disorders. As she emphasizes throughout the book, these are not examples of racism or sexism *migrating to* or being *trapped in* the body, but embodied manifestations of racism itself (See e.g. ibid, 55, 74). Moreover, their effects exceed and outlive their physiological origins insofar as they may also engender enduring chemical and even genetic alterations (See e.g. ibid, 94-8). For Sullivan, then, physiology *becomes* biology not only at the individual level but at the collective level as well. "We should acknowledge that race is biological—not in the pre-critical sense of a static, essential category but in the critical, dynamic way in which 'race becomes biology' through the embodiment of racial inequalities" (ibid, 25).

This account again bears strong affinities with Canguilhem's theory of the organism. Sullivan recognizes, like Canguilhem, that "to be alive is to be in favor of some things and opposed to others"—that living beings have a fundamental discriminatory capacity or, in other words, that living beings are inherently normative. Moreover, Sullivan concretizes and elaborates upon an insight also touched on by Canguilhem: that as he puts it "in the human species, statistical frequency expresses not only vital but social normativity" (Canguilhem [1974] 1989, 160). The statistical frequency of racial inequalities in, for example, access to high-quality perinatal care *becomes biology* when it is reflected in the rate of preterm birth among Black Americans. Sullivan

classifies this as a result of "*racist* [rather than neutrally 'racial'] health disparities," which "can have durable effects on the biological constitution of human beings that are not limited to the specific person who is the target of racism, but instead extend to that person's children and grandchildren" (Sullivan 2015, 99).

At first glance, this point could appear somewhat obvious. From Canguilhem's example of a (biological) descriptive norm such as average height being influenced by (social) evaluative norms about mating and matrimony, it is clear that the social can become biological in this sense. One of the thorniest aspects of the existence and persistence of racism, especially in its structural and institutional manifestations, is that it produces tangible differences—e.g. in rates of preterm birth (Sullivan 2015, 100), high blood pressure, and hypertension (ibid, 134)—that persist across multiple generations (and can in turn become targets of racism). Sullivan deepens this insight, however, over an entire chapter devoted to "non-genetic, psychophysiological inheritance across generational lines in the context of white domination" (ibid, 99). She thus develops a compelling argument for the biological transmission of the social effects of racism.

Though I won't recapitulate her full argument here, Sullivan's complex and subtle analysis of the three main types of epigenetic inheritance in the context of white supremacy draws critical distinctions between modes of function that are sometimes collapsed. Briefly, those three main types (from most indirect to most direct) are: first, inheritance through the repetition of similar environments (Sullivan 2015, 112); second, inheritance through genomic imprinting during the development of sperm and eggs (which involves the erasure and restoration of epigenetic markers such as degrees of methylation[103]) (ibid, 117); and third, "the direct transmission of methylated genes from one generation to another" (ibid, 118). Because this last type of transmission does not

[103] As Sullivan puts it, "We can think of methyl attachments as something like power knobs, turning down (or even off) certain genes in some cases, and turning up other genes in other cases" (2015, 111).

involve the erasure and restoration of epigenetic markers such as degrees of methylation, it represents a more direct mode of inheritance from parent to offspring of conditions undergone by the parent. This is not a *genetic* mode of transmission, however, as it modifies *methyl-DNA combinations* rather than DNA itself. Crucially, these combinations can be affected by conditions—such as malnutrition and possibly stress—encountered by a parent during his or her lifetime, which produce chemical alterations that, it appears, are directly transmitted to their offspring, who experience their effects.[104]

Sullivan summarizes her account of epigenetic inheritance as follows:

> The notion of epigenetic inheritance radically disrupts customary notions of biological heritability. It tends to blur the line between extrinsic and intrinsic biological causes of heritable traits, especially in the case of direct epigenetic inheritance. The field of epigenetics does this by dismantling sharp divisions between the innate (biology) and the acquired (culture) (Sullivan 2015, 120).

