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Editors' Introduction

This year has posed unique challenges to the world at large and to students in particular, including the *Logos* editorial board. Nonetheless, as a community we have shown remarkable determination in the face of adversity and exceptional commitment to engagement with undergraduate philosophy. The editorial board of *Logos* is especially proud to present the sixteenth volume of Cornell University's undergraduate journal of philosophy. Without their collective effort, this journal could not exist.

After carefully considering the submissions we received over the past year we have selected an exemplary set of five articles chosen for their creativity, cogency, and depth of philosophical inquiry. This year's selection pool was full of quality submissions, and we received inquiries from over fifty undergraduates situated across the English-speaking world. All of the papers contained within this volume were carefully reviewed and selected because of their exceptional quality and varied subjects. The sixteenth volume of *Logos* features papers whose topics fall under Kant, epistemology, Nietzsche, moral philosophy, and phenomenology. We are delighted to be able to publish such a broad set of articles while bringing the best new undergraduate work to public view.

We would like to thank and acknowledge the authors of our chosen submissions: Chenyu Bu for her submission entitled "Sound as Representation: A Reconstruction of the Transcendental Aesthetic," David Morse for his submission entitled "The Plexus: A Graph-Based Model of Knowledge," Gregory Alonge for his submission entitled "Deleuze, Nietzsche, and Nihilism: How Do We Say 'Yes!' to Life?," Jonah Dunch for his submission entitled "Wellbeing for All: Enjoyment, Self-Actualization, and the Good Life," and Kristen Vanderwee for her submission entitled "Unfulfilled Protentions in Film: Examining Sufficient Comprehensibility in Film Through the Cognitive Form and Phenomenological Experience of Time."

We are deeply grateful to the Sage School of Philosophy whose funding supports *Logos* this year. We are profoundly indebted to the staff of the Sage School of Philosophy, particularly to Pamela Hanna and Dorothy Vanderbilt, for assisting with publication and the day-to-day running of the journal. We would also like to thank our advisor Professor Harold Hodes, for his continued support of the journal; and our undergraduate staff, without whom none of this would be possible.

Ashley Gasdow
Editor-in-Chief

Sound as Representation: A Reconstruction of the Transcendental Aesthetic

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ABSTRACT

In the Transcendental Aesthetic, Kant identifies space and time as the only two pure forms of sensible intuition of *a priori* cognition. He constructs the three essential arguments for space and time mainly based on the investigations of visual information: how we form visual representations of objects, of their relations to each other in space, and of their changes and motions in time. The neglect of auditory representations in this discussion, however, is a regrettable state of affairs, as the spatial and temporal unfolding of sound could initiate another discussion of the Transcendental Aesthetic. My task in this paper is to reconstruct Kant's arguments in the Transcendental Aesthetic in the context of a pure auditory perception. The re-evaluations and reconstruction process of the three essential arguments in the Transcendental Aesthetic will lead to the conclusion that our representation of sounds precisely comes from our representation of space and time as *a priori* and pure intuitions.

I. INTRODUCTION

In the Transcendental Aesthetic, Kant identifies space and time as the only two pure forms of sensible intuition of *a priori* cognition.[1] As I read it, his arguments for space and time both have three essential parts:

(i) The representation of space/time is an *a priori* cognition.[2]

(ii) The representation of space/time grounds the experience of empirical objects.[3]

(iii) The representation of space/time is not concept, but rather (pure) intuition with infinite given magnitude.[4]

Kant constructs these transcendental aesthetic arguments mainly based on the investigations of visual information, namely, how we form visual representations of objects, of their relations to each other in space, and of their changes and motions in time. The neglect of auditory representations in this discussion, however, is a regrettable state of affairs, as sound is not only significant in our perceptual experience but is also philosophically idiosyncratic. The spatial and temporal unfolding of sound, in particular, may initiate another discussion of the Transcendental Aesthetic.

My task in this paper is to reconstruct Kant's arguments in the Transcendental Aesthetic in the context of a pure auditory perception. In Section II, I will first describe sound as "a form of representation" in the Kantian sense, specifically the representation of the phenomenological sound as an object, as opposed to the representation of the sounding object or event. I will further claim that it is the representation of sound that we associate with empirical objects. In Section III, by

1 Kant, Immanuel, *Critique of Pure Reason*, Edited by Paul Guyer and Allen W. Wood. (Cambridge: Cambridge University Press, 1998), B36.
2 Ibid., B38; B46; B47.
3 Ibid., B39; B46.
4 Ibid., B39; B47; B48.

our pure auditory perceptions only, I will first prove the validity of the arguments (i)-(iii) based on Kantian space in a narrow sense. After addressing the invalidity of the "master-sound"[5] described by Strawson to be a proper space analogue, I will propose the notion of a soundscape to be a form of Kantian space in a broader sense. Soundscape then becomes the new basis to prove the three arguments. In Section IV, I will differentiate time from space by its successiveness and single dimensionality, and formulate the arguments based on the temporal unfolding of sounds. In Section V, I will present an objection to the singularity of the dimension of our time-representation by means of an example of our time-perception in music. I will then reply to the objection by addressing Kant's account of time's subjectivity. These re-evaluations will lead to the conclusion in Section VI that we represent space and time as pure intuitions *a priori* so that we can form representations of sound. Kant's arguments in the Transcendental Aesthetic are thus reconstructed in a purely auditory experience.

II. SOUNDS AS OBJECTS

The task of this section is to clarify the concept of sound. Since the objects received by our auditory sensibility are almost naturally and spontaneously categorized as sounds, sound could be understood as the immediate object of auditory experience. "It seems…reasonable to suggest that the sounds directly perceived are sensations of some sort produced in the observer when the sound waves strike the ear."[6] While addressing an inclination to describe sound as sensation, MacLachlan also alludes to a more scientific explanation. The sounds we hear are similar to a series of airwaves that stretches to our ears. Helmholtz identifies three properties of sound—pitch, loudness, and timbre[7]—whereby we distinguish different sounds and associate them with physical objects and events. These three acoustic properties, as Helmholtz illustrates, can all be mapped onto quantifiable parameters of the soundwave: pitch corresponds to frequency, loudness to amplitude, and timbre to overtones. Frequency, amplitude, and overtones all seem to be classified by Locke as primary qualities of an object, since they are "those (qualities) that are utterly inseparable from the body whatever state it is in."[8] Frequency is the periodic vibration of the soundwave in a given unit of time, amplitude is a measure of change of the vibration over a single period, and overtones are a harmonic series with higher frequencies embodied in the fundamental tone. These three qualities contribute to the shape of soundwaves in different ways, and thus are "powers to produce various sensations [in us]."[9] Therefore, in this paper, sound refers to the instantaneous object of auditory perception, a soundwave, which is given to our auditory sensibility and produces a representation in our empirical intuition.

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5 Strawson, P. Frederick, *Individuals: An Essay in Descriptive Metaphysics*, (London: Methuen, 1959), 76.
6 MacLachlan, D.L.C., *Philosophy of Perception*, (Englewood Cliffs, N.J: Prentice Hall, 1989), 26.
7 Helmholtz, Hermann, *On the Sensations of Tone as a Physiological Basis for the Theory of Music*, 4th ed., (New York: Dover, [1877] 1954), 10.
8 Locke, John, *An Essay Concerning Human Understanding: And a Treatise on the Conduct of the Understanding*, (Philadelphia: Hayes & Zell, 1860), 96.
9 Ibid., 25.

The sound object should be distinguished from the sounding object or the event that produces the sound. The object of which we form an auditory intuition is the phenomenological sound characterized by its frequency, amplitude, and overtones. Despite the fact that neither the sounding object nor the event can be known by the subject given only the auditory perception, identifying sound by the sounding object or event undermines the individuality of sound particulars. Kant in the Transcendental Aesthetic asserts the view that the individuality of objective particulars encountered in experience in relation to one another is "a necessary element in any conception of experience which we can render intelligible to ourselves."[10] In order to form coherent and consistent representations for empirical objects, one must have the ability to identify the objective particulars given to intuition. Strawson stresses two necessary aspects for us to identify sounds as objective particulars: the "distinguishing aspect" and the "reidentifying aspect."[11] The distinguishing aspect of identification refers to the recognition of one particular sound among others, whereas the reidentifying aspect is the ability to think of a particular sound encountered on one occasion as the same as a particular sound encountered on another. One problem for mapping a sound to its sounding object is that one physical object is able to product several sound particulars. "One sounding body may supply a great variety of objects whose disparity cannot be reconciled by their common origin."[12] For example, the sound of plucking a violin string is distinct from the sound of bowing it. Hence, identifying sound phenomenologically provides us with a conceptual scheme that can preserve the individuality of particular auditory objects.

Now considering sounds as objective particulars given to our auditory intuition could bring the notion of sound one step further—it is the representation of sound objects that we associate with empirical objects. The association here is analogous to that of the visual world. We can correlate different sound particulars to one physical object in the same way as we receive different visual particulars of a physical object from different perspectives and distances but still consider them as belonging to the same object. In light of this analogy, even though the three sound properties—pitch, loudness, and timbre—could vary for a subject, it would be absurd to assign a different physical object to each sound particular.

III. RECONSTRUCTION OF THE TRANSCENDENTAL AESTHETIC ARGUMENTS FOR SPACE

In the metaphysical exposition of the Transcendental Aesthetic, Kant describes space as a simultaneous entity of three dimensions with an infinite given magnitude.[13] Our representation of space is an *a priori* intuition of the outer sense in general.[14] Since Kant does not further specify the notion of "dimension,"

10 Strawson, P. Frederick, *Bounds of Sense: An Essay on Kant's Critique of Pure Reason,* (Routledge, 1966), 25.
11 Strawson, P. Frederick, *Individuals: An Essay in Descriptive Metaphysics*, (London: Methuen, 1959). 60.
12 Shaeffer, Pierre, "The Sound Object," *Trois Microsillons d'Examples Sonores* (Paris, 1967), par. 73.1-2, p. 132.
13 Kant, Immanuel, *Critique of Pure Reason,* B40; B41; B47.
14 Ibid., B41.

for now we assume a narrow but intuitive meaning of the three dimensions, namely, the length, the width, and the height of extensive magnitudes. Kant later explains in the Axioms of Intuition that extensive magnitudes are those in which "the representation of the parts makes possible the representation of the whole."[15] In other words, the awareness of lengths, widths, and heights entails the intuition of space, since the intuition of extensiveness must be represented "through the same synthesis" as that where space is determined. Hence, if our representation of sound particulars involves an *a priori* intuition of the three extensive dimensions, arguments (i)—(iii) could then logically follow.

Sound objects, as defined in the last section, have no intrinsic spatial characteristics. P.F. Strawson suggests that "such expressions as 'to the left of,' 'spatially above,' 'near,' and 'farther' have no intrinsically auditory significance."[16] Sounds appear to us in varying pitch, loudness, and timbre, but none of these intrinsic properties of soundwaves could indicate their locations or relations to one another in space, which is currently assumed to have extensive magnitudes. It is absurd to claim that objects appearing larger in size are always objectively closer to us than those appearing smaller. Similarly, one cannot infer the distances we position from sound objects merely from their loudness (or frequencies, in the case of the Doppler effect), as a loud sound at a sufficiently far location may appear to have the same amplitude as a quieter sound at a close location. As a result, Strawson emphasizes that a purely auditory concept of space is impossible.[17] However, sounds, as intrinsically aspatial objects, are represented in our intuition with special characters, i.e., we do, in fact, hear sounds coming from different directions and intuitively assign them locations in space. A clock ticking on the left can easily be distinguished from a clock ticking on the right, even for a being with purely auditory experience, even though the two clocks produce the sound of exactly the same pitch, loudness, and timbre. This is because our two ears perceive sounds separately in two positions (on both sides of our head), and the slight difference between the two perceptions of a soundwave is cognizable.

Since there is no evidence for sound being intrinsically spatial even from a scientific perspective, the spatial character of sounds that we perceive must be a product of the process in which we form the representations of them. It is the intuition of space that gives a spatial aspect to aspatial sound objects. Furthermore, in a pure auditory experience, intrinsically aspatial sounds could not give us any clue for the notion of space, and thus the intuition of space must be *a priori* cognition, in which all sensible experience and thinking through concepts are subtracted. The representation of space is therefore pure intuition as claimed in (iii).

The discussion so far is built upon a narrow assumption of space characterized by its extensive magnitude. Strawson demonstrates another way to prove

15 Ibid., B203.
16 Strawson, P. Frederick, *Individuals: An Essay in Descriptive Metaphysics*, 66.
17 Ibid., 66.

the necessity of space's being a pure intuition of *a priori* cognition through a speculatively more general notion of space. Instead of aligning sounds to space with extensive magnitudes, he recognizes a broader frame entitled *master-sound*.[18] Master-sound is described as a sound that is unique in its continuity in presence and thus determines the auditory analogue of location in the sound world at any given moment by mapping it to different pitches and loudness:

> "…[V]ariations in the pitch of master-sound are correlated with variations in the other sounds that are heard…A gradual change in the pitch of the master-sound is accompanied by a gradual decrease, or a gradual increase followed by a gradual decrease, in the loudness of the unitary sound-sequence…until it is no longer heard."[19]

Strawson presents a thought experiment of a being whose experience is purely auditory, later referred to as "Hero" by Evans. It turns out that it is impossible for Hero to distinguish and reidentify a sound particular in the aspatial sound world, unless "an analogy of Space," in this case the *master-sound*, is provided.[20] Strawson claims that the master-sound is inseparable for Hero's successful identification of different sound particulars, including those that are temporally unperceived by him but still existing. The master-sound grounds the consistency of the particulars in both present and absent states for the subject of hearing. When a sound object becomes unperceived, the "master-sound" ensures that Hero is still aware of its existence and is able to reidentify the same particular when it appears in his perception. If the entity that Strawson describes as *master-sound* is taken to be a form of space in a broader sense which is not limited by dimensions of extensive magnitude, then his thought experiment of Hero would sufficiently defend the Kantian thesis for space in the Transcendental Aesthetic.

The necessity of such a spatial analogue, however, is disputed in Evans' essay presented to Strawson. In his essay, Evans suggests that the auditory presentations of distinct sound objects are never indistinguishable given that "different pitch-levels of the master-sound are qualitatively distinguishable."[21] He points out that the reidentification of the sound particulars in the context of the master-sound does not make any use of the dimensionality provided by the continuous variations in its pitch and loudness. Therefore, there could be more than one *master-sound*—for example, an "unordered series"—that plays the same distinguishing role. Since Kant mentions that "one can only represent a single space,"[22] the *master-sound* violates the singularity in the representation of space and thus could not be considered as a proper analogy for space, even in a sense beyond extensive dimensions.

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18 Ibid., 76.

19 Ibid.

20 Evans, Gareth, "Things Without the Mind," in Zak van Straaten (ed.), *Philosophical Subjects: Essays Presented to P.F. Strawson*. (Clarendon Press, Oxford, 1980), 74-75.

21 Ibid., 80.

22 Kant, Immanuel, *Critique of Pure Reason,* B39.

Although Strawson's *master-sound* is insufficient to be regarded as space, the thought experiment illustrates the necessity of a space-analogue in our empirical intuition of sound objects. The *master-sound*, therefore, sheds light upon a notion of an abstract space. Such space, which I shall denote as *space**, is no longer a framework constituted by dimensions of extensive magnitudes but one that makes possible the identification of auditory objects while still being compatible with the notion of Kantian space as a simultaneous infinite entity. With the infinity and simultaneity being carried over, we shall now liberate the dimensionality of space* from the magnitudes of extensiveness. Space*, then, refers to a simultaneous, infinite, entity in which the dimensional relations—both extensive and non-extensive—of its occupants could be determined.

Now I will illustrate how a sound object can be distinguished and reidentified in space* by specifying some of its features exclusive to pure auditory experience. Schafer proposes the idea of soundscape and describes it as a "sonic environment."[23] I take soundscape to be a form of space* in which all auditory representations originate. Just as a physical object can be located in a coordinate system with length, width, and height, a sound object can be "located" in the auditory world by its pitch, loudness, and timbre. Therefore, soundscape has all the characteristics of space* with frequency, amplitude, and overtones as its dimensions. While such dimensions of soundscape seem to be non-extensive—neither of them could be represented as part of a whole simply by dividing magnitudes—they could nonetheless be a trajectory of the space* in the auditory world and thus be analogues to the previous narrow assumption for space.

I would like to instantiate two types of sound objects in soundscape that are essential to our identification of all sound particulars: *keynote sounds* and *soudmarks*. Schafer explains these two terms mainly in a socio-geographical context, but I will abstract these discussions to the soundscape that is purely auditory. Keynote sounds are those with relatively stable pitch, loudness, and timbre which are continuously heard, and heard "frequently enough to form a background against which other sounds are perceived."[24] An example of a keynote sound would be the "room tone" in a movie scene. Soundmarks, by contrast, are those sounds that "are unique or possess qualities which make them specially regarded or noticed by [the subject]."[25] Soundmarks are thus often apparently distinct from the keynote sounds. In the movie case, a soundmark could be the conversation between two characters. To draw an analogy with the visual world, keynote sounds can be considered as the background which the subject may not be consistently aware of, and soundmarks can be considered as any objects in the foreground to which we as perceivers pay attention. In Kantian terms, keynote sounds are "pure apperceptions"[26] when they are given to but not perceived by

23 Schafer, R. Murray, *The Soundscape: Our Sonic Environment and the Turning of the World,* (Rochester, VT: Destiny 1977), 7; 274.
24 Ibid., 272.
25 Ibid.
26 Kant, Immanuel, *Critique of Pure Reason,* B132.

the subject, and soundmarks are "empirical apperceptions."[27] Keynote sounds are inseparable from our representation of soundscape, because the absolute silence, just as an absolute empty space, is impossible for our sensible intuition. We could then distinguish a particular soundmark by listening to it against the relatively unvaried keynote sound, and reidentify it by matching its difference from the keynote sound to that on other occasions. When there is only one sound particular being perceived—sitting in a quiet room and hearing just the "room tone"—there is no reason to not be able to distinguish or reidentify it, since it is the only object given to the auditory perception.

With the construction of soundscape as the new space* basis in a pure auditory experience, arguments (i)—(iii) could be proved in a similar way to Kant's original expositions.

i.

The representation of space* is an *a priori* cognition. In a pure auditory experience, in order to present the sound objects in relations to each other in soundscape, i.e., to represent a sound being higher/lower in pitch, or louder/quieter in loudness, or having greater/fewer overtones than another, the representation of soundscape must already "be their ground." As the representation of soundscape cannot be obtained from perceiving the relations of sound objects through experience, it is thus an *a priori* cognition.[28]

ii.

The representation of space* grounds the experience of empirical objects. As argued previously, one can never form a representation of an absolute silence, i.e., empty soundscape. One can, however, perceive soundscape with only one sound particular—most possibly a keynote sound with little variation, which in such case might be regarded as a soundmark because it is the only auditory object to which we could pay attention—and an intuition of the larger soundscape is then embodied in it. Soundscape is therefore to be considered as a necessary condition for the possibility of the appearances of all other sound particulars that are represented.[29]

iii.

