Article

The Proclivities of Particularity and Generality

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ABSTRACT

The proclivities of particularity and generality describe a polarity, held together by a naked emotionality that signifies a felt middle-term. This polarity indicates a type of circular reasoning, and can endlessly oscillate due to an equivocation that confuses particularity with generality that may block emotional energies and prevent resolution. Deduction and induction represent the same polarity, as does the frequentist and Bayesian interpretations of statistics. Reintroducing emotion back into logic returns an intuitionist logic and grammar, and this permits the resolution of felt tension. This intuitionism is tied to a time-sense that oscillates between foresight (to particularity) and hindsight (to generality). Emotionality is found relating to causation, agreeing with A.N. Whitehead. It is hypothesized that the intuitionist logic provides a universal grammar, or a vitalistic organizing principle, that has impacted on biological evolution. This agrees with panpsychism and panentheism.

Key Words: abduction, Bayesian, causation, deduction, frequentist, generality, induction, intuitionism, objectivism, particularity, time, universal grammar.

1. Introduction

Ayn Rand`s objectivism presented itself as a clean grammar and logic built upon sense-certain facts and tight logic. Deduction, induction, and concept-formation are all that is thought needed to acquire objective knowledge (see Rand 1990). The grammar and logic is only thought clean of the burden of emotion if cold rigor is strictly enforced. Subjectivity is removed from a picture of objective reality that is thought empty of mind and emotion. Meanwhile, emotion is free to seek its own rewards by exploiting what is seen only to be objective reality, creating a painful contradiction.

Rand`s "concept-formation" is to first differentiate (or particularize) a set into units and then to integrate (or generalize) over the set. Rand (1990, page 28) limits concepts to a polarity and writes: "The process of observing the facts of reality and of integrating them into concepts is, in essence, a process of induction. The process of subsuming new instances under a known concept is, in essence, a process of deduction." Rand correctly connects induction and deduction with the proclivities of generality and particularity, respectively, but in doing this she turns concept-formation into a polarity that holds nothing else but induction and deduction. Therefore, concept-formation is only a weaker alternative to hypothesis-formation, or what Charles Saunders Peirce calls "abduction." Abduction is neither induction or deduction, but a third category.

Peirce`s abduction turned hypothesis, or theory, may eventually become an improved induction. For this development to be successful, however, there must be testing, revision, or retraction, and all this might involve statistical analysis and hypothesis testing. Error recognition is essential, and for example if emotion is removed from logic then there is no way to recognize the hurt caused by misplacing emotion. Rand`s concept-formation won`t help if there is no way to see and feel mistakes.

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In this paper, the key mistake of objectivism is corrected thereby returning emotion to logic and grammar. It will be observed that abduction will involve a person`s emotions. Moreover, the dynamic of deduction with induction will be shown to involve an emotional interplay. Emotion is found sourcing the middle-term that holds Rand`s polar concepts together.

Emotion and mind cannot be removed from greater reality to leave an objective reality that is clean for study. Wallace (2000) finds room to study subjectivity in a way that is free of the presumption of objectivity. A presumed objectivity is illusory. Assuming meaning and truth are sought, Edmund Husserl (1970) noted that a presumed objectivity must be replaced with a transcendental subjectivity. I will agree with Husserl, using an intuitionist analysis of logic and grammar. The time sense that is found fundamental to L.E.J. Brouwer`s mathematical intuitionism will also reappear in my analysis.

Statistical methods relate very much to our capacity for error recognition, and so statistics is a subject worthy of a closer look. In Section 2, the philosophy of statistics is presented to cover both Bayesian and frequentist interpretations. In Section 3, these two outlooks will be tied to inductive and deductive logics, respectively. It will be noted that the tendency to seek particularity is tied to deduction, and the tendency to seek generality is tied to induction (agreeing with Rand). Like the Bayesian and the frequentist, induction and deduction will be shown to involve reciprocity. Particularity and generality will also show reciprocity, and the two will be shown held together by an emotive middle-term that cannot be excluded by reason. The expunging of emotion from reason as prescribed by Rand`s objectivism is committing the fallacy of excluded middle.

A two-sided time sense is hinted by a foresight that seeks particularity and a hindsight that seeks generality. Time as an intuitionist fundamental is investigated in Section 4. Causation must also be re-issued and this is done in Section 5, where it is noted that intuitionism transforms into vitalism. The interplay of particularity and generality are connected to Kant`s third antinomy in Section 6, where a universal grammar (or an organizing principle) is hypothesized. This last step takes logic and grammar, and turns them into a panpsychism and panentheism where mind is part of the universe.