In the context of my argument in this chapter, Sullivan's account provides an elaboration of several points. First, she concurs with my claim that living beings are distinguished by their capacity to discriminate between helpful and harmful surrounding conditions, which she calls 'investment,' 'interestedness,' or 'caring.' Second, Sullivan confirms that this discriminatory capacity is reflected in the biological (i.e. chemical and reproductive) and physiological responses of the organism to surrounding conditions. Third, through her illustrations of these biological and physiological interactions, she constructs an account of the interaction between the social and the biological that takes full account of experience and affect. As a corollary of this last point, she also offers another, more empirically and physiologically grounded account of how different cultural

[104] Sullivan acknowledges, however, that studies on this mode of transmission in humans—and even in mammals—is so far quite limited, and that the conclusions she and others draw from them thus remain speculative (2015, 118). In keeping with insights gleaned from the Mader article cited in footnote 101 above, we might also inquire into the extent to which these speculations rely upon and call forth the concept of a 'fabulous metabody' and its attendant logic of 'temporally strange' continuity.

and geographical contexts can bear on how racially coded behaviours feel when performed. The particular training of my sympathetic nervous system, for example, makes my self-effacing habits feel more rewarding—or at least less uncomfortable—in some social contexts than in others.

Wynter, in contrast, takes her interpretation of genetic theory, affect, and the organism in quite a different direction. Recall that Avram Goldstein's claim above was that the fundamental discriminatory capacity of the organism is enabled by and expressed through a chemical reward system—specifically the opioid system. The account of genetic selection that Wynter appends to this claim, as we saw above, figures the opioid system as existing in the service of "the stable reproduction of genes." Her argument is that the opioid system conditions, by determining what feels good or bad to the individual organism, exactly those behaviours that will best conspire to ensure the stable reproduction of the *human* genome (not the genome of the specific individual in question) through chemical biofeedback. In this respect, Wynter appears to be in concordance not only with Dawkins' 'selfish gene' hypothesis, but also with what I suspect is a somewhat simplistic account of internal chemical reward systems. As a reading of both, this strikes me as insufficiently critical and empirically hasty.

My alternative proposal is that we derive from Wynter and Sullivan an elaboration of the account of the organism I presented in Chapter 1—as engaging in, and formed by, normative activity informed by its constitutive 'dynamic polarity.' We can also see this dynamic polarity as supported and informed by experience, including the normative and affective features of experience—whether a given stimulus or activity *feels* good or bad to the organism itself. However, given Bergson's insight into the *creativity* of evolution, combined with my account of the *generativity* of normativity, I suggest that we cast the organism's seeking out of beneficial conditions as driven by vital creativity and innovation—always informed by its rootedness in the

past through duration—rather than by the adaptive advantage of the human genome. This a more appealing account given our project of articulating a social normativity consistent with progressive politics. In addition, this account depends less upon the empirically open questions of whether the reproduction of the genome is in fact the target of evolution, and whether internal chemical reward systems are aimed toward this target.

Finally, Wynter's account of this interaction, like the account I have been developing, has a temporal component as well: it is rooted in what Bergson would call 'duration.' Returning to Fanon's example, Wynter emphasizes the interaction between past and present experience in subjective self-construction: "the change in the phenomenal properties of the Caribbean Negro's sense of self […] can therefore occur only because of a specific process of socialization that had been effected and verified at every level of his existence in his French colonial island" (Wynter 2001, 38). That is, when Fanon travels to France from Martinique, the new experience he has of his own racialization is made possible by the racial schema that was already in place for him during his upbringing in the Caribbean, when he did not yet conceive of himself as Black in the sense that he came to upon arriving in France. This racial schema remains in force for Fanon despite its negative effects on him, conditioning the affects he experiences through the interface of his racialized body with the social world in which it is embedded.

This account relates productively to Alia Al-Saji's critical phenomenological approach to temporality, experience, and racialization. In much of her recent work, in particular her essay "Too Late: Fanon, the Dismembered Past, and a Phenomenology of Racialized Time," Al-Saji examines both first-person and third-person experiences of racialization from a Bergson-inflected temporal perspective. In "Too Late," this takes the form of an analysis of what she calls 'racialized time'

(Al-Saji 2021, 178).[105] "Fanon captures, I contend, a fragmenting tendency of racialization, its retrospective colonization of the past, that allows us to glimpse its temporal logic" (ibid). The temporal logic of racialization is one that simultaneously *determines* the past as something static, ossified, not subject to the 'reconfigurations' that are central to Al-Saji's account of 'generative possibility,' and *disavows* that past as something that still figures in social, political, and intersubjective relations in the present.