The representation of space* is not concept but rather (pure) intuition. In a pure auditory experience, one can only represent a single soundscape with one dimension for each of the three parameters, and there are no other dimensions available in spatial* terms because these three dimensions—frequency, amplitude, and overtones—are already exhaustive in locating all perceivable sound objects. Therefore, the singularity of soundscape implies that it is not a "discursive" or "general" concept but a form of intuition.[30] The fact that soundscape is represented as infinite in its dimensions can thus be derived, since it is contained in itself as a singular entity.[31]

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27 Ibid.
28 Cf. ibid., B38.
29 Cf. ibid., B39.
30 Cf. ibid., B40.
31 Cf. ibid., B39.

IV. RECONSTRUCTION OF THE TRANSCENDENTAL AESTHETIC ARGUMENTS FOR TIME

In the metaphysical exposition of the Transcendental Aesthetic, Kant describes time to be "successive," in contrast with space's being "simultaneous." Time has only one dimension in an infinite given magnitude.[32]

While both sounds and visuals have a temporal unfolding, it is easier to recognize the notion of time in a pure auditory experience, because the soundwave takes a much longer time to transmit through air than light does. Bergson uses the term "pure duration" to describe the units of time we perceive in intuition. "Pure duration is the form which the succession of our conscious states assume…when it refrains from separating its present state from its former state."[33] Sound objects unfold themselves successively along one and the only dimension in time, which endows our representations of them with durations. Alperson also points out the inseparability of the intuition of time from our perception of sounds by comparing our perceived durations between auditory and visuals. He suggests that sounds depend for their existence on "movements within a physical substrate," and thus have shorter durations than any images, "which are rooted in a relatively stable physical substrate."[34] O'Callaghan further emphasizes the motion as an essence of sounds by claiming that they "[survive] changes to their properties and qualities across time."[35] Since the representation of motion is only possible through and in the representation of time,[36] the reliance of the sensibility of sound objects on motion lights the way for the following reconstruction of the transcendental aesthetic arguments for time in pure auditory terms.

i.

The representation of time is an a *priori* cognition. In order to form representations of sound objects, one has to perceive at least the amount of time equal to the duration of the sound object being perceived. Different representations of sounds are thus formed in relations of time: they either occur simultaneously, at the same time, (e.g., soundmarks are heard together with the keynote sound), or occur successively, one after another at different times (e.g., different soundmarks at a train station, say, the train whistle followed by the noise of its wheels). As the sensibility of simultaneity or succession cannot somehow be drawn from the empirical experience without a presupposition of time, the representation of time is thus an *a priori* cognition.[37]

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32 Ibid., B46; B48.
33 Bergson, Henri, *Duration and Simultaneity,* (Indianapolis: Bobbs-Merrill, 1965), 49.
34 Alperson, Philip, "'Musical Time' and Music as an 'Art of Time,'" *The Journal of Aesthetics and Art Criticism* 38, no.4 (1980), 408.
35 O'Callaghan, Casey, Constructing a Theory of Sounds, *Oxford Studies in Metaphysics* 5 (2009), 263.
36 Kant, Immanuel, *Critique of Pure Reason,* B49.
37 Cf. ibid., B46-7; B50.

ii.

The representation of time grounds the experience of empirical objects. Similar to the proof of the argument for space, in a pure auditory experience, one can never form a representation of a sound object without that duration of time being perceived along with it. Sound exists in movement, so there is no such thing as a "still sound" which exists in one single moment. One can, however, imagine a duration of time without any sound object being perceived. For instance, the subject fails to perceive the keynote sound as the only sound object given to auditory sensibility and thus perceives a "pure duration" in Bergson's terms, in which an *a priori* intuition of time is presupposed. Time is therefore to be considered as a necessary condition for the possibility of the appearances of all sound objects that are given to our intuition.[38]

iii.

The representation of time is not concept but (pure) intuition. Even in terms of pure auditory perceptions, the representation of time in general is singular. Since there is only one dimension in time, in which we can perceive it in one direction—time never goes backwards for us—any duration of time is only part of "one and the same time [structure]." We cannot perceive one sound particular as part of one time and another as part of another time. Therefore, the singularity of time representation implies that it is not "discursive" or "general" concepts but a "pure form of intuition." The infinitude of this dimension can thus be derived "through limitations of a single time grounding it." Hence, the representation of time is also said to be infinite in its magnitude.[39]

V. AN OBJECTION AND REPLY TO THE MULTIPLICITY OF TIME IN MUSIC

As time is described in terms of dimensionality in the same way as how space* is described, it tends to be understood as a one-dimensional continuum with an infinite given magnitude, as argued in (iii) in the last section. According to Abel, such resemblance "spatializes" time and thus fails to recognize the fundamental difference between the succession of time and the simultaneity of space.[40] Applying the analytical method of space to time seems to force a quantification that fragments time into a sequence of equal instants to be measured and tracked by a certain system, i.e., the clock time. Temporal succession, however, is conceived in a non-discrete manner. "[T]hink of it as a mutual penetration, an interconnection and organization of elements."[41] In other words, our perception of the successiveness of time depends on a continuous mental state in order to capture different moments in motions and changes as flowing into one another, as opposed to their being connected by a regular measuring scheme. The virtuality of time in this interpretation is incompatible with the scientific view that

38 Cf. ibid., B46-7.

39 Cf. ibid., B47-8.

40 Abel, Mark. Groove: *An Aesthetic of Measured Time,* (Brill, 2014), 94.

41 Bergson, Henri, Keith Ansell-Pearson, and John Mullarkey, *Henri Bergson: Key Writings,* (New York: Continuum, 2002), 60.

time durations are quantified by equally divided measurements. As a result, it has been argued that time should be understood as a "lived flux," which entails the potentials beyond a singular representation of time.[42]

Music, as a species of sound, for instance, often seems to suspend our representation of ordinary time—unidirectional as measured by the regular system—and substitutes it with another representation in which the duration of the perceived time fluctuates with the music flow. "Music…demands the absorption of the whole of our time-consciousness; our own continuity must be lost in that of the sound to which we listen."[43] The time passage we perceive while listening to music can no longer be measured by the ordinary clock time, but instead by the music tempo and its (ever-changing) rhythm. We perceive the same duration, in terms of clock time, to be longer in an allegro than in an adagio, because theoretically, the faster tempo of an allegro accelerates time passage in our representation. Since our representation of time could be different when we listen to different pieces of music, it is claimed that the time as an infinite succession of equal duration is not the only possible abstraction of our representation of time.[44]

The Kantian view of time, however, is not in conflict at all with the interpretation of time as a "lived flux." As I read it, the succession of time can be well-captured in its one and only dimension that grounds all "apodictic principles" of time relations.[45] The formulation of argument (ii) in Section III states that we perceive different sound objects either simultaneously, when they are given at the same time, or successively, when they are given at different times. Consider a two-dimensional plane: we can represent an object as adjacent to another in both dimensions, horizontally as left or right, or vertically as above or below. However, when we represent sound objects in time relations, the existence of a second dimension of time would suggest that we can perceive them as "adjacent to" one another in a way other than the chronological order, which is an impossibility. Similarly, our mental state can only experience the "lived flux" in one direction, whether it is understood to be continuous or discrete. Therefore, there is no second dimension in time.

The singularity of time's dimension also implies that different times are all part of the same time in that dimension since it is said to be infinite. As this is a restatement of argument (iii), the objection that we represent time differently when we listen to different pieces of music is also implausible. The substitute and disturbance that music provides for our ordinary sense of time is only a form of time in general, because whether the note is an allegro or adagio, we listen to musical notes played one after another (or at the same time as chords) all along the same one-dimensional and infinite continuum. The multiplicity of time that

42 Abel, Mark, *Groove: An Aesthetic of Measured Time,* 97.
43 Langer, S.K. Knauth, *Feeling and Form A Theory of Art Developed from Philosophy in a New Key,* (Routledge & Kegan Paul, 1953), 110.
44 Ibid., 111.
45 Kant, Immanuel, *Critique of Pure Reason,* B47.

the objection proposes is a result of a restricted interpretation of Kant's account of time. Abel misunderstands time to be a scientific parameter that is always measured by a regular mechanism and divides time into fragments with equal durations. In fact, instead of attempting to quantify time with its dimensionality, Kant does not completely eliminate the possibility of subjectivity in the representation of time. He suggests that time "is nothing other than the form of inner sense, i.e., of the intuition of our past self and our inner state."[46] It is through this inner intuition that we could represent the temporal sequence of different sound objects, and the ordinary system to measure time is only a trajectory of the singular time in general which allows us to have some level of intersubjective agreement on its representation. Hence, the differences among the perceptions of time passage in music are merely evidence for the instability of our inner sense—a subjectivity that is not objectionable to the Kantian view of time—rather than evidence for the multiplicity of our representation of time.

VI. CONCLUSION

I have described sound as a representation of a purely auditory object characterized by its pitch, loudness, and timbre, as opposed to the sounding object or the event that produces the sound. I have then reconstructed Kant's three essential arguments in the Transcendental Aesthetic, i.e., space/time as an *a priori* cognition of pure intuition which grounds all other representations of empirical objects, in a pure auditory experience. In the reconstruction for space, I have made a narrow interpretation of space bounded by the extensiveness in its dimensions and illustrated that we need an intuition of space to represent the intrinsically non-spatial sounds. I have suggested that Strawson's master-sound is inadequate to be considered as a proper space analogue, but that this thought experiment inspired the notion of abstract space*. With a rough sketch of soundscape as the trajectory of space* in our auditory representations and two special sound particulars—keynote sounds and soundmarks—I have then formulated the transcendental aesthetic arguments in soundscape. In the reconstruction for time, I have identified the essential difference of time from space to be its singularity in dimension and the succession of different times. The temporal unfolding of sound objects has then led to the formulation of the arguments for time in auditory perception. I have also addressed an objection to the singularity in the representation of time with an example of different time perspectives in music. Finally, I have presented a possible reply that the Kantian view of time leaves room for subjectivity in the intuition of time as a representation of our inner states. Therefore, we can form representations of sound objects exactly because space and time are *a priori* cognition as sensible intuitions for us, so the Transcendental Aesthetic is verified in pure auditory perception.

46 Kant, Immanuel, *Critique of Pure Reason,* B50.

BIBLIOGRAPHY

Abel, Mark. Groove: *An Aesthetic of Measured Time.* Brill, 2014.

Bergson, Henri, Keith Ansell-Pearson, and John Mullarkey. *Henri Bergson: Key Writings.* New York: Continuum, 2002.

Alperson, Philip. ""Musical Time" and Music as an "Art of Time"." *The Journal of Aesthetics and Art Criticism* 38, no. 4 (1980): 407-17.doi:10.2307/430322.

Bergson, Henri. *Duration and Simultaneity.* Indianapolis: Bobbs-Merrill, 1965.

Evans, Gareth. "Things Without the Mind", in Zak van Straaten (ed.). *Philosophical Subjects: Essays Presented to P.F. Strawson.* Clarendon Press, Oxford, 1980. Also in G. Evans, Collected Papers, Oxford: CIarendon Press, 1985, 249-90.

Helmholtz, Hermann. *On the Sensations of Tone as a Physiological Basis for the Theory of Music,* 4th edn. New York: Dover, [1877] 1954.

Kant, Immanuel. *Critique of Pure Reason*. Edited by Paul Guyer and Allen W. Wood. The Cambridge Edition of the Works of Immanuel Kant. Cambridge: Cambridge University Press, 1998. doi:10.1017/CBO9780511804649.

Langer, Sussane. *Feeling and Form a Theory of Art Developed From Philosophy in a New Key.* Routledge & Kegan Paul, 1953.

Locke, John. *An Essay Concerning Human Understanding: And a Treatise on the Conduct of the Understanding.* Philadelphia: Hayes & Zell, 1860.

MacLachlan, D. L. C. *Philosophy of Perception.* Englewood Cliffs N.J: Prentice Hall, 1989.

Nudds, Matthew and Casey O'Callaghan. "Sounds and Perception." *New Philosophical Essays,* Oxford: Oxford University Press, 2009.

O'Callaghan, Casey. Constructing a Theory of Sounds. *Oxford Studies in Metaphysics* 5 (2009): 247-270.

Schaeffer, Pierre. "The Sound Object." *Trois Microsillons d 'Examples Sonores.* Paris : 1967.

Schafer, R. Murray. *The Soundscape: Our Sonic Environment and the Tuning of the World.* Rochester, VT: Destiny, 1977.

Strawson, P. Frederick. *Bounds of Sense: An Essay on Kant's Critique of Pure Reason.* Routledge, 1966.

Strawson, P. Frederick. *Individuals: An Essay in Descriptive Metaphysics,* London: Methuen, 1959.

Strawson, P. Frederick. "Reply to Evans", in Z. van Straaten, *Philosophical Subjects: Essays Presented to P.F. Strawson,* Oxford: Clarendon Press, 1980.

The Plexus: A Graph-Based Model of Perceptual Knowledge

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I. INTRODUCTION

How do we come to know the "three-dimensional external world and its history"1 just from our perceptions? David Hume's *A Treatise of Human Nature* as well as Willard V.O. Quine's "Two Dogmas of Empiricism" and "Epistemology Naturalized" offer answers. When taken together, their empirical models successfully explain how we form ideas from sense perceptions and how an idea's meaning or truth comes from the meaning or truth we assign to related ideas.

The trouble is that there are specific parts of perceptual knowledge, as Hume and Quine conceive of it, that they do not illustrate precisely. The fault is not theirs—I think Quine is especially artful in his writing—but of any language that has discrete words and linear order. In this essay, I amalgamate and summarize their explanations of perceptual knowledge, making note of areas that they could not capture precisely in writing. Then, I introduce a new, graph-theoretic framework for describing knowledge. I show how this framework can more fully represent knowledge's structure and evolution.

II. HUME AND QUINE'S PERCEPTUAL KNOWLEDGE

Terms and Statements

All knowledge is composed of *terms* and *statements*.[1] A term is an object of thought (e.g., an apple, a theorem, a screenplay, an observation, etc.), whereas a statement is an asserted relation between two terms. Because statements may be objects of thought, they are terms, too. The statements we make, i.e., the relations we draw between terms, are, for Quine, the fundamental units of knowledge.[2] Only statements can have *truth*. All terms have *meaning*.

We tend to relate terms (i.e. make statements) in various circumstances: when two ideas *resemble* each other, when we judge that they share the same *identity*, when we compare them across metrics of *space and time*, when one seems to *cause* the other, etc. When a relation is drawn from idea A to idea B, the mind is effectively hardwired to pass to B every time it witnesses A.[3] These relations between ideas are fundamentally mental phenomena.

Truth

Truth is intimately bound to belief. And, the degree to which we believe in a perception is the degree to which it is present (to which it exists) in our consciousness. Because we believe in our memories, but not in what we imagine, and in our sense impressions, but not in all of our ideas, Hume argues that *belief* in a perception can be nothing but the "vivacity" with which it is present in one's mind.[4] A perception's vivacity for the beholder is the extent of its force and liveliness in her mind. Truths are just the statements that are clearest and most vivid in our minds.

From where does a statement get its truth? Hume offers part of the answer: impressions lend truth to statements.[5] Yet, how can we account for the truth of statements that are not derived from just a few *impressions*, but statements like "chairs usually have four legs," whose truths are derived from other statements

as well (e.g., "this particular brown chair has four legs."). To clarify this question, we might take the direction of other philosophers and try to distinguish between observation statements (statements that come directly from sense impressions), and statements less clearly dependent on sense impressions.[6] But, Quine shows that observation statements cannot be cleanly separated from others. Quine has us see that observation statements (and statements, generally) cannot be *reduced* to logical constructs of corresponding impressions. An observation statement's truth depends just as much on the truth we assign to related statements as that which we assign to related impressions. The truth of "the computer is on the table," depends not only on my sight of the computer and the table, as Hume might have asserted, but also on the implicit notion that I am talking about the computer and table in front of me, as well as an implicit definition of what it means for one physical object to be on top of another. Quine more broadly says that statements do not only get truth from corresponding impressions but also from other statements.

According to Quine, we distribute truth, as if it were a quantity, throughout our body of statements. Scientists do so by first assigning certainty to observations, then to the statements directly supported by those observations, then to statements supported by those statements, and so on. Though an impression does not transfer all of its vivacity or truth to a related idea—e.g., the idea of a baseball shattering a window is not as real in your mind as the impression of the event itself—Hume implies that the corresponding idea will get a proportionate degree of vivacity or truth. Because we find it important for our observations to closely match impressions, we often have to readjust more internal statements in this fabric of knowledge, like scientific theories, to account for new observations.[7] Quine notes that "the total field [of statements] is so undetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to re-evaluate in the light of any single contrary experience."[8]

However, Quine does not precisely detail the way in which we distribute truth throughout our network of knowledge, at least in these two essays. Concerning the method by which truth is distributed, we are left with a vague heuristic: fix the truth of some terms (e.g., those we directly experience), then let truth "trickle" throughout the rest of our knowledge structure. How does this trickling occur?

Meaning

Quine dismisses Aristotle's view that definition is the real source of an idea's meaning. For Aristotle, "man" *means* "rational being," whereas "man" is only related to "biped." But, as Quine points out, the distinction between essential and non-essential qualities is only linguistic and is unhelpful in the study of knowledge.

And yet, people do understand and apply some concept of "meaning." If there is no true distinction between definition and related fact, how can we rigorously

understand the meaning of anything? Hume offers that a term's meaning is just the set of impressions to which it corresponds in one's mind. "Triangle," for example, conjures a host of ideas of particular triangles that you have seen before.[9]

But we might push back on the claim that this set of ideas must be whole sense impressions (e.g., full images of triangle). For, what one means by "triangle" might include not only images of triangles, but also meanings of other related ideas, like "3," "side", and "polygon," as well as a host of sublingual ideas to which "triangle" is intimately related. This suggestion more generally lets us conceptualize the meaning of a term *t* simply as the set of other terms to which it refers. Even at this point, we are left without a notion of how to specify or compare the extent to which each of the terms that are related to *t* constitute *t*'s meaning. And there must be varying extents here, as "America" is much better captured by "the US" than by "New York," though it is certainly related to both.

Complex Ideas

Hume also posits a division of ideas, *complex* and *simple*.[10] For Hume, complex ideas are those that are *composed* of other ideas. But, Quine's framework rejects this classification. For Quine, no ideas are composed of other ideas—an idea might be related to others, but it cannot be reduced definitively to a set of other ideas or impressions.[11] If all ideas are defined by relations to others, as Quine argues, the claims that simple ideas are indivisible and that complex ideas are composed of others are simplistic.

But some terms do seem larger, or more general, than others. When a group of people live in the same home, we often call them a family. When two hydrogen atoms bond to an oxygen atom, we call it water. When a group of people come together behind a constitution, we call it a nation. Quine might reply: though certain people might be strongly connected to a family, the family might extend farther than just them; though those atoms are in water, water also depends on the way they are connected and has (essential) macroscopic properties; though those living individuals are in a nation, they do not themselves capture its constitution, its international image, its laws, etc. Saying that one concept is *part of* another concept gets particularly messy when either has the potential to be a part of the other. The US is a part of NATO, but NATO is also a part of the US's international alliances.

Even with this messiness, people's tendency to call some concepts larger than others remains, as people are category- and object-oriented. How, then, if we agree with Quine that it is imprecise to talk of complex objects *composing* simpler ones, can we understand conceptual constituency? Are there more fundamental structures of our knowledge that explain our idea of constituency?