2. Bayesian and Frequentist

The praxis of statistics is an application of probability theory. Probability has to do with assigning measure to a sample-space; see Pierre-Simon Laplace`s A Philosophical Essay On Probabilities. Because of this dependence a presumed “randomness” cannot be taken as a fundamental property in the universe, and Laplace might possibly agree if only because his determinist ontology only recognized knowledge and ignorance while leaving nothing to chance. Randomness is found emerging from an a-priori structure provided by the sample-space, albeit by design (e.g., the rolling of dice), or by deterministic chaos (e.g., the butterfly effect), or by Laplace`s ignorance. Quantum uncertainty may also reveal a presumed randomness, but this uncertainty is non-classical and quantum mechanics is already strongly suggestive of polarity representing the extremes of particularity (the collapse of the wave-function upon measurement) and generality (the evolution of the deterministic wave-function). In any regard, “possibility” does not convey the same meaning as “probability,” and therefore, statistical methods (when used correctly) are only tools and are not intended to signify a rigid ontology. The methods of statistics help reveal errors (that depart from a model), and also help to summarize knowledge (under an assumed a model), and so statistical application is dependent on the context offered by a nominated model.

Debate can rage on what is a “good” model, but even prior to this argument the notion of randomness is already found bifurcated (depending on our inclination to recognize errors or to summarize knowledge). Within the field of statistics, and within the sciences where statistics is applied, there is the ongoing battle between the frequentist and Bayesian interpretations of statistics. My observation is that both horns of the bifurcation are represented by this battle.

Bayesian statistics is marked by belief functions turned into probability distributions. These functions are called "priors," and because we are talking about "belief" the functions may be called "subjective priors." That is, human subjectivity finds its way into a functional representation. These packages of information combine with actual observations (that associate with a likelihood function) to provide an information set that is now transformed by Bayes theorem; as originally formulated in An Essay Toward Solving a Problem in the Doctrine of Chance by Reverend Thomas Bayes. The output is a neatly summarized probability distribution for a parameter set that is conditional on the observed data and including all a-priori beliefs. The idea is that the statistician is interested in the statistical distribution of the parameter set, which includes such quantities like the mean and variance, because these parameters impact directly on typical statistical inferences.

Subjectivity enters the Bayesian analysis not only by model specification and subjective priors. In Bayesian decision theory there are also utility functions which are meant to express the utilitarian value of a set of decisions given the possibility of statistical outcomes (that may or may not be anticipated by the decision maker). The utility function can only be specified subjectivity, and the utility function is then found reflecting the risk tolerance of the decision maker.

The frequentist is marked by skepticism of Bayesian statistics. The frequentist attempts to deduce statistical distributions from a sampling scheme that is fully declared. For example, the frequentist will deduce the sample distribution for a set of statistics (e.g., the sample mean) by pretending to repeat the survey an infinite number of times. That is, if I calculate the sample mean in each of one million (or more) do-overs of a survey, then I will expect to see some statistical variation from sample to sample. You would think that one survey is enough, but the frequentist must follow this deduction even when there is really only one survey to be conducted. Moreover, the frequentists have perfected their trade to the point that the do-overs may be imagined in finite populations or in infinite populations, and with replacement of samples or without replacement of samples.

The Bayesians and the frequentists are found conflicted. Each pretends to hold the high ground of statistical purity, but in reality each is loyal to a particular brand of statistics and the two brands are found contradicted when each is pushed to an extreme that excludes the other. This hints of a genuine reciprocity, in my view.

The Bayesian will note that the frequentist has imagined a repetitive sampling that does not occur because in practice only one sample is usually collected. Even in a sequential-sampling experimental design, the Bayesian will note that statistical evaluation comes ex post facto, and planning need only anticipate this reality. Moreover, the Bayesian will complain that the frequentist has imagined a sampling scheme that is found incoherent; meaning that the statistician is only interested in statistical errors that have to do with a parameter set that corresponds to a realized set of observations, and the statistician is less interested in hypothetical observations that are never realized.

The frequentist will fire back that the Bayesian approach lacks "objectivity," and that "Bayesians are found introducing their own subjectivity into their statistical inferences." The response comes that at least the Bayesian declares his (or her) subjectivity, whereas the frequentist only pretends to expunge subjectivity. The Bayesian notes that frequentist subjectivity remains in the form of an incoherence, a mere pretense, a mess and obfuscation of sampling arguments. "Besides," the Bayesian says, "we have improper priors that reflect our state of ignorance and this is as close to true objectivity that we can get."

"Ah," the frequentist counters, "you only have improper priors for a few cases where full ignorance is admitted, you don`t have a prior probability for all the cases that you are ignorant of."

Up to this point the Bayesian was winning the argument, and the Bayesian is pushed off balance with this last remark. Nevertheless, the Bayesian responds: "your sampling scheme only obfuscates your statistical analysis, and this leads to a needless complexity that can become intractable in the worst case."

The frequentist argues back: "you call my analysis complicated, yours is complicated by the mere fact that you remain unable to declare the pure state of ignorance that can be applied in all cases."