The 2017 white supremacist and neo-Nazi Unite the Right rally in Charlottesville, VA provides a good example of this double movement. The rally was ostensibly in defense of the statue of Confederate General Robert E. Lee against proposed removal, and marchers employed explicit Nazi and Klu Klux Klan symbology such as Nazi and Confederate flags and torches, thus consolidating and illustrating their own account of the trajectory of history. Yet both the 'proof' of a post-racial America supposedly provided by the Obama presidency, *and* President Trump's equivocal assertion that both 'violence' and 'very fine people' were to be found on 'both sides' of the protests, effectively disavow the very history that the rally both consolidated and celebrated. As Al-Saji puts it, "There is an ignorance to racism that is not merely accidental, but that sustains its operations—a forgetting which actively hides racializing mechanisms and misconstrues its objects […] it represses the histories and operations of power which constitute it and instead scapegoats or blames its victims" (Al-Saji 2021, 178).

My extended example above of the tenacious transformations of my ignorance (however unconsciously cultivated) of the roles I've inhabited in the various racial schemas I've lived under illustrates the adaptability and the activeness of this 'forgetting.' Sullivan uses the term

[105] Alia Al-Saji, "Too Late: Fanon, the Dismembered Past, and a Phenomenology of Racialized Time," in *Fanon, Phenomenology and Psychology*, eds. Leswin Laubscher, Derek Hook, and Miraj Desai, 177–193 (New York: Routledge, 2021).

'unconscious' specifically to identify racist habits that "actively obstruct attempts to bring them to conscious awareness and deviously thwart efforts to transform or eliminate them" (Sullivan 2015, 11). From this perspective, the transformations of my distinctively white ignorance in the various cultural and geographic contexts I've lived in is not an accident of my peripatetic lifestyle. Rather, they provide an illustration of a specific commitment of white supremacy: to "actively hide racializing mechanisms," and "deviously thwart efforts to transform or eliminate them." To translate this insight into Bergsonian terms, racism depends upon a repudiation of duration and indetermination: the trajectories of the past and the future are presented as determinate, at the same time as the role of the past in molding the present is denied.

For Al-Saji, this means that "these frames not only define different subject-positions along racial lines, but also differentially configure the kinds of past and fields of possibility available to subjects" (Al-Saji 2021, 180). Here it is important to recall her concept of 'generative possibility'—which, in distinction from logical possibility, recognizes the retroactive emergence of the possible *along with* the actual, rather than prior to it. If, as Bergson's temporal insights suggest, both experience and normativity originate in the moment of 'hesitation' between stimulus and response, then this vital capacity for hesitation sets the stage for the emergence of possibility and agency. The origin of experience in indetermination permits the generative mode of possibility. Al-Saji's generative account of possibility is deeply rooted in this vital capacity to reconfigure the past.

Yet this capacity is distributed along lines of power that delimit its exercise. A Biden campaign ad broadcast in the summer of 2020 juxtaposed images of the (then contemporary) anti-racist uprising with images of torch-carrying white supremacists in Charlottesville, narrated by a Biden speech condemning 'looting and violence.' This narrative, like the Charlottesville

demonstrations and President Trump's commentary at the time, flatten and ossify the past by equating protest with violence and uprising with supremacy. This ossification of the past within the narrative frame of power contravenes our vital and subjective capacities to hold open the past and generate a different future.

It bears repeating, as well, that the target of the original racist rally in Charlottesville was the proposed removal of a statue promoting the racist founding of the United States. It has often been observed that the erection of Confederate monuments during the Jim Crow era broadcast the consolidation of white supremacy after the Civil War. Resistance to the removal of these monuments, while it is often articulated in terms of their 'neutral' representation of a factual past, is most vocally expressed by members of far-right and racist groups. As we saw in Chapter 4, from the perspective of Al-Saji's insight into the colonial closure of generative possibility, this resistance to the reconfiguration of the past on the part of the powerful can be read as a commitment not only to writing the past, but to keeping the past closed. Black Lives Matter, the international anti-racist uprising that began in the middle of the last decade and reached peak prominence in the summer of 2020, has insisted upon keeping the past open—not only to historically contextualize current and continuing events like the killing of unarmed Black people by the police, but also so that the past can be recontextualized and reconfigured in order to generate a transformed future.