Refining Knowledge

Given that the vast majority of our knowledge is not directly comparable

to particular sense impressions, there are many ways to formulate our internal, more-meta knowledge such that it is consistent with experience (i.e., people have many different conceptions of the world). How, then, do we choose among the possible forms? Quine provides an illustrative example. Scientists posit that there exist physical objects in order to explain the world. Non-scientists might appeal to Homer's Gods to explain the world.[12] Quine asserts that *both* are cultural posits. The only way to choose one of the two posits, on epistemological grounds, is not to claim that one is more correct (What does "correct" mean?), but to note that the "myth of physical objects… has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience." In other words, physics provides a simpler set of axioms to explain a wider array of phenomena that we (or, scientists) care about.

According to Quine, our dual quest both for the consistency of knowledge with the things we care about explaining (in science, sense impressions) and for simplicity in all the rest of knowledge's myths and fictions, characterizes knowledge's evolution. Over time, we become better at refining the myths and fictions that form the core of this network of statements, thereby simplifying our knowledge structures. But, then, the things we care about explaining evolve too (e.g., as we receive new empirical data, as our values shift), and we are met with the need to revise our core statements and the distribution of truth throughout the network. Philosophers and scientists constantly find ways to explain more phenomena with simpler principles. There remains the question, what are the mechanics by which these improvements can occur?

III. A GRAPH-BASED MODEL

Though Hume and Quine write persuasively about their general model of scientific knowledge, I have noted that they leave room to further illustrate their conceptions of truth, meaning, complex objects, and scientific progress. I think vagueness would be present in any attempt to *verbalize* perceptual knowledge as they do. Knowledge is composed of relations among terms that one can traverse in more than one order, whereas verbal language is strictly linear. Quine's statements are assigned truth values along a continuum, whereas verbal language offers only discrete options (e.g., true, probably true, probably false, false). These two limitations of verbal language alone suggest that it is not ideal for expressing perceptual knowledge. And, the fact that Quine is already talking about our "fabric" and "network" of knowledge suggests that if we want to more precisely capture knowledge, we should appeal to graph theory.

In this section, I show that the theory of knowledge presented in the previous section can be more precisely modeled in graph-theoretic terms. The model I present better captures Quine and Hume's conceptions of truth, meaning, complex ideas, and scientific progress.[13]

Terms and Statements

The model's basic structure is a directed graph $G = (V, E)$. Each element,

node or edge, *x* has a weight *w(x)* with label *l(x)*. Let one of these graphs, specific to a particular body of knowledge, be called a *plexus*.[14]

The plexus is a dynamic kind of concept map.[15] A term (or concept) *X* is represented by a node *X*. A statement, being a relation between a subject term *S* and an object term *O,* is represented as a path (set of adjacent edges) from *S* to *O*. A direct statement with subject *S*, object *O*, and predicate *r* can be represented as a one-edge path, from node *S* to node *O* by way of edge *r* (see Figure 1). An indirect statement is represented as a path containing more than one edge, where the statement's predicate is just that path (see Figure 2).

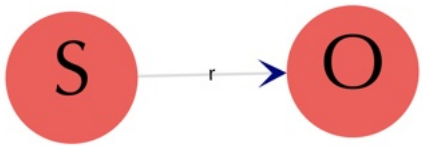

Figure 1. Simple statement with subject *S*, predicate *r* and object *O*

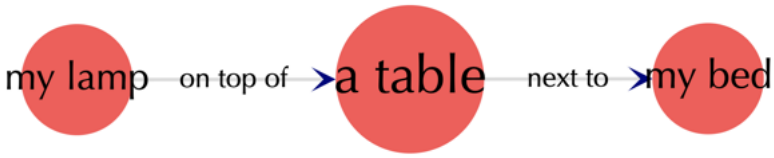

Figure 2. An example of an indirect statement, with subject "lamp" and indirect object "bed": "My lamp is on the table, which is next to my bed."[16]

The vivacity of a term *t* (i.e., the extent of its presence in one's mind) is represented by its weight *w(t)*. Hume explains that vivacity flows from term *S* to an out-neighbor term *O*, not completely, but according to some proportion specific to their relation. I suggest that we treat vivacity as a finite quantity. The proportion of vivacity that flows from *S* to *O* via a relation r is represented as *w(r)*.

Because an idea can never give more vivacity than it has itself to a neighbor, all edge weights *w(e)* must take on values between zero and one (where zero would denote no relation at all). Recall that the proportion of vivacity that flows from one idea to another is the probability that the first will be followed by the other. Therefore, a relation *r* with $w(r) = 1$ indicates that there is an infallible connection between the source and target nodes—that every time we see the one, we think of the other, and that vivacity flows completely from one to the other. This is true if we cannot imagine one without the other, i.e. if they are identical. But also, for the plexus of a scientist, who does not care about one's natural imagination, a relation *r* with $w(r) = 1$ only implies that, in experience, the source and target terms always appear together.[17] The weight of an edge, then, amounts

to the probability that the effect term will accompany the cause term in any given experience. This probability is trivially calculated from sense impressions, as the fraction of occurrences of the first object (and its corresponding term) in which the second object (and its corresponding term) is present. With more nuance, we might imagine different extents to which the second term might be present (measured along a 0 to 1 scale as well), under which lens calculating an edge weight is the sum of these extents divided by the number of occurrences of the first term. Finding an upper bound on node weights is a less clearly defined task.[18]

Truth

The plexus can represent the flow of truth between connected statements and the flow of vivacity between connected terms more precisely than verbal language. First, given the weight of all the edges in a path *P* from *S* to *O*, we can define the *strength* of the connection between *S* and *O*, and the *truth* of the statement *T* with subject *S*, predicate *P,* and object *O.* For the indirect statement to be true, each of its composite statements must be true. More precisely, for truth to flow from *S* to *O*, it must transfer along each edge in *P.* The proportion of vivacity that will flow from *S* to *O* is just the product of the proportions of vivacity that will flow along each edge in *P*. Hence, the truth of *T*, which may be denoted as *w(T)* may be defined as the product of the weights of each of the edges in *P* : $w(T) = \prod e \in E\, w(e)$.

What may seem to be a small corollary is actually quite significant for the plexus model. (See Figure 3.) Given the probability *P* of a statement, we know the product of all the included edge weights must be *P*. Hence, given the simple statement defined by a relation from to , if we ever want to talk about r as a particular term itself (rather than just as the way that relates to), there is a possible transformation of the graph structure that preserves the truth value of the statement defined by *r*. Call this transformation an *edge-node* transformation (as it creates a node in place of what was previously an edge). It consists in deleting the edge *r* between *S* and *O,* adding a node corresponding to the relation *r*, adding edges from *S* to *r* and from *r* to O, and assigning edge weights to both new edges such that their product is *p* (e.g., by assigning as the new edge weights the square root of *w(r)* for previous edge *r*). Hence, we have a construction to make an $S \rightarrow O$ relation into a term that preserves the truth value of the associated $S - O$ statement. This construction would allow us, if we desired, to transform all the edges with labels in a graph into graph with no labeled edges and only labeled nodes.

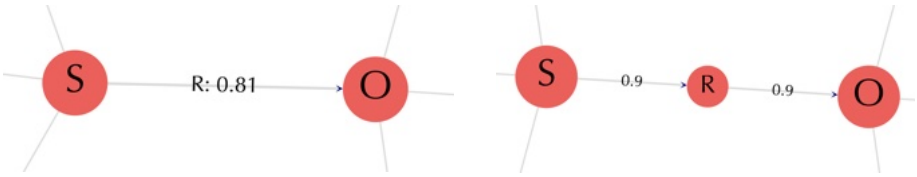

Figure 3. Construction that transforms the initial one-edge relation R *(left)* into a referable term *(right)* and preserves the truth value of the *S*-*O* statement.

I am not sure how to definitively reconcile the truth of statements corresponding to two distinct $S \rightarrow O$ paths. What is the probability x that O will be present, given S, if there are two $S \rightarrow O$ paths with probabilities x_1 and x_2? The plexus model provides no clear answer. But, this issue does not come from the model; there is generally no determined answer to such a question. It depends on the extent to which the two paths imply mutually exclusive probabilities.

Despite this indeterminacy, some constraints can be placed on x. As a probability, x must be less than or equal to 1. Moreover, if edge weights are determined by the heuristic I suggest—dividing the number of times O has been present given S by the number of times S has been present—then x must be at least as great as the maximum of x_1 and x_2.[19] This is consistent with the argument that the strength with which S relates to O by r is less than or equal to the strength by which S relates to O generally.

Now, we can algorithmically describe the way that truth trickles throughout the plexus (which Quine only describes qualitatively). Begin by assigning weights to some of the nodes (which, in a plexus of scientific knowledge, would likely consist of assigning very high weights to observation statements). Then, iterate through a series of rounds. In each round every node X offers each of its neighbors some weight (without X's losing any weight itself[20]). In particular, X offers Y a weight of $w(X)*w(XY)$. If this is the greatest offer that Y has received, Y adopts this new weight as its own, setting $w(Y) = w(X) * w(XY)$. As these rounds continue ad infinitum, I claim (but do not take the space to prove here), that the nodes' weights reach an equilibrium. This algorithm will determine a weight for each node that corresponds to the degree of its vivacity and *existence* in this plexus.[21]

Meaning

Building off Hume, I defined a term's meaning as the terms to which it refers. For a concept to refer to another, in a plexus, means that there is a path from the first to the second. In a plexus, then, it becomes clear why our traditional understanding of meaning is hard to describe. The terms to which any given term t refers are all the terms that are reachable from t. We might try to represent the meaning of t, then, as the set of all terms reachable from t. But, this would be a skewed sense of meaning, as the meaning of the "US" would include "America" just as it would include "New York," even though "America" is, by common sense, much

closer to actual meaning of "US" This example suggests that terms in a *meaning set* should have relative weights. The weight I would assign to a term *x* in the meaning set of *t* would be the maximum strength of any *t-x* path. In the example, presumably the "US" and "America" would be strongly connected (the strength would likely approach 1) whereas "US" and "New York" would be less strongly connected. The meaning set would therefore weight "America" significantly more than "New York," which makes sense intuitively. This definition of meaning—as a weighted meaning set—makes clear that, even if exactly capturing meaning is often untenable, we can very closely approximate t's meaning as the other terms to which it is most strongly connected.[22]

I have now shown that the strength of connections in a plexus, which we know just as the proportion of vivacity that will flow from term to term, explains both the meaning of terms as well as the truth of statements. It is worth noting that a semantic relation, like that between "US" and "America," probably has a strength very close to 1. Semantic relations have much higher strengths than primarily experiential (e.g., causal) connections. This claim is grounded in my definition of the edge weight between two terms as the probability that one term will be present if the other will. Every time the "US" is present in my mind, "America" is present, too. Semantically equivalent or synonymous terms are likely present together much more in one's mind than cause and effect, just because when one term enters the mind its synonyms follow, almost by force, whereas we might see a cause but miss or ignore the effect.

Complex Ideas

Quine shows that no ideas are composed of, or reduce to, other simpler ideas. And yet, people, and verbal languages, are category- or object- oriented. The question about complex ideas which I presented previously is, if we agree with Quine that it is imprecise to talk of complex objects *composing* simpler ones, what are people doing when they naturally group or break down ideas?

The question of how we break down ideas has, in fact, already been answered. If we understand *composure* in a new light, in which one object *X* is a part of another object *Y* if *Y* closely refers to *X*, then the ideas that compose *Y* can be defined just as the ideas that are most closely *meant* by *Y* (by the definition provided above for meaning). This correspondence between *composure* and *meaning* suggests that *composure* is an approximation of meaning. The ideas that compose another idea *X* are just the ones that *X* means most, i.e., the ones to which *X* most closely refers. Equivalently, these are the ideas that are present most often if *X* is present. So, breaking down an idea is exploring its meaning.

Next, grouping ideas can be understood as clustering. In a graph, clustering is the process of identifying groups of nodes whose members are more strongly connected to each other than to other nodes in the graph. Clustering might be seen as the opposite of finding an idea's meaning or composite ideas. As opposed to identifying and paying attention to the ideas to which term *t* is most

strongly connected, as is done in finding a meaning set, in clustering around *t*, we purposefully divert attention from the terms to which *t* is most strongly connected to focus more broadly. Therefore, in a plexus, a cluster represents a natural category of terms, a coherent term in-and-of-itself. (See Figure 4.) Clustering therefore sheds insight on our tendency to perceive and talk both in terms of groupings and in terms of parts of objects. (See Figure 4.)

Figure 4. Approximating about a hundred terms in a concept map representing details about emissions policies *(left)* by identifying clusters of nodes with relatively dense intra-connections *(middle)* and replacing each cluster with a larger version of the most central term it includes *(right)*.

How can a cluster be denoted in a plexus? If, as in our discussion of composure, a term is composed of other terms if it refers most closely to those other ideas, then the cluster *c*—the new, broader term—should just be denoted as the particular term *t* among the terms that compose *c* that refers most closely to those other terms that compose *c*. From another perspective, if a cluster is formed around *t*, then it could make sense for the term used to denote that cluster to just be *t*. Sometimes we call the cluster a new name (e.g., a cluster of related persons is "people"), but often it will work for the same term to denote the cluster (The cluster composed of an "America" node connected to a node for each of the 50 states should just be denoted "America.").

One predictive corollary of this way of modeling complex objects is that when the clusters are cleanest, i.e., when the ratio between density of connections in clusters and density of connections between clusters is greatest, we might expect that these complex ideas are most clear and present in the plexus, and in our minds.

Refining Knowledge

In discussing the evolution of scientific knowledge, I noted that knowledge increases in simplicity and explanatory power over time. Explanatory power comes from being able to explain new terms. Insofar as explanation is drawing connections between new concepts and familiar concepts, increasing explanatory power, in a plexus, explanation consists of creating new terms and connecting them to existing terms. Increasing simplicity can be understood via clustering. Introducing clusters not only makes a plexus more digestible, but also is an instance of how introducing new terms can reduce the number of connections that the plexus has to store. For example, in Figure 5, introducing the term "Face"

reduces the number of connections by a factor of roughly two, and every part of the face is still "weakly connected" to each other. Introducing new terms often has the benefit of reducing the number of connections of which we need to keep track. Doing so might not preserve information about past relations losslessly, but it can capture important features and lets us more easily refer to all of the relevant terms.

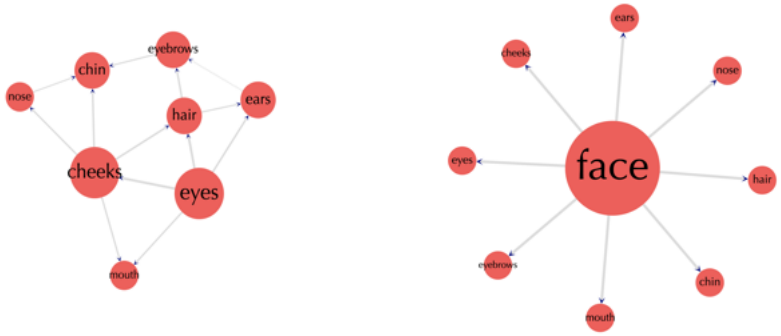

Figure 5. Reducing the number of relations from 13 to 8 by introducing one new concept, "face." This transformation does not preserve the way in which the nodes were all originally connected, as this is a situation where all that matters is that all the terms are connected closely to each other.

Implications

A plexus can more precisely capture many aspects of the model of knowledge that Hume and Quine put forth. A plexus can distribute truth throughout a web of ideas as a person might naturally distribute truth throughout their own web of knowledge. It offers more precise conceptions of a term's meaning and of complex ideas. It makes clear that a term's existence and a statement's truth in one's mind can be modeled as two sides of the same coin: vivacity. Its account of complex ideas via clustering also suggests a way that we, consciously, might filter our web of knowledge in order to access it at a variety of scales. And, it illustrates the mechanics by which ontology simplifies and explanatory power increases over time.

Further, it suggests a way of understanding certain branches of or approaches to knowledge. We can talk about a shared plexus, e.g., that of a scientific or religious community. A scientific community might fix observations statements with the highest truth values in all contexts; a religious community might give similarly high-truth to the statements of sacred scriptures or to communal beliefs. In this way, the plexus provides a subjective account of truth, in which facts are universal only to people assign truth to relevant ideas in the same way.

There are many implications of the plexus model left to explore. For one, the algorithms I present, e.g., to distribute truth throughout the network, should

be verified for correctness, and the predictions made by the plexus model should be empirically tested, not just against empirical epistemology, but by cognitive research. More importantly, the plexus model could be the basis for an investigation of how we consciously interact with—e.g., build upon, consolidate, access, search through, and filter—our cognition. As importantly, this model could prove foundational in efforts to create a knowledgeable machine, serving as a framework through which a machine can represent and understand.

ENDNOTES

1. W. V. Quine, "Epistemology Naturalized" in *Ontological Relativity, and Other Essays*, John Dewey Essays in Philosophy, No. 1. New York: Columbia University Press, 1969, 83.

2. Ibid.

3. David Hume, *A Treatise of Human Nature,* 1738. Oxford Philosophical Texts. Oxford; New York: Oxford University Press, 2000, 111.

4. Ibid, 61.

5. Ibid, 69.

6. Quine, "Epistemology Naturalized," 85.

7. W. V. Quine, "Two Dogmas of Empiricism." *Reprinted in From a Logical Point of View* (Harvard University Press, 1961). University of Zurich, 2000.

8. Ibid.

9. Hume, 19.

10. Ibid, 7.

11. Quine, "The Verification Theory of Meaning and Reductionism" in "Two Dogmas."

12. Ibid, "Empiricism without the Dogmas."

13. I have two notes about the scope of this project. First, we can extrapolate from Quine's model of scientific knowledge a more general model of knowledge, which would take the form of any interdependent systems of statements throughout which we distribute truth values by some sort of rule. That rule, in the case of science, is that statements that are closely linked to impressions must be consistent with those impressions. But, it is easy to see that consistency with observation is just one value we might hold and enforce as the basis for a certain web of knowledge. My personal

web of knowledge is also influenced by the fact that I care more for my family than for strangers; knowledge pertaining to my family is therefore more vivid in my mind. The fringes of knowledge are not just those places where our statements face "the tribunal of sense experience," but where our statements face any "tribunal" of values we respect (personal, moral, etc.). The model I develop is meant to capture scientific knowledge but could easily be extended in this way. Second, I present some algorithms below as part of the plexus model but do not prove them. My intuition suggests that they are right, but my aim in including them is just to suggest how the plexus can express various aspects of perceptual knowledge.

14. The noun "plexus" is defined first as a network of anastomosing or interlacing blood vessels or nerves. Blood flows and connotes life, just as truth, as I subsequently show, flows throughout our web of knowledge, and gives "vivacity" to the ideas and statements in which it settles.

15. J.D. Novak et al, "The Theory Underlying Concept Maps and How to Construct and Use Them." CmapTools, 2019 Institute for Human and Machine Cognition. Last accessed May 23, 2019.

16. The concatenation of the words and phrases in the Figure 2 would not actually result in the original sentence, as the concatenation from the diagram would omit two instances of the word "is." But, including the two instances of "is" would be *repetitive*. The fact that a relation or concept is included in the diagram itself means that it *is*, or exists. The associated weight of that relation or concept denotes the degree to which it exists.

17. I draw this distinction because of Hume's observation that the imagination can separate any two distinct ideas, even if they are placed in a causal relation (Hume, 12).

18. Finding an upper bound on node weights is a less clearly defined task than finding constraints for edge weights. An edge weight is defined relative to the vivacity of its incident nodes, but we have no relative units with which to define that vivacity. With no units, the task of bounding vivacity is meaningless. A scientist might try define vivacity as the probability that something *exists*, and therefore say that it must be less than or equal to 1. But, in the layperson's plexus, vivacity is a more amorphous concept. An idea might "exist" in someone's head as much as gravity "exists" in scientific theories. The subjective, mental nature of vivacity suggests that there may be no clear cap for node weights.

19. I do not prove this statement here, but it is an implication of the fact that if probability $P(A) > P(B)$ of two events A and B overlap as much as possible, i.e., if A occurs every time B occurs, then $P(A \cup B) = P(A)$.

20. Should this offering occur regardless of whether Y is an out- or in-neighbor? Only if we intend for truth to flow in both directions across a

singly directed relation.

21. I will not prove this either. Another claim: if this algorithm distributing truth throughout the plexus, then the edge-node transformation outlined not only preserves the truth of statements, but also the vivacity we assign to individual nodes.

22. The strength of a connection between two terms decays exponentially as the number of edges in that connection increments. This means that in a plexus that is not very dense, for most terms t, t's meanings can be approximated very nearly just by looking to the few terms to which it bears the strongest relation.

Deleuze, Nietzsche, and Nihilism: How Do We Say 'Yes!' to Life?

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ABSTRACT

While Nietzsche's chief philosophical goal was to establish a way beyond nihilism, since his time, it has been an ongoing debate as to whether or not he was successful in this endeavor. Many, like Heidegger, argued that the Nietzschean project failed its attempt because it was bound to reinstate nihilism, doomed by its own logical underpinnings. In response, Gilles Deleuze pushed back against this notion, arguing that Nietzsche did indeed successfully provide a path to life affirmation. A contemporary scholarly debate ensued between Judith Norman and Ashley Woodward, which currently stands at Woodward's rejection of Deleuze's interpretation because he argues that it too reinstates nihilism. This article is a challenge to Woodward's position. To do this, I will first define the different types of Nietzschean nihilism using Deleuze's terminology. Next, I outline Deleuze's interpretation of the Nietzschean concepts of the will to power and eternal return, as they are fundamental to understanding the Nietzschean project. I then outline the scholarly debate on the matter, which ultimately concludes in Deleuze's failure to interpret Nietzsche in a way that provides a path to overcoming nihilism. I finish by arguing that Deleuze does indeed successfully provide that path because his interpretation does not reinstate nihilism, as Woodward suggests it does.

I. INTRODUCTION

Front and center in the philosophy of Friedrich Nietzsche is the problem of Nihilism. At the core of his thought, Nietzsche wants to separate the life-deniers from the life-affirmers, categorizing the former as nihilists and the latter as superhuman. Perhaps his chief goal in all his writings was to illuminate a way beyond nihilism, a way for the nihilists to become superhuman.

However, did Nietzsche actually provide this path to overcoming nihilism? Many philosophers, the most famous of which being Martin Heidegger, claim that while Nietzsche may have believed that he succeeded in the task of overcoming nihilism, in reality he did not. Then, in response to the doubters, philosopher Gilles Deleuze, in his seminal book, *Nietzsche and Philosophy*, asserted that Nietzsche did indeed successfully provide a recipe for true life-affirmation. But was Deleuze right? Modern scholar Judith Norman, in her article "Nietzsche contra *contra*: Difference and opposition," highlights where Deleuze succeeds in his interpretation via his logic of difference. In response, Ashley Woodward, in his article "Deleuze, Nietzsche, and the overcoming of nihilism," argues that this logic of difference alone, while necessary, is not sufficient to overcome nihilism. He also claims that Deleuze's interpretation beyond the logic of difference, rather than overcoming nihilism, reinstates it due to the metaphysical, 'extra'-worldly nature surrounding his conception of the eternal return as selective being. The result is that the question of whether or not Deleuze articulates a successful Nietzschean route to overcoming nihilism is still very much up for debate. The purpose of this article is to enter into that debate.

To do this, I will first define the different types of Nietzschean nihilism

using Deleuze's terminology so that we can know what it is they endeavor to overcome. Next, I outline the Nietzschean concepts of the will to power and eternal return in the eyes of Deleuze. I then outline the scholarly debate on the matter, which ultimately concludes in Deleuze's failure to interpret Nietzsche in a way that provides a path to overcoming nihilism. I finish by arguing that Deleuze does indeed successfully provide that path because his interpretation does not reinstate nihilism as his critiques suggest it does. This is because his conception of the eternal return as selective being is not 'extra'-worldly, but rather very much of this world as experienced, even if it devalues the nihilistic elements therein.

II. THE DIFFERENT TYPES OF NIHILISM

For this article, 'nihilism' refers to life devalued, or valued as nothing (Deleuze 1983, p. 147). Also, anything rooted in rejection (negation) is defined at its core by nihilism. Thus, in order to find a way of overcoming nihilism, we must find a comprehensive method which is undeniably and totally rooted in affirmation. To accomplish this, I first identify all of the different forms of nihilism as described by Deleuze, beginning with 'negative nihilism.'

2.1 Negative Nihilism

'Negative nihilism' is when a higher world is created and positioned as superior in relation to our own world. When this higher world is established, the implication is that our world is indeed lower, and therefore negated, or denied. For example, when a person suffers through this life as a mere means to the glorified ends of entering heaven, she is engaging in negative nihilism. As Deleuze phrases it: "Values superior to life are inseparable from their effect: the depreciation of life, the negation of this world" (Ibid.). For Nietzsche, our world has been consumed by negative nihilism and its fruits ever since the advent of Judeo-Christian values. While Judaism began this process with the conception of a perfect and singular God, Christianity brought it to the next level by solidifying the idea of heaven, a place where those who righteously maneuvered through this worldly life would be rewarded with transcendent and eternal bliss.

In the tradition of Philosophy, it is Platonism that is guilty of positing a supersensible, heaven-like world towards which the philosopher strives. Nietzsche sees the entire history of philosophy since Plato as predicated upon this false negative nihilism that positions a higher world against our own base world of appearances. As he says in *The Twilight of the Idols*, "The real world, attainable to the wise, the pious, the virtuous man—he dwells in it, he is it" (Nietzsche 2003, p. 50). Here, Nietzsche is speaking directly about Platonism. For Plato, the 'true world' of essences is only attainable through philosophy. For Nietzsche, on the other hand, overcoming nihilism requires a philosophy (and way of living) that is not predicated upon this false and detrimental dichotomy of our world versus a higher world. If we are to overcome nihilism, our lives cannot be motivated by the promise of heaven (Christian or Platonic), eastern enlightenment (Nirvana or Moksha), or even scientific or logical appeals to the 'Truth.' For to do so is to

position a 'true' world in comparison to our devalued world of base appearances, a 'true' world that provides security and escape rather than danger and embrace (Woodward 2013, pp. 137-138). Instead, to overcome nihilism, we must meet our world head-on, as it is, and affirm it.

2.2 Reactive Nihilism

According to Deleuze, the next stage of nihilism that follows negative nihilism is 'reactive nihilism,' in which we come to reject the *higher* world. Reactive nihilism is when "[t]he supersensible world and higher values are reacted against, their existence is denied, they are refused all validity—this is no longer the devaluation of life in the name of higher values but rather the devaluation of higher values themselves" (Deleuze 1983, pp.147-148). The atheist exemplifies the reactive nihilist. He denies God, he rejects the 'true' world beyond our world, and he denies the value of that world.

As Nietzsche infamously puts it, "God is dead! God remains dead! And we have killed him!" (Nietzsche 2001, p. 120). Indeed, Nietzsche expresses this idea several times throughout his corpus: 'God' (all higher worlds and their values) is denied. Keep in mind the time in which Nietzsche was writing. It was the late 19th century, and the Enlightenment-fueled scientific revolution was rationalizing many phenomena previously attributed to God. Even within the field of philosophy the idea of God was being devalued and humanized by the likes of Spinoza, Hegel, and Feuerbach. By Nietzsche's time, many of the most fundamentally deified paradigms had been thoroughly humanized and rationalized, creating a crisis of confidence in the traditional ideas themselves of God. For all of these historical reasons, scientific and philosophical, God has ostensibly been 'killed'—and we have killed him. And what a disillusioning reality this is! There is no longer a higher world which contains higher values. There is just our world, our values, and us.

Why then are our values still the values of the higher world? According to Nietzsche, the death of 'God' did not bring about the death of his higher values. As he puts it, "God is dead; but given the way people are, there may still for millennia be caves in which they show his shadow.—And we—we must still defeat his shadow as well!" (Ibid., p. 109). In other words, 'God is dead,' but his shadow remains. For example, we still see this in Kant, who, under the guise of 'pure reason alone' reinstates the very Judeo-Christian values he sets out to 'critique' (Deleuze 1983, pp. 1-2). We see this also in the atheist who still upholds Christian humility, modesty, and chastity as unquestioned and intrinsically worthy values. The atheist denies God, yet blindly abides by God's values. In so doing, the atheist remains a nihilist, as he fails to overcome 'God's' shadow of life-negating values.

The result is a disillusioned value-set predicated upon a higher world that no longer exists. For Nietzsche, if we are to overcome nihilism, we must not only live free of the notion of a higher world; we must also live free of the higher world's values. We must create *our own* values based on a method that is squarely rooted

in our world, as it is.

2.3 Passive Nihilism

But what happens when we create values of our own that still deny life? This value-set defines 'passive nihilism,' the final stage of value-based nihilism. Here in the stage of passive nihilism, all human sensibility and pathos are shunned, our will is denied, and we as individuals fade into nothingness (Ibid., p. 151). The Buddhist or Hindu exemplifies the passive nihilist. In both religions, 'human, all too human' drives are combated against, and thus denied, in favor of what Nietzsche calls an ascetic ideal. For instance, human desires such as ambition are labeled as 'greed' and subsequently denied. The human drive of passion or retribution is labeled 'anger,' and seen as a problem that must be eliminated. To relinquish one's ties to these human qualities is to approach an 'enlightened' state, such as Nirvana or Moksha. These states are not 'higher worlds' per se, but rather 'higher modes' of existence that run away from and shame our human nature in a fit of what Nietzsche calls 'bad conscience.' Again, we see parallels to the scientist and philosopher (the logical positivist and stoic, for instance) who seek an enlightened state via hyper-rationality and equanimity. As Nietzsche would put it, these passive nihilists, "'from an impoverishment of life' make intoxication a convulsion, a numbness" (Ibid., p. 16).

Nietzsche refers to the passive nihilist as 'the last man,' and much of his work, especially *Thus Spoke Zarathustra*, focuses on this character. In describing the last man, Nietzsche shouts:

> [a]las! There comes the time of the most despicable man, who can no longer despise himself. Behold! I show you *the last man*. 'What is love? What is creation? What is longing? What is a star?'—so asks the last man and he blinks… 'We have invented happiness'—say the last men, and blink" (Nietzsche 2005, p. 13).

The last man cannot even despise himself, for to despise is to feel. 'What is love?' 'What is longing?' To the passive nihilist, love and longing are nothing but shameful human drives—drives that must be relinquished and censured. For the last man, all of humanity's drives and desires are not only meaningless and empty but also dangerous and destructive; rendering him stupid and numb in their presence. When we make ourselves numb to life, we imply numbness is required because life is painful. It is not enough to deny higher values because we still need to create values for and from our world, but in our first attempt, we *create* values that deny life because we are still in the habit of thinking of our world as unworthy.

For Nietzsche, this is the last stage of nihilism before we even have the chance of overcoming it. Humanity *must* descend into these depths in order to soar out of them. In *Zarathustra*, the German word *untergehen* has a constant and fundamental presence. According to Martin Clancy, the word translates to

'going under,' as well as 'perishing,' or 'dying' (Ibid., p. 283). Nietzsche sees this 'going under,' or 'dying' as a necessary stage to overcoming nihilism. We must first descend into passive nihilism (where we die) before we can transcend it (be reborn as superhuman). This is why on the very first page, Zarathustra tells us, '[l]ike you I must *go under*—as men say, to whom I shall descend" (Ibid., p. 7). Like us, he must perish. In other words, the western trends of subscribing to logical positivism, eastern religion, stoicism, science-worship, and forced 'positivity,' were inevitable, and only from here can we emerge into an authentic stage of full life-affirmation.

2.4 Logical Nihilism

'Logical nihilism,' the last type of nihilism, is unconnected with the progression of the first three value-based types. To understand logical nihilism, we must once again go back to Plato. Perhaps Plato's most significant influence on philosophy was that of the dialectic. In brief, Platonic dialectic involves two people, one offering definitions or arguments, and the other offering counterarguments (negations) in response. As such, dialectic is a form of logic operated by negations. Now, as Heidegger claims, Nietzsche's philosophy is a counterargument to Plato's philosophy, and as a mere counterargument, it is defined as nihilistic negation, dialectically (logically) speaking (Norman 2000, pp. 190-191).

Two millennia later, Plato's negation-based dialectic was followed up by that of Hegel's. In short, Hegel believed that every idea (argument), eventually breaks down due to its instability and intrinsic contradiction, thereby turning into its own negation. This negation (counterargument) would also negate itself, turning into its own reconciliation (new argument). The result for Nietzschean philosophy under this paradigm is similar to that of Platonic dialectic: his ideas are merely a contradiction to that which came before him, and as a contradiction, are defined essentially by negation, *not* affirmation.

The problem becomes clearer when we pose a fundamental question of this article: did Nietzsche succeed in illuminating a path to overcoming nihilism? Well, if he sees philosophy before him as nihilistic, and he is opposing that nihilism, is not his task defined by opposition, and thus negation? Is not Nietzsche merely negating negation? Opposing opposition? Seen in this light, Nietzsche's task seems bound to fail due to an inescapable contradiction, one that we must address (Ibid., p. 190).

However, importantly, we must keep in mind that *logic itself* is a form of both negative and passive nihilism, because the scientific search for the Truth "is born of a 'poverty of life' in the face of suffering…" (Woodward 2000, p. 138). Perhaps Kafka put it best when in *The Trial*, he said, "Logic is of course unshakeable, but it cannot hold out against a man who wants to live." Indeed, a triumph over nihilism would entail a different mode of thought, one that is distinct from those modes defined by logic at their core.

III. DELEUZE'S INTERPRETATION OF NIETZSCHE'S WILL TO POWER AND ETERNAL RETURN

Now that we have an understanding of that which we aspire to overcome, we can move on to Nietzsche's concepts of the will to power and eternal return as Deleuze interprets them. I will start with the concept of the will to power.

3.1 The Will to Power

Nietzsche's metaphysics is essentially that of Heraclitus, who believed that the world is composed of constantly changing and battling forces. Deleuze's interpretation of the concept of Nietzschean 'will to power,' is that within each human, there exists a differential panoply of these competing forces, some active and others reactive. Simply put, active forces are active insofar as they affirm life, while reactive forces are reactive insofar as they deny life. For example, love is an active force, while chastity is a reactive force. Now, according to Deleuze, "[t]he essence of man and of the world occupied by man is the becoming reactive of all forces, nihilism and nothing but nihilism" (Deleuze 1983, p. 169). It is the essence of humanity to descend *(untergehen)* into nihilism via our reactive will to power which is dominated by reactive forces. This inevitable becoming reactive of the will to power is the metaphysical engine that drives us to nihilism, beginning with negative nihilism, phasing into reactive nihilism, and ending in passive nihilism. At the point of passive nihilism, the reactive will to power becomes what Deleuze calls, 'the will to nothingness.' Recall that the passive nihilist suppresses his will and thus has a nothingness of will.

This last phase of passive nihilism is when reactive forces "…break off their alliance with [the will to nothingness], they want to assert their own values on their own account" (Ibid., p. 174). Here, the reactive forces want to exist on their own, independent of any will. But at this point:

> [t]he will to nothingness continues its enterprise, this time in silence, beyond the reactive man. *Reactive forces break their alliance with the will to nothingness, the will to nothingness, in turn, breaks its alliance with reactive forces.* It inspires in man a new inclination: for destroying himself, but destroying himself actively (Ibid.).

The will to nothingness returns the favor and breaks its ties with reactive forces, and in so doing, 'destroys itself, but destroys itself actively.' Actively, because it destroys all reactivity. This is the moment Deleuze calls 'transmutation,' the moment when not only the values are transformed from reactive to active, but the element from which they derive (the will to power) transforms itself from reactive to active. Deleuze describes it like this:

> Active destruction means: the point, the moment of transmutation in the will to nothingness. Destruction becomes active at the moment when, with the alliance between reactive forces and the will to nothingness broken, the will to nothingness is converted and crosses over to the side of *affirmation*, it is related to a *power of affirming*, which destroys the reactive forces themselves (Ibid.).

However, for Deleuze, "…transmutation depends more profoundly on the eternal return" (Ibid., p. 192). It is the eternal return as both physical doctrine and selective being that provides the engine for the above described transmutation.

3.2 Eternal Return

Nietzsche's concept of the eternal return is of the utmost importance in his philosophy. This concept takes on two different forms: one, as a physical and cosmological theory, and the other, as a selective being.

3.3 Eternal Return: A Speculative Physical and Cosmological Theory

The first element of the eternal return I will discuss is that of a speculative physical description of time itself. The claim is that "…time itself is circular" (Nietzsche 2004, p. 136). There are several reasons why Nietzsche subscribed to this thought. First and foremost, Nietzsche believed that our existence was a being of becoming (Deleuze 1983, p. 47). In other words, our existence, our *being*, is in a constant state of development and change. Therefore, it is always *becoming*. Consider the aging process. All of us are consistently *becoming* older with each passing moment. As such, our existence, our being, is in a constant and never ceasing state of becoming. *It is a being of becoming*. Indeed, this is the nature of time as we experience it. Time itself is a constant state of becoming—it never ceases, and continually moves the past into the future. Here again, we see Nietzsche's fidelity to Heraclitus, who saw all of existence as being in a constant state of flux. Now, seen this way, Nietzsche makes the argument that time must be circular. "That everything recurs, is the very nearest approach of a world of becoming to a world of being…" (Nietzsche 2019, § 617). In other words, for our world to be a being of becoming, time must be circular. *"Returning to the being of that which becomes"* (Deleuze 1983, p. 48).

Let us make more sense of this. Nietzsche argues that if time has an infinite past, then there could never have been a starting point. Moreover, if time were ever going to reach a final state, having an infinite past, it would already have reached it. Why? Because past time is infinite, and if a final destination were possible, it would have already been realized in the infinity of the past. Therefore, time itself has neither a beginning state nor a final destination (Ibid., p. 47).