As Al-Saji puts it, "it is with the past, by taking it up, reconfiguring it, and playing on its relations, that we can act in the present; whether the past is instituted dimension, memory or habituality, this past is a resource for agency" (Al-Saji 2021, 185). By simultaneously determining and disavowing the racialized past, it is precisely this resource that racism forecloses upon. Here, however—through an analysis of the relationship between experience and the social world that explicitly takes into account the temporal dimensions of this relationship—a possibility for

resistance arises. “Racialization, on my account, would also be about managing and mediating the configuration of possibility” (Al-Saji 2021, 184). As we saw in Chapter 4, we manage and mediate the configuration of possibility by managing and mediating our relation to normativity; generative possibility and generative normativity go hand in hand.

Through a return to the question of experience as the basis of vital normativity, this chapter has synthesized the theory of generative normativity that I have been developing throughout the thesis. As Goldstein and Canguilhem observe, every organism takes a normative perspective on its environment. As Canguilhem adds, healthy organisms are capable of generating new norms, which are constituted by *feeling* more than normal. Bergson characterizes these vital capacities as arising from the *creativity* of evolution. The translation of this model from the vital sphere to the social sphere, however, leads Foucault and many post-structuralist feminists to sound a cautionary note: the interplay between descriptive and evaluative normativity in the social sphere both produces the coercive mechanism of normalization and renders appeals to pre- or extra-discursive identity or experience inherently suspect.

Alcoff exposes this tension between including experience in theory and revealing its basis in ideology as a false dilemma. Through a surprising appeal to a Foucauldian definition of experience, she illustrates how theoretical analysis of experience may be permitted without leading either to normalization or the naturalization of certain kinds of subjects. Fanon, Wynter, and Al-Saji demonstrate how such a theoretical analysis of experience can be carried out. Fanon contributes the concept of sociogeny, as well as his phenomenological analysis of the first-person experience of racialization. Wynter carries this analysis further by emphasizing, in Fanon’s account, the incorporation of social normativity at the experiential and affective level, showing how normative frames are translated into individual behaviours and feelings about behaviours. Al-

Saji reintroduces generative possibility into this account of the interaction between the individual and the social by demonstrating how the temporal mechanisms of racialization can be recognized and resisted. In my conclusion, I will work through an example within the realm of social justice to show what the concept of generative normativity can do in this context.

Conclusion:
We Don't Yet Know What Will Have Been

In Chapter 1, I introduced the concept of vital normativity and showed that both Goldstein and Canguilhem locate the origin of normativity in life, not only in the discriminatory capacities of the living being, but also in the first-person, qualitative and evaluative experience of the organism. In Chapter 5, I demonstrated that while experience, and subject-formation through experience, are deeply imbricated in the power structures of the social world and in particular its normative frames, we must nonetheless turn to experience in order to develop an account of the interaction between vital and social normativity—and thus, of *generative* normativity. It is precisely in making legible the experiential and affective translations of oppressive social norms and locating these translations within the vital temporal structure of generative possibility that we find the potential for generating *new* norms and new ways of being along with them.

Here I'll work through a thorny example of the entanglement of descriptive and evaluative normativity, as well as experience and subject-formation, in social life: one that, while it contains elements of 'normalization,' cannot be fully accounted for by this concept.[106] It is an example of how description, even when it is explicitly formulated to support the case of progressive social justice projects, can inadvertently produce a prescriptive pull that is intensified by the coercive 'interplay of normativities' discussed in Chapter 4. Moreover, the example shows that we cannot extricate ourselves from this inadvertent entanglement with the interplay of normativities by means of more accurate descriptions or clearer formulations of our evaluative norms. Rather, what we need is a mode of normativity that is *creative*, open to innovation while remaining deeply rooted in the past—particularly the embodied, sedimented, experiential and affective past of both

[106] A content advisory: this example turns on the issue of suicide.

individuals and social collectives. We need a normativity that is oriented toward the temporal structure of generative possibility—one, that is, that points toward the future anterior or what 'will have been' possible.