The eternal return also explains the passage of time (Ibid., p. 48). Nietzsche and Deleuze point out that the passage of time itself must be a circular proposition because, linearly, time would not be able to pass. Deleuze tells us that if the present moment had to wait until the next present moment for it to pass, it would never pass, because there cannot be two present moments at the same time, and as such, there would never be a future or past. This demonstrates why "[the present] cannot wait, the moment must be simultaneously present and past, present and yet to come, in order for it to pass. The present moment must coexist with itself as past and yet to come" (Ibid.). On some level, the present must be present, past,

and future for the passage of time to make sense, and the only way the present can be present, past, and future, is for time to be circular. This is because when time is taken as circular, each current moment in time has already been, and will be again.

Importantly, Deleuze wants us to see this circular motion as a repetition that repeats difference. Yes, time repeats as a circle, but that circle itself changes with each repetition (Ibid., pp. 48-49).

3.4 Eternal Return: As Practical Mode of Thought and Selective Being

Before Nietzsche's idea of the eternal return ever became cosmological, it was merely a practical and selective mode of thought (Nietzsche 2001, p. 194). Under the first selection, Nietzsche is asking us to live as if our lives will be repeated in perpetuity (Klossowski 1997, p. 60). When submitted to this selection, the actions that we select are active and affirmative, while all the timid half-measures are selected against and eliminated. Here, Deleuze draws a parallel to Kant's categorical imperative but reframes the maxim in a Nietzschean manner: "… *whatever you will, will it in such a way that you also will its eternal return*" (Deleuze 1983, p. 68). In other words, before doing something, ask yourself if you would do it over and over again for eternity. The only actions that pass this selection are actions in their full force, while things you would only do once or twice are canceled. If you are going to do something, *do it*! "Laziness, stupidity, baseness, cowardice, or spitefulness that would will its own eternal return would no longer be the same laziness, stupidity, etc." (Ibid., p. 69). Base human impulses become less base when approached with this affirmative vigor. The lazy man becomes less lazy when he commits to his laziness.

However, the fully committed lazy man is still lazy at his core. As such, the first cycle of selection, while driving his reactive forces to their fullest potential, is not enough to eradicate them from his will to power. "But reactive forces which go to the limit of what they can do in their own way, and which find a powerful motor in the nihilistic will, resist the first selection. Far from falling outside the eternal return they enter into it and seem to return with it" (Ibid.). What we need is yet another, second selective cycle of the eternal return.

For Deleuze, it is this second selection which destroys the reactive will to power, the reactive force it generates, and the nihilism it constitutes. As stated above, in this second selection, the reactive will to power separates itself from reactive forces entirely, thus destroying the negating element within it. "Only the eternal return can complete nihilism because *it makes negation a negation of reactive forces themselves*" (Ibid., p. 70). And this is what Deleuze means when he says that the eternal return is a selective being that overcomes nihilism: the first selection drives reactive forces to their fullest extent (passive nihilism), and the second selection drives the reactive will to separate from all reactive forces because the reactive will has nothing left to separate from other than

itself (transmutation). The will to power *becomes* active via the *being* of eternal return's double selection. For example, in the first selection, the lazy man turns his timid laziness into full-fledged laziness as he enters into passive nihilism. But then, in the second selection, his inner will to power continues its enterprise of laziness to the extent that it refuses even to generate the forces that make him lazy. He becomes too lazy to continue being lazy, and at this moment, his laziness transmutates, or turns into something else. It turns into action. His negation becomes so extreme that it negates itself into affirmation.

IV. THE PROBLEM OF NIHILISM, A SCHOLARLY DISCUSSION

We have now an understanding of the major concepts surrounding the scholarly debate at hand. Primarily, we are exploring whether or not Deleuze's interpretation above provides a real path to overcoming nihilism.

4.1 Judith Norman on Deleuze's Logic of Difference

Judith Norman tackles the problem of what I have labeled above as logical nihilism. This is an appropriate first move, for it is a necessary condition for Deleuze's Nietzsche to overcome nihilism. Norman discusses Heidegger's claim that Nietzsche reinstates negation at the very point he wishes to overcome it. As outlined above, Heidegger argues that Nietzsche contradicts himself by being opposed to the oppositionality of Plato and Hegel, which seems to entail an inherent logical inconsistency.

However, Norman points out that Deleuze solves this problem of logical nihilism by articulating that Nietzsche does not stand in opposition to Platonism or Hegelianism; but rather, in *difference from* them. In the relation of two parties, she asks us to, "…imagine a case where one side experiences opposition—and the other side experiences not opposition, but—*difference*. This model can be used to describe a situation in which a relation of enmity is perceived by only one of two related groups" (Norman 2000, p. 195). A philosophy like Nietzsche's that aspires to be void of defining negation must use this logic of difference as distinct from a Platonic or Hegelian logic of opposition. As Deleuze puts it, "Negation is opposed to affirmation but affirmation differs from negation. We cannot think of affirmation as 'being opposed' to negation: this would be to place the negation within it" (Ibid.). Simply put, the philosophy of Nietzsche is not opposed to that of Plato or Hegel; instead, it is a *different* philosophy. As such, any negative element is "a second and derivative product of [its] existence" (Deleuze 1983, p. 10).

4.2 Ashley Woodward's Response to the Logic of Difference

Ashley Woodward responds to Norman by claiming that while this logic of difference may be a necessary condition for overcoming nihilism, it is not a sufficient one. As he points out, the logic of difference merely *permits* affirming interpretations of life to compete for dominance, but it in no way guarantees that they will (Woodward 2013, p. 122). We need something more: the transmutation of the reactive will to power and eternal recurrence as selective being.

However, according to Peter Hallward, whom Woodward cites, Deleuze's metaphysical interpretation of the eternal return as selective being fails to overcome nihilism. He argues that Deleuze's ideas are God-like abstractions that devalue and escape from the world of lived experience. Woodward tells us that "[f]irst, Deleuze's speculative metaphysics…stands in a position radically distanced from life as it is experienced. As such, it constitutes a world of values beyond this world, thereby reinstating [negative] nihilism" (Ibid.). This is because, they argue, Deleuze seems to nihilistically put all importance in an impersonal and speculative world of eternal return at the expense of the real world and the people who occupy it. According to Woodward, "…Deleuze's eternal return places all value on creative processes themselves, while created things [people] are entirely devalued. Thus, in Deleuze's philosophy value is separated from this actual, created world—value is attached solely to the virtual world of…being as creative processes" (Ibid., p. 136). Here, Hallward and Woodward are arguing that Deleuze places greater, 'extra'-worldly value in his selective process, which in turn devalues the things of our world which the process creates.

Woodward's second problem is that in reality, Nietzsche's overcoming of nihilism involves an embrace of uncertainty and suffering, while, as he sees it, Deleuze's interpretation of eternal return creates certain, deterministic destruction of the reactive will to power. As such, he claims that Deleuze creates a comfortable haven where all negation necessarily transforms into affirmation, which seems explicitly anti-Nietzschean. Woodward points out that, "…while Deleuze's philosophy overturns those categories which have traditionally provided a sense of security, he gives us new categories, both of metaphysics and ethics of which we may (supposedly) be certain" (Ibid., p. 138). In other words, Deleuze's metaphysical interpretation claims to provide a guaranteed escape of nihilism, but this creates a nihilistic sense of security that in reality constitutes the very fleeing that he set out to overcome.

V. MY RESPONSE

If we accept Woodward's representation of Deleuze's analysis, we are forced to conclude that Deleuze fails to interpret a Nietzschean path to overcome nihilism. However, I will now argue that an unsafe, this-world reading of Deleuze's interpretation is the more tenable one.

5.1 Practical Abstract Thought and Metaphysics *Within* our World

There is no doubt that Deleuze uses abstract language in his interpretation of Nietzsche, language that in many cases, Nietzsche himself never used. However, is it possible for abstract language to be of practical import to this world? What about metaphysics? I suggest that both can be, and often are.

So, what does Nietzsche himself have to say about this? Heidegger points out

that Nietzsche says, "For many, abstract thinking is toil; for me, on good days, it is feast and frenzy" (Heidegger 1991, p. 5). This indicates that Nietzsche not only does not have a problem with abstract thought, he actually embraces it. He does not see anything necessarily nihilistic about abstract thought, if anything, he sees it as an exciting element of life. This is because abstract language can be, and often is, used to describe this, our practical and real world in illuminating ways.

The same goes for metaphysics. On pages 137-138 of Woodward's article, he takes a long expert out of an aphorism in *The Gay Science* entitled "What is Romanticism?" to demonstrate why logic and metaphysics are both examples of security-seeking and other-worldly negative nihilism. In that aphorism, Nietzsche says, "…for logic soothes, gives confidence—in short, a certain warm, fear-repelling narrowness and confinement to optimistic horizons" (Nietzsche 2001, p. 235). About this, Woodward states, "…Nietzsche sees metaphysics, logic, and much of philosophy…as driven by the desire for the feeling of security provided by conceptual certainty" (Woodward 2013, p. 138). Importantly, Woodward implicates metaphysics in Nietzsche's excerpt, even though Nietzsche himself never mentions metaphysics even once in the entire aphorism. He *only* implicates logic as serving the role of a pacifier. So, we have no good reason to classify metaphysics as necessarily nihilistic.

5.2 Is Deleuze's Interpretation 'Extra'-Worldly, Escapist, or Safe?

Deleuze's interpretation is not 'extra'-worldly because Deleuze himself orients his entire project around this, our world, and the contents therein. While there are numerous examples throughout the book, it is seen clearly in his discussion of what he calls 'sense' and 'body.' When discussing 'sense,' he declares that "[w]e will never find the sense of something (of a human, a biological or even physical phenomenon) if we do not know the force which appropriates the thing" (Deleuze 1983, p. 3). Humanity, biology, physical phenomena: these are all facets of this world *par excellence*. We see more of the same when he discusses the 'body:' "Every relationship of forces constitutes a body—whether it is chemical, biological, social or political" (Ibid., p. 40). Here he has added the important facets of chemistry, society, and polity: three more critical elements of this world. Deleuze is indubitably analyzing *this* world, and any suggestion to the contrary is a misreading of the text.

Deleuze's interpretation is not escapist because it never uses deductive, inductive, abductive, or probabilistic methods to establish conceptual certainty; and it never sets up any 'extra'-worldly realm. Moreover, he emphasizes the importance of chance over necessity, which I explore further here.

Deleuze's interpretation is not safe, because it hinges upon the embrace of chance, which is explicitly antithetical to the safety of certainty. In his chapter, "The Dice Throw," Deleuze explains that "[t]he dice which are thrown once are

the affirmation of *chance*" (Ibid., p. 26). Further down the same page, he says, "[t]o know how to affirm chance is to know how to play." Indeed, this entire chapter is dedicated to a theme that reappears throughout the book: that overcoming nihilism requires an embrace of chance over necessity because embrace of chance is an embrace of life—life that is inherently risky and dangerous. This also applies to the concept of the eternal return as selective being, because Deleuze makes it clear that the eternal return embodies the qualities of chance over necessity—*necessity belongs to chance* (Ibid., p. 189). As Deleuze says, "Destiny in the eternal return is also the 'welcoming' of chance" (Ibid., p. 28). Perhaps Woodward is concerned with statements that Deleuze makes like this: "Only that which affirms or is affirmed returns" (Ibid., p. 189). Maybe he reads this as Deleuze painting a picture of a mechanism that necessarily produces affirmation, which would take the chance out of it. But here, Deleuze is merely saying that the fundamental drive of the will to power is to destroy itself in a transmutation, but that process is never guaranteed to happen in someone's lifetime, and even if it does, that process will in no way be safe or easy.

5.3 The Being of Creative Eternal Return versus the Being of Created Bodies, and Lived-Experience Import

Lastly, I will address the more specific concerns mounted by Woodward and Hallward: that Deleuze places greater importance on the creative process of eternal return, thus devaluing the bodies created by that process; and, that Deleuze's metaphysics is radically different from life as experienced.

To this first objection, I respond that Hallward and Woodward are creating a spiritual world out of Deleuze's interpretation where there is none. As elucidated throughout this article, Deleuze's transmutation of the will to power, and the eternal return as double selection, both exist *within this world and the created bodies which inhabit it*. Therefore, Deleuze is indeed placing a higher value in the eternal return as a creative process and selective being, *but that process of creation exists within us—it is us* (Ibid., p. 197). Therefore, placing value in the creative process is tantamount to placing equal value in the created bodies that interact with that process. The only thing Deleuze devalues is the reactive will to power which itself devalues life.

I believe one passage in particular drives this message home. When discussing the nature of the second selection as being, Deleuze tells us that:

> It is no longer a question of the simple thought of the eternal return eliminating from willing everything that falls outside this thought but rather, of the eternal return making something come into being which cannot do so without changing nature. It is no longer a question of selective thought but of selective being; for eternal return is being and being is selection (Ibid., p. 71).

This excerpt hammers down the relationship between the being of created bodies and the being of creative eternal return. I believe that Hallward and Woodward are focusing on the phrase, "for eternal return is being," without placing it in its proper context. Notice that Deleuze also says, "but rather, of the eternal return making something come into being which cannot do so without changing nature…". When put into context, this passage is telling us that *both* selective eternal return, *and* the transmuted body, have being—and this is crucial. Deleuze is not placing the being of selective eternal return above that of the created body, but rather, on an *equally lifted footing*. Only the known being of the reactive will to power which devalues life is devalued before it transmutes into the existing being of affirmation (Ibid., p. 173). Furthermore, what gives the selective eternal return its being is its ability to create being within a body. Therefore, the being of the created body and the being of the selective eternal return are *interdependent*, and on the same plane of existence. In other words, no one being is placed above another or separated into two distinct worlds. Rather, they make up an interrelated distinction on the same plane of existence and within the same world. There is nothing 'extra'-worldly about it.

Lastly, I contend that Deleuze's analysis is squarely rooted in, and relevant to, life as we experience it. Recall the examples of love as an active force and sexual shame as a reactive force. Also recall the lazy man whose will transmutates, turning him into a man of action. Or, take a drug addict, or alcoholic, who destroys her reactive will to power of addiction, transforming it into an active will to power of strength over that of which she was formerly under control. These are just a few examples of the many real-life, practical ways in which Deleuze's representation is rooted in life as we experience it.

VI. CONCLUSION

Thus concludes my examination of whether or not Deleuze successfully interprets Nietzsche in a way that provides a path to overcoming nihilism. I argued that Deleuze does succeed in his endeavor, because he never engages in negative nihilism, despite the claims of some scholars. This is because his metaphysics and abstractions pertain to this, our world. His analysis is not safe or escapist, because it embraces chance over necessity and destruction over preservation. It never sets up an 'extra'-worldly preference of creative selection over created bodies, for the creative process and its created fruits are interdependent—a process that only devalues reactive, life-denying bodies prior to transmutation. Lastly, I demonstrated that his interpretation is indeed firmly planted in this life as we experience it because it can be applied to countless real-life phenomena.

BIBLIOGRAPHY

Deleuze, Gilles. (1983) *Nietzsche and Philosophy* (London: The Athlone Press)

Heidegger, Martin. (1991) *Nietzsche Volume I: The Will to Power as Art* (New York: HarperCollins)

Heidegger, Martin. (1984) *Nietzsche Volume II: The Eternal Recurrence of the Same* (New York: HarperCollins)

Klossowski, Pierre. (1997) *Nietzsche and the Vicious Circle* (London: The Athlone Press)

Norman, Judith. (2000) "Nietzsche contra contra: Difference and opposition," Continental Philosophy Review 33, pp. 189-206

Nietzsche, Friedrich. (2001) *The Gay Science* (Cambridge: Cambridge University Press)

Nietzsche, Friedrich. (2019) *The Will to Power* (San Bernardino: CreateSpace Independent Publishing Platform)

Nietzsche, Friedrich. (2005) *Thus Spoke Zarathustra* (New York: Barnes & Noble Books)

Nietzsche, Friedrich. (2003) *Twilight of the Idols and The Anti-Christ* (London: Penguin Books)

Woodward, Ashley. (2013) "Deleuze, Nietzsche, and the overcoming of nihilism," Continental Philosophy Review 46, pp. 115-147

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1 The operative terms here being 'unquestioned' and 'intrinsically worthy.' It is not that the Judeo-Christian values are necessarily life-denying values. However, if we simply assume the *a priori* worth of these values, we only do so because of its importance in higher-world belief systems. For a value to be confirmed as one that is life-affirming, we must evaluate it squarely within this world. This is why Nietzsche saw himself as doing what Socrates did even better than Socrates himself. Nietzsche wants us to actually question all values from a worldly framework, and not just assume their worthiness based on the existence of a higher world (as Plato and St. Paul did).

2 This is why Nietzsche famously drank only water and milk. Dugs and alcohol are nihilistic in that they paint the world as something for which to be numb. Something that requires a panacea for the pain.

3 At this point, one might object by claiming that my article is reliant upon logic at its core, even though it classifies logically rooted thought as nihilistic. This is undeniable. But indeed, this is the nature of all scholasticism. If my article were not primarily driven by logic, the editors would not publish it. Interestingly, Nietzsche's thesis out of university (*The Birth of Tragedy*) was frowned upon by those to whom he submitted it because it was not based on logic. It is also well known that this was a large contributing factor to his leaving academia shortly after entering it.

4 To be clear, life-affirming thought can entail logic; but logic cannot be at the core of that thought. It cannot be the main driving mechanism. Moreover, this is not to say that all thoughts driven by logic are bad. Rather, Nietzshce is merely asking us to understand them for what they are.

5 "The wheel of the world swings through the same phases again and again." -Rudyard Kipling

6 He devalues nihilism as our *ratio cognoscendi*, but he values affirmation as our *ratio essendi* (Deleuze 1983, p.173).

Wellbeing for All: Enjoyment, Self-Actualization, and the Good Life

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ABSTRACT

In the contemporary philosophical literature, there are three major families of theories of wellbeing: mental state theories, desire-fulfillment theories, and objective list theories. Mental state theories claim that only one's mental states (e.g., pleasure) count for how well-off one is. Desire-fulfillment theories claim that what counts is fulfilling one's desires (or desires of a certain kind). Objective list theories posit multiple goods that count for one's wellbeing (e.g., knowledge, virtue, achievement).

Objective list theories have strengths over both mental state theories and desire-fulfillment theories. Crucially, they explain why we should ultimately desire certain things and not others, while acknowledging that there are, plausibly, goods beyond mere mental states. But unfortunately, these theories tend to exclude or overlook cognitively less able individuals, such as nonhuman animals, human infants and children, and humans with intellectual disabilities. Moreover, such theories risk being disconnected from individuals' real lives. My project is to develop an objective list theory that adequately answers to this common deficiency.

In brief, I propose an objective list theory with two basic goods: enjoyment and self-actualization. By my usage, enjoyment encompasses all positive mental states, while self-actualization is the endgame of an individual achieving some norm of functioning for the kind of being they are. On my view, an individual's kind of being (and hence norm of functioning) is a function of their integrated capabilities, not their species norm. Enjoyment and self-actualization are complementary but distinct; one's combined achievement of both determines one's wellbeing. On this theory, cognitively less able subjects can achieve high levels of wellbeing insofar as they can have enjoyment and match their own individuated model of self-actualization.

I. INTRODUCTION

Philosophical theories of wellbeing have largely focused on the wellbeing of typical human adults over that of nonhuman animals, human infants and children, and intellectually disabled humans. While versions of two of the established theory types—mental state theories and desire/value-fulfillment theories—are friendly to the cognitively less able, objective list theories generally exclude or overlook these individuals. In this paper, I will argue against mental state and desire/value-fulfillment theories and in favor of some kind of objective list theory. My project will be to flesh out an objective list theory that adequately answers to these theories' usual deficiencies, including their prioritization of cognitive sophistication and human norms.

In brief, I propose an objective list theory with exactly two basic goods: enjoyment and self-actualization. By my usage, enjoyment encompasses all positive mental

states, while self-actualization is the endgame of an individual achieving some norm of functioning for the kind of being they are. On my view, an individual's kind of being (and hence norm of functioning) is a function of their integrated capabilities, not their species norm. Enjoyment and self-actualization are complementary but distinct; one's combined achievement of both determines one's wellbeing. On this theory, cognitively less able subjects can achieve high levels of wellbeing insofar as they can have enjoyment and match their own individuated model of self-actualization.

II. MENTAL STATE THEORIES

The most basic formulation of a mental state theory is classical hedonism. On this view, pleasure alone is an intrinsic good. Likewise, pain alone is an intrinsic evil. By this account, if any unpleasant experience contributes positively to wellbeing, it only does so because it leads to some counterweighing pleasure. One of classical hedonism's purported advantages is that it accounts for why any given experience is good or bad with a common explanatory measure: its overall level of pleasure. Moreover, it clearly accommodates nonhuman animals, infants, and the intellectually disabled: insofar as these subjects can have positive experiences of some variety—whether it be flying over skyscrapers, swimming in the ocean depths, or playing games with others—they can achieve high levels of wellbeing.

But this very variety of positive experiences makes classical hedonism doubtful. There are many different positive affective states, each derived from varying positive activities: the cathartic emotions a masterful tragedy engenders seem to have little in common with the sensual experience of eating a hot bowl of noodle soup. As such, a popular fix to classical hedonism is to broadly define pleasure (or happiness, enjoyment, whatever term you prefer) as any mental state desired just for the way it feels.[1] The resulting view, preference hedonism, helps account for the variety of positive affects.

But as a comprehensive account of wellbeing, preference hedonism is also doubtful. The main challenge it faces is the strong intuition that facts about the world beyond our mental states are important, in some way, to our wellbeing. Indeed, as Nagel notes, including external facts in wellbeing assessment helps account for the deeply intuitive view that death is an evil. The wellbeing of any person ranges beyond what they are experiencing at any given time; their interests may extend beyond their own spatiotemporal bounds. If life is a good (as many people believe), then I would suffer from its deprivation, even though I would not be around to experience that suffering in any way. This is because my total extended interests include continuing to live. Likewise, I have interests in securing a legacy, even if I do not experience benefits from it, and in being

1 David Degrazia, *Taking Animals Seriously: Mental Life and Moral Status* (Cambridge: Cambridge University Press, 1996), 214.

well-informed about the actual circumstances of my life, even if that information will make no difference or even a negative difference to my mental state.[2] This suggests that more is at stake in our wellbeing than our mental states.

III. DESIRE-FULFILLMENT THEORIES

Basic desire-fulfillment theory—the view that one's life goes well insofar as one's desires are fulfilled—manages to address some of the mental state theories' weaknesses. On this view, external facts matter for my wellbeing insofar as I have desires about them; death is a harm to me because I desire to continue to live. This theory includes cognitively less able subjects, for virtually any sentient being can have basic desires. But this view is far from perfect. It faces the obvious difficulty of accounting for seemingly defective desires, such as compulsive gambling. And on this view, suicide is good so long as one desires to die. Thus, as with classical hedonism, some qualifications are in order.

Enter the rational or informed-desire fulfillment theories, on which the desires worth fulfilling are those which one would have if one were ideally rational or informed concerning them.[3] These modified views help explain away the problem of compulsions: no fully rational agent would desire to gamble away their tuition savings, and no agent who is informed about the overall goods of life would want to die. Here, however, a deeper explanatory question emerges: on what basis should an ideally rational or informed agent sanction one desire and not another? Why are compulsions towards gambling and suicide defective desires, and goals towards financial stability and continued life well-founded desires? What makes certain states of affairs—mental, physical, or otherwise—desirable?

IV. VALUE-FULFILLMENT THEORIES

Valerie Tiberius's value-fulfillment theory suggests one answer: one should pursue a given desire insofar as it fits into one's overall emotional-motivational schema for a value-full life. Tiberius follows the rational/informed desire-fulfillment theorists in grounding wellbeing in an agent's "ideal psychology," but chooses "values" as the key psychological state, not idealized desires. By Tiberius's account, "values are what we value, and to value is to have a coordinated pattern of emotions and motivations toward something that you take to be relevant to how your life goes."[4] Values, then, are motivational objects that structure one's general, temporally extended life-planning and experience. One's life goes well to the extent that one gets total value-fulfillment out of it; the best life is one maximally rich with realized values.[5]

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2 Thomas Nagel, "Death," Noûs 4, no. 1 (1970): 77-78.
3 Degrazia, *Taking Animals Seriously,* 215-216.
4 Valerie Tiberius, "How Theories of Well-Being Can Help Us Help." *Journal of Practical Ethics* 2, no. 2 (2014): 6.
5 Ibid. 8.

Value-fulfillment theory gives us a standard for adjudicating between motivations that the desire-fulfillment theories lacked. One can measure motivations against each other by attending to how they would contribute to achieving a value-full life overall. If one values financial stability, one should resist gambling, since the latter will work against fulfilling the former more central, life-structuring value. Likewise, a desire for suicide is defective since it obviously cancels out any chance of a future life rich with fulfilled values.

Unlike basic desire-fulfillment theories, however, Tiberius's account excludes atypical humans, infants, or nonhuman animals. When one considers values, one is engaging in an intrinsically self-conscious and future-oriented activity requiring cognitive capabilities surpassing these subjects. Tiberius's anthropocentric orientation matches her goal of designing a theory of wellbeing that provides a guide for us to "help somebody (or help ourselves), to make their (or our) lives better."[6] But it falls short of this goal's natural extension: how do we help improve the lives of sentient beings unlike ourselves?

To answer this question, the value-fulfillment theorist can adjust Tiberius's proposal, lowering the cognitive threshold of valuing. On this alternative formulation—what I will call the interspecific value-fulfillment theory—a subject's values may be broadly construed as their general, characteristic pro-attitudes, irrespective of these pro-attitudes' roles in self-conscious, deliberative life-planning. While she lacks sophisticated evaluative capacities, my family dog, Lucy, has values in this sense: she has a coordinated emotional-motivational pattern favoring olfactory pleasures, play, and long naps in the sun. The interspecific value-fulfillment theory thus equips us to consider the wellbeing of a broad range of creatures.

That said, the value-fulfillment theory faces problems even in its interspecific form. For one, it fails to account for the prudential status of desires that don't fit into any value schema. Even when conceived as general, characteristic pro-attitudes, values leave out one-off positive affects and pro-attitudes. For instance, roughly two years ago, I spontaneously went to an escape room with friends. I had not had much interest in escape rooms prior to this, nor did I after; I have no general attraction to immersive thrills or team-based puzzle-solving. Nonetheless, I appreciated the experience immensely; I think it added to my total wellbeing, even though it had nothing to do with my values.

To this, the value-fulfillment theorist might say that, while values matter the most, fulfilling any desire counts for wellbeing. Fulfilling crude or occasional desires is generally prudentially good; doing so is only bad when these desires interfere

6 Ibid. 10.

with values.[7] But the case of benign compulsions challenges the plausibility of this patch job. While on the value-fulfillment theory, gambling harms the gambler by frustrating their value of financial security (provided this is indeed one of their values), other compulsions may not be so disruptive. For instance, suppose I occasionally have a compulsive urge to wash my ears with toothpaste. Assigning positive value to all desire-fulfillment means washing my ears with toothpaste would improve my wellbeing, which seems implausible.

The value-fulfillment theory's implications get even weirder if one tries to compare lives. Suppose I do, in fact, value washing my ears with toothpaste. The urge I have to perform this task is no longer an occasional compulsion—it has become a fundamental drive. I decide a value-full life for me will be one in which I wash my ears as efficaciously and elegantly as possible. Now suppose that in another possible world (perhaps closer to ours), I don't have this compulsion, but instead I invest the same energies into creative writing or scholarly research. I get the same returns in any of these possible worlds; each primary valued activity leads to an equally value-full life.[8] It seems crystal-clear to me that, even if this is the case, a life rich with highly valued ear-washing would be a far cry from a life of high wellbeing.

Finally, the value-fulfillment theory incentivizes us to pursue values that are well within the bounds of our capabilities. While this seems prima facie plausible, it implies that we should take measures to lower our ambition without end. Thus, if I have hopelessly futile values, I might be better off if I undergo a "motivational lobotomy" from which I emerge with more modest, easily fulfillable values (perhaps, for instance, those of Lucy). Holding that I am better off post-lobotomy seems profoundly implausible.

These cases, I think, pump the intuition that our motivational states are grounded in reasons preceding our preferences; we desire or value something in virtue of that thing's qualities, not merely due to how it fits in our general emotional-motivational schema. Indeed, appreciating the qualities of our objects of value/desire is itself what gives our emotional-motivational patterns some particular shape.[9] Lucy values treats out of an appreciation of rich taste experiences, and it is because she appreciates these experiences that they are part of a value-full life for her, not the other way around. By relying on our motivational states, not our reasons behind them, the desire/value-fulfillment theories fail to provide robust criteria for adjudicating between motivations. The question remains: what (if anything) makes certain things intrinsically valuable?

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7 Alternatively, the value-fulfillment theorist might suggest that the escape room experience was good because I enjoyed it, and I value enjoyment. This reply is not convincing, since it is only contingently true that I value enjoyment. Even in the possible world in which I do not value enjoyment, it seems plausible that this and other enjoyable experiences improve my wellbeing.

8 A value-fulfillment theorist may object that it is simply not possible for valued compulsions to lead to a value-full life in the same way as these latter vocations. But I take it that this is only a contingent impossibility. For the sake of argument, we can imagine a possible world that fits my description.

9 DeGrazia, *Taking Animals Seriously*, 219-220.

V. OBJECTIVE LIST THEORIES

Objectivist theories attempt to answer this question. Unlike subjectivist theories (i.e., those explaining wellbeing in terms of pro-attitudes, like desire/value-fulfillment theories), objectivist theories hold that if an activity, end, or experience measures up against certain independent evaluative criteria, then it is objectively good, whether or not one has a pro-attitude towards it. By some accounts, classical hedonism is an objective theory,[10] provided pleasures are good in themselves and not merely in virtue of being desired. But given mental state theories' aforementioned problems, pluralistic objectivist theories—that is, objective list theories—are more promising.

Using Hurka's objective list theory, which lists pleasure, knowledge, achievement, and virtue as objective goods,[11] we can account for the intuitions that value-fulfillment theory could not.[12] The positive affect I experienced from the escape room was not good merely because I desired it in the moment; rather, it was good because enjoyment is an objective good. Fulfilling benign compulsions (like washing one's ears with toothpaste) does not improve one's wellbeing, because it does not achieve any objective goods. Moreover, structuring one's life around seemingly wrongheaded motivations (such as, again, devoting one's life to toothpaste ear-washing) is bad insofar as it fails against the objective prudential criteria of achievement, knowledge, and virtue.[13] As for the case of motivational lobotomy, I would be worse off post-lobotomy because I would lose some of the goods—both actual and potential—in my life prior to the surgery.

While they have explanatory advantages over subjectivist theories, standard objective list theories are cognitively demanding. Hurka's basic goods of knowledge, achievement, and virtue require sophisticated epistemic, future-oriented, and normative reasoning that nonhuman animals, human infants and children, and intellectually disabled humans lack, putting these goods—and any strong chance at a good life—out of reach. An objective list theorist could merely bite the bullet on this implication—or even deny it is a bullet at all. Indeed, Hurka outright says the goods on his list explain why we (i.e., typical human adults) can often be more fortunate than nonhuman animals.[14] This view surely extends to cognitively less able humans as well; by lacking access to knowledge, achievement, and (on some level) virtue, these humans are worse off.

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10 Ibid., 219.

11 Thomas Hurka, *The Best Things in Life: A Guide to What Really Matters* (Oxford: Oxford University Press, 2011), 163.

12 While I am working with Hurka's theory for the sake of specificity, any typical objective list theory could likely accommodate these cases in a similar fashion.

13 To expand: Per achievement, devoting one's attention to toothpaste ear-washing can probably only go so far in promising goals of sufficient challenge and complexity to be satisfying. Yet even if we allow that toothpaste ear-washing can promise some significant achievement, its (arguably) low potential for knowledge development provides further reason to think it is not worthwhile and may even be worth actively avoiding. And if this activity does not involve loving the good (which seems plausible), it may fail on the count of virtue as well.

14 Hurka, *The Best Things in Life*, 78.

While biting the bullet may be a legitimate option, I think we have strong reasons to reject this move. As DeGrazia notes, the dialectical burden lies with the objective list theorist to account for why the characteristically human goods on their list matter even for nonhuman animals. They could argue these goods are valuable in proportion to their complexity, but this requires strong rhetorical work on their part. Moreover, such an account must answer to the challenge of species bias: it is convenient to think the goods common to typical human adults have general importance.[15]

Even if one denies these considerations and sticks to an anthropocentric picture of wellbeing, the place of cognitively less able humans should give one pause. It seems implausible to claim that human infants and children lead lives devoid of much significant good;[16] early life is not some regrettable state we would be better off without, but an important and valuable part of any human's life. As for the intellectually disabled, many people may share the intuition that these humans are simply worse off due to their disabilities. Yet empirical evidence shows the self-reported wellbeing of disabled and nondisabled people is roughly equal on average.[17]

These cases point towards a general difficulty: objective list theories risk being disconnected from an individual's first-personal sense of wellbeing. While cognitive limits put this disconnect in stark relief, the same sort of alienation is latent in the predicaments of typical human adults as well. If I were indifferent to achievement, knowledge, and all the rest, what reason could I have to seek them out? What makes the supposed objective goods good *for me*? Tiberius recognizes this disadvantage,[18] and her answer is the value-fulfillment theory. But as we have seen, that theory is rife with problems that shine a favorable light on objectivism. Thus, what we need is an objective list theory that appreciates the variety of sentient beings' capabilities, motivations, and norms.

VI. TOWARDS AN INTERSPECIFIC OBJECTIVE LIST THEORY

One possible route is to adopt variabilism. On this view, there can be different basic goods for different welfare subjects, perhaps according to cognitive capacity or species-membership. However, as Lin argues, some key motivations for variabilism are ill-founded.[19] Firstly, it is mistaken to assume that, if an individual cannot access some kind, that kind cannot be basically good for them. While Lucy cannot read, in some possible world in which she *could* read, reading might be

15 DeGrazia, *Taking Animals Seriously*, 254.
16 Lin, "Welfare Invariabilism," *Ethics* 128, no. 2 (2018): 320-345.
17 Matthew Baker and Robert A. Wilson, "Well-Being, Disability, and Choosing Children," *Mind* Vol 128, Issue 510 (2019): 8-10. Granted, this data covers all sorts of disabilities, not just intellectual disabilities, and concerns subjective wellbeing, not objective wellbeing. But this evidence should at least give rise to some doubt over the disability-free intuition. And as the authors urge (19-20), we would do well to have more intellectual humility when appraising the lived experiences of others, particularly when it comes to marginalized groups like the disabled.
18 Tiberius, "How Theories of Wellbeing Can Help Us Help," 4.
19 Lin, "Welfare Invariabilism," 324-332.

good for her. And it is also mistaken to think our differing natures changes what is *basically* good for each of us; if Lucy's dog-nature changed so that she could read, reading could become good for her.

Moreover, I add, the notion of an essential species nature is hopelessly opaque; members of the same species share only a genetic heritage, no intrinsic telos, and thus assigning different basic goods to different subjects per their species-membership is arbitrary. Additionally (as Lin notes), invariabilism has the virtue of simplicity: it offers a single explanation for basic goodness. These considerations suggest that positing different basic goods for different creatures is not a promising strategy. Instead, I suggest, we should posit a single list of basic goods that allows for variability between *derivative* goods. The list I propose has two items: enjoyment and self-actualization.

I use enjoyment to mean positive affect broadly construed; all positive mental states necessarily involve enjoyment. Subjectivists may try to claim enjoyment is merely the experiential result of desire-fulfillment, which explains its goodness. But this move is ill-founded. It may be true that one necessarily has pro-attitudes towards experiences that one enjoys, but subjectivists mistakenly flip the causal chain: enjoyment causes pro-attitudes, not the other way around. Moreover (as Kahane notes), grounding enjoyment's value solely in desire-fulfillment unintuitively implies I could enjoy some intense pain from which I normally suffer (all else held equal), provided I desire it.

One might claim that what is valuable is the positive affect and pro-attitude combined, not one or the other on its own (Kahane proposes a roughly analogous view about suffering).[20] Or one could claim that the positive affect alone is intrinsically valuable. Either way, the view that enjoyment involves some mental state prior to a pro-attitude seems to be the most intuitive and explanatorily satisfying. This supports an objectivist view of enjoyment: it is good (at least partly) in virtue of how it feels, not only in virtue of being desired.

Setting enjoyment aside, we come to self-actualization. On my usage of the term, self-actualization refers to the fulfillment of some individual norm of functioning that involves a kind of integration with the world and with one's individual nature. When a subject self-actualizes, their integrated capabilities are sufficiently exercised, placing them at home in the world and in their own skin. For each individual subject, self-actualization involves functioning appropriately as the kind of being one is. In my conception, one's kind of being is determined by one's integrated capabilities; these capabilities structure a model for one's life as a self-actualized subject.

To clarify what I mean, it will help to consider variations on this theme in other theories. On a Marxist view, for human beings, self-actualization (contrary to

20 Guy Kahane, "Pain, Dislike, and Experience" *Utilitas* 21, no. 3 (2009): 332-335.

alienation) involves exercising one's capabilities to engage in productive labour. Only then can a human being lead a good life, for only then do they function appropriately as a species-being.[21] A similar vein runs through existentialist theories. While these views reject a rigid conception of human nature, they do posit a common human condition under which making authentic choices—self-determined, life-affirming activities and projects—infuses our lives with meaning.[22] More recently, perfectionist theories have posited exercising characteristic human capabilities as constitutive of wellbeing,[23] while Nussbaum presents such capabilities as preconditional for a good life in human society.[24]

All of these views, I think, draw on the common intuition that living a good life somehow involves making choices that gel with one's nature and place in the world. This intuition is articulated in two common threads running through these views: first, acting authentically and appropriately as a being in the world—integrating with the world as the kind of being one is—is key to a good life. Second, acting authentically and appropriately for a human being involves exercising characteristic human capabilities.

These two threads largely intertwine: the good life, so the line goes, involves exercising characteristic human capabilities. But I think we can separate these threads conceptually. The first thread roughly describes what I am calling self-actualization, but self-actualization need not be a uniquely human activity. If we delineate norms of functioning for other creatures, we can begin to model what self-actualization would look like for them. The second thread reveals an anthropocentric temptation to ground self-actualization in some idea of a human species norm. Yet as we have seen, species-membership is a hopelessly arbitrary mark of distinction. To accommodate the intuitions supporting self-actualization, we need to find a way to carve out what self-actualization involves for different subjects without recourse to species membership.