In Chapter 4, I discussed Canguilhem's examination of how social norms condition the 'vital statistics' of a population. As he puts it, "if it is true that the human body is in one sense a product of social activity, it is not absurd to assume that the constancy of certain traits, revealed by an average, depends on the conscious or unconscious fidelity to certain norms of life. Consequently, in the human species, statistical frequency expresses not only vital but social normativity" (Canguilhem [1974] 1989, 160). The use of statistical measurement in social life has notable effects at both the descriptive and prescriptive level, whether it is turned toward the service of normative projects or not. These effects reflect the entanglement of descriptive and prescriptive norms, thus complicating the use of statistics in normative political projects.

One such use of statistics is the claim, quoted widely in relevant circles, that queer (specifically, lesbian, gay, bisexual and questioning)[107] youth in America are five times as likely to attempt suicide as their straight and gender-conforming peers. In a 2010 paper on the statistical relation between queer youth identity and suicidality, sociologist Tom Waidzunas considers at length the complex relationship between the deployment of statistics and individual instantiations of the identity categories those statistics describe, specifically interrogating the 'five times as likely' claim. This claim, which originated in a largely anecdotal report published by clinical social worker Paul Gibson in 1989, has since been superseded by a larger study which has yielded more

[107] I've chosen 'queer' as a colloquial catchall comprising Lesbian, Gay, Bisexual, Transgender, Questioning, and Two-Spirit (LGBTQ2+) identities, as well as other minority sexual and non-gender-conforming identities and practices. This is because I recognize, as implied by the existence of the acronym, that this grouping of disparate identities and practices often shares a constellation of political and social vulnerabilities and oppressions. The studies I cite, however, often include some, but not all, of these identities and practices. I will thus use the catchall 'queer' as a general term, and other terms and acronyms to identify the (usually narrower) groups discussed by the relevant studies.

conclusive findings (Trevor Project 2021, CNN 2017). Waidzunas' project here is to historicize the concept (or conjunction of concepts) 'queer youth at risk for suicide,' and thus to de-naturalize it (Waidzunas 2010, 203).[108] In Waidzunas' view, seeking more 'reliable' statistics on the suicidality of queer youth would only "sidestep the inevitable interactive relationships between scientific representations and the ways people live their lives—what philosopher Ian Hacking calls the 'looping effects of human kinds'"[109] (Waidzunas 2012, 202; Hacking 1995, 1999).

Defining the social problem of queer teen suicidality was an explicit goal for Gibson, the compiler of the original report, who hoped by so doing to motivate the kind of social change that would ameliorate the problem. Specifically, he intended to expose the effects of the stigma attached to homosexual behaviors in order, in turn, to motivate reduction of that stigma. Gibson, then, understood at least implicitly that statistical description has normative, and formative, effects: that is, such descriptions can both produce continuities between individuals which form them into populations (e.g. queer youth) and, in figuring members of these populations a certain way, help to construct the identities of these populations' individual members (e.g. as normal or deviant, suicidal or resilient, 'at risk' or safe).

To put the concern simply: if one is first exposed to the possibility of membership in the population of queer youth by means of the statistical conjunction of queer youth with suicidality, one may be inclined to identify oneself in relation to this conjunction, whether by embracing or repudiating it. Moreover, the assumption that queer experiences are uniform, especially insofar as these experiences remain socially marginalized, may intensify the propensity of individuals who identify as queer to chart their own experiences in relation to what they consider to be the queer

[108] Tom Waidzunas, "Young, Gay and Suicidal: Dynamic Nominalism and the Process of Defining a Social Problem with Statistics," *Science, Technology and Human Values* 37, no. 2 (2010), 199-225.
[109] Hacking uses 'looping effects' to describe the recursive interactions between classifications of 'kinds' of people and the people whose shared traits or behaviours are identified by these classifications.