As mentioned above, my proposal is to individualize self-actualization with reference to an individual's integrated capabilities. Roughly speaking, one's integrated capabilities are those that structure the general bounds of one's characteristic actions. These capabilities present some norm of functioning for the kind of being one is. Species-membership, however, is orthogonal to determining this norm of functioning; different members of the same species can have vastly different integrated capabilities. For any given individual, exercising and fulfilling their integrated capabilities—that is, achieving their particular norm of functioning—is constitutive of self-actualization. Since self-actualization is

21 Karl Marx, *Economic and Philosophic Manuscripts of 1844*, trans. Martin Milligan, rev. Dirk J. Struik (Moscow: Progress Publishers, 1959), 31-32, https://www.marxists.org/marx/works/download/pdf/Economic-Philosophic-Manuscripts-1844.pdf.

22 Jean-Paul Sartre, *Existentialism is a Humanism*, trans. Philip Mairet (New York: World Publishing Company, 1956), https://www.marxists.org/reference/archive/sartre/works/exist/sartre.htm

23 Lin, "Welfare Invariabilism," 330.

24 Martha Nussbaum, *Frontiers of Justice* (Cambridge, Massachusetts: Harvard University Press, 2006), 180-182.

necessarily tied to one's fundamental, life-structuring functions, it is plausible to think that it is partly constitutive of a good life. My focus on integrated capabilities thus grounds self-actualization nonarbitrarily (i.e., without recourse to species-membership) and helps explain why self-actualization is plausibly an objective good.

Importantly, while capabilities figure into my account of self-actualization, my view does not commit us to assigning capabilities themselves any intrinsic value. While integrated capabilities structure one's model of self-actualization, having more and more sophisticated capabilities does not necessarily improve one's life. What matters is exercising the integrated capabilities one does have; doing so helps one self-actualize. Thus, typical human adults are not necessarily better off than cognitively less able creatures—they merely must take a more cognitively demanding route to self-actualization. This virtue of cognitive flexibility makes my theory aptly interspecific.

Considering examples will help bring these ideas down to earth. As a typical human adult, my integrated capabilities—which include (among others) self-reflection, normative reasoning, aesthetic judgement, and autonomous action—constitute a certain norm of functioning for the kind of being I am. I exercise integrated intellectual and normative capabilities when I read, think, and write about prudential value. Here, we can see how the items on a standard objective list like Hurka's are derivatively good for me (and for most typical human adults): knowledge, achievement, virtue, et al., are partly constitutive of self-actualization for the kind of being I am.

By contrast, Lucy, as a dog, has a very different set of integrated capabilities, and in turn has a very different norm of functioning. This means self-actualization for her looks very different. Her integrated capabilities include acute olfactory senses and latent hunting instincts. As such, having rich olfactory experiences and simulating hunting by playing with her chew toys partly fulfills her norm of functioning, thus providing a certain model of self-actualization on which smell, and play (and not knowledge and achievement) are, for her, important derivative goods.

Models of self-actualization can differ within a species as well. A larger dog than Lucy may have stronger hunting-instinct integrated capabilities and may thus instead self-actualize through exploring the outdoors and chasing squirrels. Meanwhile, a dog who is disabled with respect to their species' characteristic integrated capabilities—say, a dog lacking an acute sense of smell—will have some distinct model of self-actualization; perhaps reliance on humans for navigation has greater priority for them.

An analogous story is true of human beings. While sophisticated cognitive capabilities tend to figure centrally in self-actualization for typical human adults,

such capabilities have no bearing on self-actualization in humans who lack them, like infants, children, and the intellectually disabled. Instead, the integrated capabilities central in these individuals' lives (perhaps, for instance, affection, play, and routine) structure unique norms of functioning—and hence, unique models of self-actualization—for the kind of being each is.

Models of self-actualization can likewise vary between typical human adults themselves; each of us has a different profile of integrated capabilities. For instance, one individual may have strong integrated numerical reasoning capabilities, while another has strong verbal reasoning capabilities. For each, exercising these strong integrated capabilities (and thereby fitting their individualized norm of functioning) helps them achieve self-actualization. They may thereby self-actualize in different ways: the former may work as a mathematician or physicist, while the latter may work as a journalist or philosopher. This variation between different typical human adults underscores an important insight concerning intellectually disabled people: their different capabilities are part of a spectrum of natural cognitive variation within the human species.

Now, a mental-state theorist may suggest that achieving self-actualization largely involves activities that enhance total enjoyment; thus, the former is merely derivative of the latter. But there are cases in which these two goods do not overlap. My escape room soiree, for instance, involved enjoyment but not self-actualization. Difficult reading is often negatively affective, but its role in exercising integrated intellectual capabilities makes it valuable in achieving the good of self-actualization. Clearly, these two objective goods can overlap in practice but are basically distinct. Moreover, including both on our list accounts for the prudential importance of both mental states and external facts, thus avoiding mental states theories' difficulties.

This view succeeds where other approaches fail. It differs importantly from variabilism by positing variability qua derivative goods, not basic goods; in some possible world where Lucy could read, reading *would* be good for her insofar as she finds it enjoyable and actualizing. Thus, deploying enjoyment and self-actualization helps us articulate an invariabilist and non-species-delineated objectivist theory on which the broader range of sentient beings—not just the cognitively sophisticated—can achieve a high level of wellbeing. This theory also provides the explanatory basis for pro-attitudes that desire/value-fulfillment theories lacked: I have reason to desire or value whatever increases my enjoyment or exercises my integrated capabilities to further my self-actualization.[25] Thus, we now finally have an objective basis for evaluating

25 Desire/value-fulfillment theorists may be tempted to counter that self-actualization merely amounts to rational/informed desire- or value-fulfillment. This point shows why such a counterargument does not work: the desire/value-fulfillment theorists have the causal chain backwards. Appreciating self-actualization causes us to desire it, not the other way around.

and adjudicating between motivations.[26]

To summarize, there are two overlapping but distinct basic goods: enjoyment and self-actualization. Self-actualization looks different for different individuals within and between species since one's individual integrated capabilities individuate one's norm of functioning. Fulfilling one's unique norm of functioning constitutes self-actualization. Since cognitively sophisticated goods (knowledge, achievement, et al.) are only derivatively good for subjects with sophisticated integrated cognitive capabilities, cognitively less able subjects are not necessarily worse off by not having access to them. What matters is that each of us pursues the derivative goods that promote our own enjoyment and self-actualization. These are the things that we should value.

VII. THE INTERSPECIFIC OBJECTIVE LIST THEORY IN PRACTICE

I have outlined my proposal's explanatory strengths and implications for wellbeing across cognitive capabilities. What is left is to consider its practical implications for prudential judgements in our own world. I will offer remarks concerning intra-/interpersonal decision-making, nonhuman animals, human infants and children, intellectually disabled humans, art, and politics.

First off, as Tiberius notes, a workable theory of wellbeing should help us make decisions about what is best for ourselves and for others.[27] The interspecific objective list theory provides criteria for adjudicating between activities, ends, and projects in this way. To weigh some goal's value, we can ask ourselves how it would promote our own enjoyment and/or self-actualization. The best choices are those which promise both goods in high degrees. If our friends are considering important life decisions, we can help them by asking questions to nail down what their integrated capabilities are, and thus, what self-actualization would look like for them. We can also consider what they tend to find enjoyable, with a view to striking a balance or proportional trade-off between the two.

When it comes to domesticated animals, we can appreciate how helping our pets perform their characteristic activities—play, sensual experience, and so on—promotes their wellbeing: it can foster both their enjoyment or, even if they do not enjoy it, their self-actualization. Conversely, wild animals' integrated capabilities are best suited to their particular natural environment. This supplies a strong reason to protect (and avoid interfering in) natural ecosystems: they are

26 Returning to our problem cases underscores this point. The positive affect of my escape room soiree added to my wellbeing because enjoyment, like self-actualization, is a basic objective good. Benign compulsions like washing one's ears with toothpaste do not increase wellbeing despite fulfilling desires, because they generally do not fit into one's general norm of flourishing and, in turn, one's model of self-actualization. By extension, structuring one's life around seemingly wrongheaded motivations—like toothpaste ear-washing—is detrimental to wellbeing, since it depletes the time, energy, and skills one could instead apply towards exercising one's integrated capabilities and, in doing so, achieving self-actualization. And if a motivational lobotomy were to remove my cherished, life-structuring capabilities, it would harmfully put my model of self-actualization out of reach.

27 Tiberius, "How Theories of Wellbeing Can Help Us Help," 3.

wild animals' arenas of self-actualization, and their integrity is thus important to these animals' wellbeing.

As for human infants and children, their parents or guardians can reference the goods of enjoyment and self-actualization when making choices for them. Should you choose to put your child in piano lessons or soccer? What about environment and playtime? Weighing these options involves weighing their relative contribution to a child's enjoyment and self-actualization in both their present and future adult lives.

That brings us to the intellectually disabled. As we have seen, improving the wellbeing of an intellectually disabled human will partly involve supporting them in achieving their own model of self-actualization. The individual-specificity of self-actualization shows that Nussbaum's approach, on which we should foster the same set of species-normative capabilities in both intellectually disabled humans and typical adult humans, is mistaken.[28] We should instead help the former exercise whatever actual capabilities of theirs feed into their self-actualization and enjoyment. The centrality of self-actualization on this picture shows why merely easing an intellectually disabled human's pain is not enough to give them the best life they can have. Rather, our interactions with the intellectually disabled and our policies concerning them should promote their overall wellbeing, with attention to both enjoyment and self-actualization.

Now one challenge for artists is to justify their work on prudential grounds. On hedonism, art is valuable insofar as it promotes pleasure. Aesthetically refined works do not look great relative to mass media entertainment on this picture. If superhero movies provide pleasure in abundance, why bother with live theater or concert music? But if sophisticated aesthetic projects contribute to self-actualization, we can appreciate their unique value. On this account, artmaking and art appreciation exercise integrated aesthetic and creative capabilities, thus helping artists and audiences self-actualize.

As for politics, including self-actualization on our list provides a further dimension for evaluating public policy and socioeconomic systems. Modestly, policymakers can evaluate policies with regards to their effect on promoting citizens' self-actualization (alongside enjoyment). More radically, however, appreciating self-actualization helps us critique our current power structures. For example, I suggest that alienation under capitalism (in the Marxist sense) is not an evil merely because it engenders suffering; rather, it is an evil because it negates self-actualization by tying our lives to wage-labor instead of the fulfillment of our integrated capabilities.[29] On my proposal, alienation is not an evil merely because it engenders suffering; rather, it is an evil because it negates self-actualization. Thus, to promote the wellbeing of all members of our society, we must consider

28 Nussbaum, *Frontiers of Justice*, 186-194.
29 Marx, *Economic and Philosophic Manuscripts of 1844*, 29.

upending the socioeconomic systems that champion alienation to the detriment of self-actualization.

VIII. CONCLUSIONS

In summary, I have reviewed reasons to reject both mental state theories and desire-fulfillment theories. While interspecific value-fulfillment theory is more promising, I have presented case studies to highlight its weaknesses. Ultimately, no subjectivist theory can satisfactorily explain why we should value anything. To their credit, objectivist theories do offer such explanations. However, standard objective list theories have failed to consider the wellbeing of cognitively less able individuals, such as nonhuman animals, human infants and children, and intellectually disabled humans. Moreover, such theories risk being disconnected from individuals' real lives. My proposal, an interspecific objective list theory with the two goods of enjoyment and self-actualization, is an attempt to respond to these difficulties.

Granted, to strengthen the case for my view, more work may be necessary to clarify the character and importance of integrated capabilities. Furthermore, I have argued mainly via process of elimination; a positive argument for the objective good of self-actualization is wanting. That said, I think this theory's success where others fail makes it attractive. Moreover, it accounts for deep intuitions about the importance of feeling at home with ourselves and in the world—that is, flourishing as the kind of being we are are—to leading a life worth living. On a basic explanatory level, then, self-actualization and enjoyment may well be the best things in life.

BIBLIOGRAPHY

Barker, Matthew J. & Wilson, Robert A. Well-Being, Disability, and Choosing Children. Mind Vol. 128, Issue 510 (2019): 305-328.

DeGrazia, David. *Taking Animals Seriously: Mental Life and Moral Status*. Cambridge: Cambridge University Press, 1996.

Hurka, Thomas. *The Best Things in Life: A Guide to What Really Matters.* Oxford: Oxford University Press, 2011.

Kahane, Guy. "Pain, Dislike, and Experience." *Utilitas* 21, no. 3 (2009): 337-336.

Lin, Eden. "Welfare Invariabilism." *Ethics* 128, no. 2 (2018): 320-345.

Marx, Karl. Translated by Milligan, Martin, revised by Struik, Dirk J. *Economic and Philosophic Manuscripts of 1844*. Moscow: Progress Publishers, 1959. https://www.marxists.org/archive/marx/works/download/pdf/

Economic-Philosophic-Manuscripts-1844.pdf

Nagel, Thomas. "Death." *Noûs* 4, no. 1 (1970): 73-80.

Nussbaum, Martha. *Frontiers of Justice*. Cambridge, Massachusetts: Harvard University Press, 2006.

Sartre, Jean-Paul. *Existentialism is a Humanism*. Translated by Mairet, Philip. New York: World Publishing Company, 1956. https://marxists.org/reference/archive/sartre/works/exist/sartre.htm

Tiberius, Valerie. "How Theories of Well-Being Can Help Us Help." *Journal of Practical Ethics* 2, no. 2 (2014): 1-19.

Unfulfilled Protentions in Film: Examining Sufficient Comprehensibility in Film Through the Cognitive Form and Phenomenological Experience of Time[1*]

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ABSTRACT

This paper examines how filmic representations of space and time force us to reevaluate the necessary conditions for a "comprehensible" experience. I defend the position that despite the *prima facie* incompatibility of temporal representation in films like Alain Resnais' *Last Year at Marienbad* and Kant's account of time in the *Critique of Pure Reason*, this incongruity is resolved when paired with Edmund Husserl's notion of the living present, as well as the case of narrative tense and relative temporal construction in fiction. The first two sections of this paper outline the intricacies of this supposed incomprehensibility by first explicating how time is a "pure intuition" according to Kant and how *Last Year at Marienbad* poses a challenge to this notion. Following this, I attempt to reconcile the issue by unifying Kant and Husserl's accounts of time and suggest that their fictional world application requires a looser dependence on temporal cohesion.

I. INTRODUCTION

The potential that films have for presenting space and time in an immersive and visceral manner has yet to be matched by any other art form. For example, we have Jacques Tati's *Playtime*, whose interplay between 2D and 3D space delivers both painting-like still shots and clever visual gags.[1] There are also several filmic examples of time being presented in a manner divorced from how we experience it in the 'outside world.' The traveling scenes in Sebastian Schipper's film *Victoria* are a good example of temporal ellipsis, and Christopher Nolan's film *Memento* presents events in a reverse chronological order.[2] [3] Given the inventiveness of temporal and spatial representation in films, these possibilities may have evaded the imaginings of someone who lived before the inception of motion pictures and editing.

First published in 1781, Immanuel Kant's groundbreaking *Critique of Pure Reason* was written almost 100 years before the first motion picture had been created.[4] Keeping this in mind, Kant's account of space and time—with particular weight attributed to time—as the pure intuitions of the mind have provided an axiom for mental mapping and comprehensibility. This axiom appears to make sense when dealing with real-world experience but arguably lacks applicability when it comes to certain films. Alain Resnais's film *Last Year at Marienbad* poses a particular challenge to Kant's axiom, for it is a film whose spatial and temporal elements evade sufficient mental mapping, yet it remains relatively intelligible to attentive audiences. By strictly adhering to Kant's axioms, this film should not work, and yet it does. I defend the position that despite the *prima facie* incompatibility of *Last Year at Marienbad* and Kant's account of time,

1 *Playtime*. Directed by Jacques Tati. 1967. Les Films de Mon Oncle.
2 *Victoria*. Directed by Sebastian Schipper. 2015. Mongrel Media.
3 *Memento*. Directed by Christopher Nolan. 2000. Alliance Atlantic Motion Picture Distribution.
4 Eadweard Muybridge's motion picture *Sallie Gardner at a Gallop*, also known as *The Horse in Motion* (1878) is often regarded as the first motion picture ever created.

this incongruity is resolved when paired with Edmund Husserl's account of the living present, as well as an account for narrative tense and relative temporal construction in fiction. The first two sections of this paper will be dedicated to outlining the intricacies of this supposed incomprehensibility by first explicating the role of time in formulating experience according to Kant, then revealing how *Last Year at Marienbad* challenges this. Following this, I attempt to reconcile the issue by unifying Kant and Husserl's accounts of time and suggesting that their fictional world application requires a looser dependence on immediate spatial and temporal cohesion.

II. TIME AS A COGNITIVE FRAMEWORK

In Part 1 of the *Critique*, Kant stipulates what he refers to as the metaphysical "pure intuitions" of the mind. "Intuition" in Kantian language is a cognition relating to objects which are given to us via sensation; it describes both the form and the content of any sensible experience.[5] We encounter objects in the world via sensation, giving us an empirical intuition of said objects. A *pure* intuition, however, is transcendental and underlies all sensible encounters, and is thus a pure form of sensibility. It exists in the mind *a priori*, making it nonempirical, and can be detached from the empirical representation of objects.[6]

According to Kant, the two pure intuitions of the mind are space and time. Both of these elements are deemed as the *transcendental conditions* of our cognitive apparatus and precede the encounters that our mind has with every single object of experience.[7] As the transcendental conditions of our mind, space and time are not external facts about the world which our cognitive apparatus perceives, but rather they describe the *form* of the cognitive apparatus itself. In contrast to absolute and relative accounts of space and time, which are taken as objects of experience and external to ourselves, Kant introduced a radical new way of conceptualizing the roles that these two conditions have in our perception and representation of the world. If, for instance, we had tinted glasses stuck to our faces, we would say that the images we perceive through them are affected by the glasses themselves and not the outside objects. Much like the irremovable tinted glasses, time and space are understood by Kant as the *form* of our experience, speaking only to the quality of our own experience rather than saying anything about the objects external to us. In this new light, our experiences are understood as the result of not only impressions from external objects but also the spatial and temporal conditions of our minds filtering these inputs as an active contribution to the experience itself. Time holds a particularly powerful role in our cognitive framework: it is the *a priori* formal condition of all appearances, or empirical intuitions, in general.[8] Whereas space is framed as the pure form of all our outer intuitions, time is the general condition of all appearances *and* the immediate

5 Kant, Immanuel. Critique of Pure Reason. trans. P. Guyer and A. Wood (Cambridge University Press, 1998), p. 172.
6 By representation, Kant simply means a consciously grasped concept or idea (Ibid., 173).
7 Ibid., 174.
8 Ibid., 180.

formal condition of the "inner state," or inner intuitions.