(descriptive) 'norm,' even if doing so is (evaluatively) not beneficial to them. As Wynter demonstrates (and as discussed in Chapter 5), it may even further invest these experiences with the affects considered appropriate to them—it might *feel bad* to be queer, precisely because to be queer is, according to the statistical description, to feel bad. For these reasons, Waidzunas recommends that the 'five times as likely' claim be approached with caution:

> These numbers have had some unintended consequences. By referring to all ''gay youth,'' they have glossed over diversity within the category. Additionally, the numbers have fostered "looping effects" between people and facts as gay youth seem to have responded to the numbers and new institutional arrangements in various ways (Waidzunas 2010, 212-3).

This "glossing over of diversity within the category" (which could also be described, in Foucauldian terms, as the creation of continuities between individuals), has effects not only on the first-person experiences of the individuals in question, but also on the third-person portrayal of the 'population.' First, the reduction of the examined conjunction to only two elements—queerness and suicidality—effaces the other factors (e.g., as Waidzunas enumerates, "family acceptance, school climate, sex, race, class, nation, region") that may impact their correlation, effectively presenting the reductive two-factor correlation as causal (Waidzunas 2010, 213). This causal interpretation directly contradicts the explicit intent of disseminating the 'five times as likely' and similar claims, which is to show that group-level injustice exists *outside the correlation*, in turn making the lives of queer youth seem less worth living than those of straight youth.

Moreover, permitting an interpretation of this two-term correlation as causal also allows other, more pernicious portrayals. As Waidzunas cautions, "a final unintended effect of the Gibson numbers has been the potential for their redeployment for antigay purposes. The phrase 'five times as likely' represents a correlation, and as such, is open to numerous attributions of causality, some of them explicitly antigay" (Waidzunas 2010, 218). Due in part to the contemporary ascendency

of statistical thinking, the intra-group continuity produced through the statistical constitution of the population of queer youth in conjunction with suicidality is naturalized and de-historicized, so that they begin to seem like naturally occurring features of the social world. Moreover, the conjuncts begin to appear *evaluatively* related. That is, the *description* of queer youth as 'five times as likely' to attempt suicide becomes not only coercively prescriptive at the first-person level—insofar as queer youth who interpret their own experiences through this frame may become more likely to instantiate it—but also a third-person *evaluation* of queerness as *bad*, at least bad for kids.

It might seem as if the solution to this entanglement is to be more precise about our statistical descriptions. If the 'five times as likely' claim leaves out relevant factors such as "family acceptance, school climate, sex, race, class, nation, region," then perhaps studying these variables *independently* will give us a better sense of the situation. Such a project has been attempted in recent years, particularly with respect to the factor of family acceptance/rejection. It has been found that while Lesbian, Gay, and Bisexual youth overall exhibit five times the average rate of suicide attempts among their straight, gender-conforming peers, those LGB kids whose families were 'highly rejecting' of their sexual identities exhibited a still higher rate of suicidality than their LGB peers whose families were accepting—*eight* times the (already elevated) overall LGB average (Ryan et al, 2009).[110] The individual predictions we might derive from these averages may seem to be more reliable than the more general 'five times as likely' claim, which throws all queer youth regardless of risk factors into one statistical bucket.

This statistical refinement constitutes an intervention at the level of the descriptive norm; as such, it is clearly important to guiding the accuracy of our descriptions of suicidality among queer youth. It is also crucial, one would hope, in guiding the evaluative norms of parenthood,

[110] Caitlin Ryan, David Huebner, Rafael M. Diaz, and Jorge Sanchez, "Family Rejection as a Predictor of Negative Health Outcomes in White and Latino Lesbian, Gay, and Bisexual Young Adults," *Pediatrics* 123 (2009): 346-352.

such that affirmatively accepting one's queer child is recognized as an indisputable good. Refining our descriptions, however—even under the explicit aim of improving our evaluative norms—does not address the coercive 'interplay of normativities' itself. Indeed, it exploits this interplay, however benignly, by trading on the coercively prescriptive pull of the descriptive norm in order to produce the desired social change. Moreover, the implicitly *predictive* character of statistical norms relies upon the assumption that the future will resemble the past. This assumes in turn that, as Bergson puts it in his disparagement of finalism, "time is useless" (Bergson [1907] 1998, 40)—that is, both the rootedness of the present moment in the past reflected in the concept of duration, and its openness toward the future reflected in the concept of indetermination, are occluded. As we saw in Chapter 4, the interplay of normativities is a site of social power in itself, expressed most familiarly in the imposition of normalization (Mader 2011b, 49). And as we saw in the Chapter 5, collapsing the temporal field of possibility—specifically, by *determining* the past as something static, ossified, not subject to 'reconfigurations,'—results in the foreclosure of one's individual and collective agency to act in the present, and to create the future (Al-Saji 2021, 184).

Viewing this example, instead, through the lens of *generative* normativity, however, opens up a new way of theorizing, and of acting, in relation to social justice concerns—particularly queer, feminist, and anti-racist projects. In keeping with the vital origin of generative normativity, this approach begins by making legible the qualitative, first-person experience that is enabled most fundamentally by the discriminatory capacity of the organism. In the example under consideration, this would mean turning to queer kids themselves and asking about their experiences as they relate to the normative frames that they encounter in their social worlds, *without* first defining the conversation in terms of suicidality or any similarly fraught category of experience, ideation, or behaviour. As Wynter reveals, the affective dimensions of these experiences will be particularly

important to identifying *how* social normativities interact with first-person perspectives, especially first-person perspectives on the social valuation of one's queer identity. As Alcoff demonstrates, these experiences are as central to the creation of concepts as concepts are in naming, identifying, and delineating between experiences. This shifts the focus away from the ways in which normativity forms subjectivities through its conceptual sleight—that is, normalization—and toward the ways in which subjects can re-form normativity in the image of their own experiences.

This move is in keeping both with what Bergson identifies as the 'creativity' of evolution, and what I have identified as the 'generativity' of vital normativity. This approach maintains an open temporal structure which, while it is deeply informed by the past (including the collective past as reflected in social statistics), holds open toward the future. This 'future anterior' structure of generative possibility means that, to adapt a turn of phrase, we don't yet know what *will have been*—precisely, as Al-Saji puts it, "because it is open to and awaits future searching and elaboration" (Al-Saji 2012a, 3). This is especially true given that our example concerns young people—in particular, queer young people—who are in the process of constructing the normative landscape that *will have been* before our eyes.

Some of the projects that are important to 'queer youth' may not yet be legible to us, even those of us who are committed to supporting their cause, however they choose to express it. Aspects of the social justice projects that carry the most currency with contemporary youth clearly seem superficial or even superfluous to many older adults. Perhaps the most well-documented example of this is the proliferation of terminology pertaining to sexual and gender identity, in conjunction with efforts to stigmatize and thus discontinue the use of terminology now associated with prejudice. A conversation about these issues has emerged in recent years, in which some authors lament what they see as a myopic focus on linguistic issues, while others point out that the

social and affective dimensions of language use—and in particular its attendant proscriptions—have *always* been subject to swift and uncompromising change.[111] The frustration of the older generations—as well as a more conservative sector of the younger generations—with these swiftly transforming terminological norms seems to arise both from discomfort with the reconfiguration of their own personal and collective histories of supremacy, and from the disorientation brought on by the structure of generative possibility and generative normativity itself. These normative innovations reflect, and enact, the structure and promise of generative normativity.

The concept of generative normativity has the potential to recall us to the ambiguity at the heart of normativity, without becoming elided by its conceptual sleights. Despite the demonstrated impossibility of fully disentangling descriptive and evaluative normativity, there is more to be done in distinguishing the two concepts, especially in feminist, anti-racist, and queer theory and related discourses. Generative normativity is critical of the coerciveness of the norm without advocating that we dispense with normativity altogether. Notwithstanding the prevalence of critical perspectives on normativity that acknowledge the insights covered in this thesis, there is more to be done in rehabilitating the very notion of 'the normative' as an evaluative category of theory and practice (as opposed to the 'non-normative' as a classification of what falls outside this category of theory and practice). Generative normativity has the capacity to maintain the aliveness, of the past while yet calling for normative innovations in the present. Despite frequent invocations of the past by both proponents and opponents of social justice, there is more to be done to explain how it is that the past remains with us, 'actual and acting.' The concept of generative normativity helps us to recognize the fact that we are always poised within a temporal pause during which we do not yet know what will be, but that what will have been always remains for us to determine.

[111] See e.g. Malik 2019, Illing 2020, Beauchamp 2020.

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