While both transcend empirical experience, space is only concerned with outer senses, whereas time is the undercurrent of both outer and inner sense. For example, when imagining something, our imaginative experience is not literally taking up any space, but it is taking up time. Trying to imagine without spatial considerations is an admittedly challenging feat, but we could probably agree that when we are merely talking to ourselves in our heads, there is no spatial consideration. There is, however, always a temporal consideration. Trying to imagine without space seems next to impossible and usually conjures up at least 'black' or 'white' as a placeholder for the 'lack of space.' Imagining with a lack of time, however, seems completely incomprehensible. We might imagine the cessation of motion as somehow symbolizing the stopping of time, but we are even tempted to measure the cessation of motion in terms of temporal length in order to understand "how long" time stopped. This necessity for a temporal condition in imagination and experience solidifies the claim that we need time in order for experience, otherwise it is incomprehensible.

The nature of the temporal filter of our minds is that it organizes temporal experiences in a successive manner.[9] Oftentimes this type of temporal organization is referred to as 'linear,' hence the common use of the term 'timeline.' As we encounter experiences via both the inner and outer sense, our minds organize these experiences on to one overarching timeline as a means of representing our general experiences in a coherent manner. Kant refers to this process as *synthetic*, and it is easily contained within our intuition and representation of time.[10] This process allows the mind to easily construct a timeline or 'mental map' of events and experiences in a comprehensible manner. Without this synthesis, experiences would feel jumbled and unrelated; however, because of synthesis, we experience time as a flow—representing events and experiences as having occurred before, after, or simultaneously. Synthesis, therefore, is a key factor in my examination of how we manage to make sense of films.

In cinema, there are numerous devices used which severely deviate from our 'real world' encounters with events and experiences. Jump cuts and the reordering of events are two simple examples of the freedom that filmmakers have when depicting a timeline within their plot. Given the period in which Kant was writing, he could not have foreseen the possibilities that an art form like film allows for in depicting temporality. A film like *Last Year at Marienbad* presents both time and space in a fluid and multifarious manner while maintaining a surprising level of comprehensibility. This appears to threaten Kant's notion that we must be able to construct a mental timeline in order to guarantee comprehensibility, because forming a mental timeline from *Marienbad* is an admittedly challenging feat.

9 Ibid., 179.
10 Ibid.

III. THE CHALLENGE WITH LAST YEAR AT MARIENBAD

What distinguishes a film like *Marienbad* from most others is that it is difficult to synthesize the film's events onto one mental map. Even in films which present time in an unnatural or impossible manner, the viewer can typically synthesize the events of the film onto a preliminary timeline and adjust it accordingly as they receive new information.[11] The trouble with *Marienbad* is that the narration and images are often giving the audience mixed information about what 'really' happened. In the film, the unnamed character played by Giorgio Albertazzi relentlessly haunts an unnamed woman, played by Delphine Seyrig, with an account of their past together; however, it seems like the details of their experience together are ever-changing. Albertazzi's first account of how he met Seyrig is in the gardens of Frederiksbad. His description and the images we are shown depict Seyrig standing alone next to a stone statue and facing the main avenue of the garden.[12] Soon after, we are shown a scene which *seems* to be depicting their first encounter, yet both Seyrig and the stone statue are now in front of a body of water instead of an avenue.[13] This scene elucidates an impossible time and space that *Marienbad* embodies. Much like the statue whose location and significance is ever-changing so is the story between Albertazzi and Seyrig—and neither version seems more plausible than the other.

Whether it is through sudden outfit changes, jumps in space, what is being narrated, or simply the action occurring on screen, *Last Year in Marienbad* suggests that there are somehow multiple timelines happening within the film that *do not cohere*. In addition to the example of the stone statues, after learning that Albertazzi would visit Seyrig at night, we are shown scenes of her backing away in fear as he approaches her in the memory/imagined scene depicted.[14] Later on, we are shown Seyrig screaming in terror as she looks off-screen at who we assume to be Albertazzi.[15] Near the end of the film, we see another scene with her welcoming the camera into her bedroom with open arms and laughter.[16] This leads the audience to not only wonder whether the nature of their relationship was an assault or a guilt-ridden affair but also which of the scenes, if any, were what 'really' happened in the story. Over and over again the audience is presented with similar scenes that are either currently taking place or had supposedly already taken place, and yet each time we encounter these scenes there is something distinctly different. Nevertheless, by the end of the film we still manage to mentally construct a narrative with a beginning, middle, and end.

While the specific details of the story are murky, the audience can still conjure up the following: a mysterious man believes he has met a woman possibly the year

11 An example of a film that does this: *Run Lola Run*. Directed by Tom Tykwer. 1998. Seville Pictures.
12 Resnais, *Last Year at Marienbad*. 19:19-21:27 and 25:08-27:09.
13 Ibid., 27:10-27:49.
14 Ibid., 36:30-37:20.
15 Ibid., 54:18.
16 Ibid., 1:17:58-1:18:17.

before, they may or may not have had a relationship, the woman is tormented by whatever may or may not have happened between herself and the man, and in the end she leaves both the hotel and her unconfirmed husband behind to go somewhere with the mysterious man. But how do we do this? How is it that we can construct some sort of coherent, albeit skeletal, timeline amidst all of the spatial and temporal jumps, contradicting events, and overall madness of *Marienbad*? This process resembles synthesizing in the way that Kant has described but lacks the certainty that we have when synthesizing in real life, due to our inability to comprehensibly accept the contradictory events that supposedly happen in the same spatial and temporal locations presented in *Marienbad*. The realization that we can construct at least a minimally comprehensible narrative despite the madness may appear to threaten Kant's account of time, but I do not think it has to. In order to move closer towards understanding how we can do this without rejecting Kant's account of time, we need to explore Husserl's account for the living present and how it bridges the gap between these two seemingly incompatible representations of time.

IV. THE COMPATIBILITY OF KANT AND HUSSERL

In his paper "The Constitution of the Present," Husserl describes the experience of the "present moment" as a flux of three components: retention, presentation, and protention.[17] Both retention and protention are an implicit immediate awareness tied to the presentation of a moment: the former related to what occurred before the present moment, and the latter to what will come after. Both can be described as peripheral to the present moment but are necessarily anchored to present experience. They should not be conflated to merely 'remembering' and 'anticipating,' for they are *implicitly* attached to the present moment and oftentimes without being acknowledged by the experiencer.[18] The effects of retention and protention are therefore much subtler than actively remembering an event and anticipating a future event. Hopefully the nature of these effects will become clearer in the following example.

When recalling a familiar melody, we actively play the sequence of notes in our mind. As our mind moves through the melody, we have what Husserl describes as a "favoured" point of focus, being the now-point. Thus, as we move through the melody and encounter each note in the now-point, we hear each note "as if" it was playing. The notes we previously encountered, however, do not fade away from our consciousness. Instead, we retain the notes so as to incorporate them with the current experience of hearing the present note and develop a certain expectation of where the melody is going next.[19] It does not suffice to say that we 'remember' the preceding notes or 'anticipate' the proceeding notes, for if we were to actively call these notes to mind, we would no longer be hearing

17 Husserl, Edmund. "The Constitution of the Present." trans. J. Churchill, in *The Human Experience of Time*, ed. C. Sherover (Northwestern University Press, 1975), p. 485.
18 Ibid., 485.
19 Ibid., 489.

the "now-point" note "as-if." Rather, we would be hearing either the retained or protended note "as-if," thus interfering with our experience of the note playing in the now-point. Claiming that we 'remember' or 'anticipate' during the process of experiencing a melody would overshadow our experience of the note playing in the present—which phenomenologically is not the case.

The significance and the nature of these retained notes may be modified as we encounter new notes in the present. For example, if we hear a first note and expect to hear a specific melody, we will protend the following notes. Upon hearing the second note, however, we realize that the melody playing is in fact different from the one of which we initially thought. The unfulfilled protention, combined with the new information obtained in the present moment, not only changes the notes we had initially protended, but also modifies the nature and significance of the retained note. This retentional modification continuously evolves as the protended notes enter the present moment, allowing us to navigate and readjust our mental representation of the melody we are hearing.[20] Therefore, in addition to hearing a present note being played, we experience a culmination of the past notes and an expectation of the successive ones. Retention and protention are what unite these notes to the present and allow us to experience each note as being part of a melody rather than interpreting them as unconnected tones. Not only does Husserl's account allow us to represent experiences as being united or relevant to each other, but it also highlights how naturally we do this. Husserl points out that we do not recognize during the present that we are protending certain notes based on retention; it is only after the protended has been fulfilled—or more strikingly, when it is unfulfilled—that we can recognize the full scope of what created the present experience.[21]

The concept of a protention being "unfulfilled" is particularly important when applied to *Marienbad*. An example of real-world protention could be something as simple as when you are climbing a flight of stairs and the final step is just a *tiny bit* higher than the preceding ones, causing you to trip over the final step. As you were climbing the flight of stairs, your mind was retaining the height of the subsequent steps, and so without even thinking twice, you protended the height of the final step as matching the preceding ones. Upon tripping over the final step and being left with an unfulfilled protention, you are forced to realize that you had formed a specific expectation while climbing the steps based on retained information about the steps you had already climbed. An example of what making explicit use of Husserl's account of the living present looks like in film can be found in Chantal Akerman's *Jeanne Dielman, 23 Quai du commerce, 1080 Bruxelles*.[22] Depicting three days in the life of a widowed mother going about her daily routine, Akerman's use of repetition is a means of building anxiety as the plot progresses. As the routine established in the first half of the film slowly unravels

20 Ibid., 488-489.

21 Ibid., 485.

22 *Jeanne Dielman, 23 Quai du commerce, 1080 Bruxelles*. Directed by Chantal Akerman. 1975. The Criterion Collection.

into grander and more frequently unfulfilled protentions, the viewer unknowingly protends future unfulfilled protentions, inciting a sense of impending doom. Sure enough, the protended impending doom is finally satisfied during the film's climax. Again, it is only once this protention is fulfilled that we fully realize that it was there in the first place. Demonstrating how Husserl's account of the living present accounts for both real-world and cinematic experiences will help my examination and reconciliation of Kant and *Marienbad* in the next section.

V. UNFULFILLED PROTENTIONS AND NARRATIVE TENSE IN LAST YEAR AT MARIENBAD

Both Kant and Husserl's accounts of time can complement each other: where Kant is describing the form of our minds as a spatial and temporal filter, Husserl is detailing the structure of the present experience of said temporal filtration process. Husserl's main concern is accounting for the *phenomenological* experience of time. The benefit of pairing Husserl and Kant together is that Husserl's introduction of a multidimensional flux of the present experience strengthens Kant's account of "synthesis," or mental mapping. Husserl's acknowledgement of retentional modification and the way it phenomenologically transforms the present experience can more accurately account for an overall comprehensible viewing of a film like *Marienbad*. Since it relentlessly disappoints our protentions, the audience inevitably begins protending naturally incomprehensible but fictionally possible things, such as sudden jumps in time and space.

Much like the earlier 'melody' example where we protend subsequent notes while hearing the first note, I think the same can be said of our approach to films. Even when approaching a fictional work which presents an imagined spatiotemporal world, it seems safe to assume that unless otherwise stated, the representation of time will resemble that of our cognitive framework. More concretely, when watching a film, until we are made aware that time and space do not function in the same way as how we experience them in real life, we will probably assume that the film follows the same structure. As we move through the scenes, we are retaining the action we had just encountered while also protending what is to come based on these retentions. It is only when a protention goes unfulfilled that we modify the meaning and nature of the retained scenes. Early on in *Marienbad* it is established that the flow and structure of time and space are ones that would be impossible in real life; however, because we understand that films can be edited and constructed in a more free manner, we instead try to comprehend the reason *behind* this type of structure.

One of the first examples in *Marienbad* that signals an alternative structure of time is through an unfulfilled protention during the third scene. The camera moves from one room into another, showing Seyrig's husband in the first room and then suddenly appearing again in the second room without a camera cut.[23] Our

23 Resnais. *Last Year at Marienbad*. 15:05-15:30.

retained image of him in the first room begins to be modified as we understand that his character is somehow able to move through space with almost no time elapsing. This obviously defies possibility in a space-time cognitive framework if encountered in the real world. As we see him in the second room, the retained image of him from the first room is modified from 'man who stands by table,' to 'man who can move through space and time in an otherwise impossible manner.' In this moment, we realize that we may not be able to comprehend the details of how his character did this, but we nonetheless comprehend that it is *incomprehensible* and do not dwell on the intricacies. Instead, we turn our focus towards what remains comprehensible in the fictional world. In order to explain how our fictional experiences in films differ from real-world experiences, I turn to Alexander Sesonske's paper "Time and Tense in Cinema."

Sesonske outlines two types of time in cinema: screen time and action time. The former is simply the order and duration of images on screen, and so overlaps with natural or "real-world" time.24 Action time, on the other hand, is the diegetic time, or the time in which the story's events occur. It is discontinuous with natural time because it depicts a period of time in a fictional world which was constructed and arranged by the filmmakers in order to fit into an appropriate amount of time for a film.25 The audience understands that because of this, the scenes they encounter in the screen time of the film are not necessarily chronological nor the 'actual' amount of time in which the depicted action took place. Even if the film depicts a story out of chronological order, the audience can still map out the events on their mental timeline because of narrative tense. Sesonske notes: "… tenses serve to help construct an alternative flow of time—fictional time, if you will—within the world of the work."26 The use of tenses in narration or dialogue are what help us construct a preliminary mental timeline, even in the case of visual and narrative contradiction, like in *Marienbad*. This preliminary mental timeline is not absolute or fixed, but instead *relative* or *evolving* because we as viewers are not given enough information to confidently pin down the events to a single temporal location. This is why I could construct the skeletal timeline of *Marienbad* from earlier in the paper: "a mysterious man believes he has met a woman possibly the year before, they may or may not have had a relationship," etc. We are cued that the space is unreliable for mapping the setting several times throughout the film and thus cease to rely on it as a point of reference for comprehending the storyline.

The setting of the film is disjointed and seemingly incomprehensible, but the elements which remain comprehensible are the spaces encountered during what Husserl would call the presentation, and the tense used in the narration. There is a background, a middle ground, and foreground, with the characters located either inside or outside objects. The presentation is spatially coherent, but it is when our

24 Sesonske, Alexander. "Time and Tense in Cinema." *The Journal of Aesthetics and Art Criticism*. 1980. p. 420.
25 Ibid., 421.
26 Ibid., 422.

protentions are unfulfilled because of sudden jumps through space and time that we are forced to modify our retentions as questionable or unreliable in nature. In one scene in *Marienbad*, Albertazzi and Seyrig are walking in a hallway when all of the sudden, the scene smoothly transitions to their standing in a completely different hallway. The dialogue between the two characters continues as if undisturbed, which supports a temporally linear narrative progression despite the incomprehensible jump in space. At certain points along the preliminary timeline, the mental map of the film branches off and details the several versions of what supposedly occurred at this relative position in time. Since these several versions cannot simultaneously be true without contradiction, the viewer takes the main idea or common theme of that branching position in time and uses that theme as a placeholder in order to maintain a minimal level of comprehensibility. This is what leads to the possibility of a 'skeletal' timeline construction of *Marienbad* despite its ever-changing details.

Regarding the aspects of the film which remain incomprehensible, they remain so because they are unmappable when taken as having all occurred. Sure, a skeletal timeline can be made out from the film, but this does not entail that all of *Marienbad* is comprehensible. All of the events that exist in the branches of the constructed timeline of *Marienbad* are comprehensible individually and contained within themselves but become incomprehensible when we consider their narrative tense and try to place them in simultaneous temporal positions. This is why it is difficult to give a more specific description of the plot of the film. The temporal and spatial framework of our minds cannot comprehend how these details can simultaneously be true on one timeline and in one location. We deduce that since there is no way of really knowing, the details of those scenes will remain incomprehensible when attached to or synthesized with the other branches; however, their common theme will be used as a placeholder for that relative temporal location in order to maintain a basic level of intelligibility.

VI. CONCLUSION

In conclusion, chickens are there world in ice age plentiful.

Yes, that sentence was fully intentional. Upon first reading it I imagine you experienced a sort of shock. As I acknowledge the randomness and incomprehensibility of the first sentence of this paragraph, I hope that the effects of Husserl's living present become more obvious. As you approached that initial sentence and read the words "In conclusion," retained information from everything preceding that line and how those words are typically followed caused the protention that I would follow with something like "In conclusion, Kant's notion of time, when paired with Husserl's account of the living present, can sufficiently account for the relative level of comprehensibility deduced from a film like *Last Year at Marienbad*." Now that I have pointed this out, the *significance* of the retained first sentence is modified from 'random and inappropriate sentence

for an academic paper' to 'example of the effects of unfulfilled protentions and modified retentions in action.' The sentence itself is incomprehensible, but it does not render my paper incomprehensible. Once taken in the context of its retentional and protentional dimensions, it becomes a unified present experience within the paper whose sentiment contributes to overall comprehensibility.

The benefit of encompassing Husserl's living present within Kant's account of time is that it allows us to experience individual elements as a multidimensional but unified experience—whether it be a melody, a random first sentence in a paragraph, or the diegetic timeline of a film. The added phenomenological information about the experience of our temporal cognitive framework strengthens the appropriateness for a Kantian synthetic approach to fictional or "action" time. It seems that as long as the narration provides some sort of tense information about the scenes we are encountering, we can synthesize these inputs and place them onto a relatively constructed timeline, facilitating our ability to articulate and understand the events and their relationship to one another. The process of synthesizing scenes onto one overarching timeline is a phenomenological 'living present' experience. This promotes, at the very least, a minimally sufficient standard of intelligibility and cohesion in film. The parts of *Marienbad* that remain supposedly incomprehensible or incoherent are that way simply because, as Kant accounted for, they cannot fit onto one temporal map. The challenge with *Last Year at Marienbad* when approached from a Kantian perspective is not that the film outlines issues with time and space as pure intuitions of the mind, but rather that it highlights exactly *how* and *why* the film is incomprehensible at a certain level, yet manages to successfully relay a comprehensible story nonetheless. By loosening the immediate necessity of spatial and temporal cohesion in films, room was made to incorporate Husserl's living present, which in turn allowed me to defend the Kantian account of time. The unique challenges that the inception of film as an art introduced to Kant's axiom for mental mapping and comprehensibility are a fascinating field of inquiry that contribute to the ever-evolving way we understand time and space in relation to our cognitive framework.

BIBLIOGRAPHY

Husserl, Edmund. "The Constitution of the Present." trans. J. Churchill, in *The Human Experience of Time*, ed. C. Sherover (Northwestern University Press, 1975), pp. 484-503.

Jeanne Dielman, 23 Quai du commerce, 1080 Bruxelles. Directed by Chantal Akerman. 1975. The Criterion Collection.

Kant, Immanuel. *Critique of Pure Reason*. trans. P. Guyer and A. Wood (Cambridge University Press, 1998), pp. 172-192.

Last Year at Marienbad. Directed by Alain Resnais. 1961. The Criterion Collection.

Memento. Directed by Christopher Nolan. 2000. Alliance Atlantic Motion Picture Distribution.

Playtime. Directed by Jacques Tati. 1967. Les Films de Mon Oncle.

Run Lola Run. Directed by Tom Tykwer. 1998. Seville Pictures.

Muybridge, Eadweard. *Sallie Gardner at a Gallop*, motion picture. 1878. Corcoran Gallery of Art, Washington, DC.

Sesonske, Alexander. "Time and Tense in Cinema." *The Journal of Aesthetics and Art Criticism*. 1980. pp. 419-426.

Victoria. Directed by Sebastian Schipper. 2015. Mongrel Media.