At this point I must intervene, and stop an argument that can become heated. The frequentist approach of repetitive sampling is important, but not as a stand alone statistical dogma. The doubting frequentists, along with the doubting deduction (as we will see), is found holding inductive thinking in check. Therefore, the right application for frequentist statistics is for the purpose of quality control, and in checking the methodology of statistical thinking that is highly inductive. If an inductive analysis is false, the frequentist is up for the job of refuting the wayward induction by using a deduction that follows from repetitive sampling; this is called sensitivity analysis.

Inductive thinking reaches its high point in Bayesian statistics. The hopeful induction is married to its brand name: that the sun will rise tomorrow because that is what the sun has always done; that we act by hopeful dictates that emerge from subjective probability and utility; that the Bayesian inference is "optimal" and uses all the information given by prior knowledge and historical data. The problem is that inductive thinking by itself cannot describe all of reality. Bayesians need frequentists to expose their glaring error of the heart.

There is a hint of a possible resolution of this conflict that demonstrates the apparent soundness of an intuitionist interpretation of statistics.

3. Deduction and Induction

By “deduction” I mean a logical chain that starts with propositions, even presuppositions, and ends with a conclusion. Deduction flows from the general to the particular. Moreover, I speculate that any logical chain must necessarily permit time passage, otherwise awareness of the chain is not possible within the intuitionist paradigm. Because the conclusion following from the presuppositions indicates time passage, a deterministic mechanism may likewise represent a clock`s ability to keep time. A logical chain that is conclusive mimics determinism, with no remainder. Therefore, deduction is the ability to recognize deterministic chains, and deterministic chains are described as a one-way flow of cause-and-effect that parrots awareness thereby revealing a declared determinism. The awareness of deduction is the awareness of one-pointed causation that comes with time passage.

Deduction is necessarily provisional, because the presuppositions must be nominated and their truth, or falsity, must be known by something other than by deduction. That is, a deduction can be declared universal only in the sense that the conclusion follows faithfully from the presuppositions, not that the presuppositions are true.

It is inductive logic that comes into play when presuppositions are evaluated; e.g., that the sun will rise tomorrow because sunrises have always occurred in our history. Induction flows from the particular back to the general. Moreover, deduction`s ability to recognize deterministic chains implies a middle-term that is excluded from deduction, but it is this middle-term that permits said recognition. Therefore, I speculate that when the middle-term is recognized then the grounding inductions are reasserted as truth. Deduction is supported by its induction, revealing a type of circular reasoning. The deductive-inductive circuit is held together by naked emotionality that becomes self-evident when the faithful are asked to explain their circularity that may be blocked. Imperfect deduction only finds a false induction and will endlessly repeat itself, thereby revealing an emotional tension that is blocked and held tight by equivocation. The unblocked circuit can find within itself an ability to resolve tension, where particularity is now distinguished from generality.

Like deduction and the mechanism of clocks, time also leaves an impact of induction. For what is induction but the awareness of time that underwrites apparent causation and the reappearing habits that become anticipated? The number of sunrises becomes a habit, dully anticipated by a rooster that faithfully marks the dawn with a "coco doodle doo."

What is induction but the attempt to make a caricature of time history, and to build a Bayesian posterior distribution that can summarize the recent past? Oddly, the question of time is now found impacting on both statistics and induction. Clearly, a distribution that describes frequency can agree with our sensibility given a time passage that supports inductive hindsight. However, Frequentists attempt to deduce the sampling distributions on a firm deterministic foundation, like rolling a dice thereby showing that probability is firmly established (in fact determined): enter the sample-survey with prescribed statistical properties. The frequentist is marked by this abstract deductive thinking that anticipates future events, e.g., he or she will deduce the sample distributions from a rigid protocol that follows an imagined repetition of data collection (noted in Section 2). The frequentist then declares a probable foresight that works to stifle hindsight. The frequentist program is opposed to the Bayesian school that is founded more on induction; i.e., deductive foresight is opposed to inductive hindsight.

A continuos sample space is infinite, with each occurrence coming with an infinitesimal probability. This would turn the infinite universe into a strawman that is well caricatured by probability theory, and this invention is hardly worthy of religious notice. The rare event must also occur with the benefit of hindsight (i.e., coming with a-priori knowledge), otherwise even the frequentist statistician will declare it non-significant. The abstract frequentist remains disconnected from concrete reality, unless there is a-priori knowledge that comes as an induction and can be specified by Bayesian accounting. The statistician starting as a frequentist now comes full circle and becomes a Bayesian. Nevertheless, what is anticipated by the habits of time-history is found conflicted by a determinism that remains unable to ground its presuppositions. Correlation does not imply causation, and the conflict between Bayesian and frequentist may remain unresolved at a deeper level.

What grounds deduction`s presuppositions must be none other than a self-evidence revealed by time-passage and that reconnects with inductive frequency and causation. Otherwise, one-pointed deduction will remain conflicted with its own wayward induction, until the riddle is solved. My guess is that it`s the

"journey" that tunes deduction to its none-wayward induction where correlation implies a causation that reattaches to authentic emotion. However, the journey is not the conclusion at the end of a long chain of determinism, as a one-pointed deduction will have it.

The drive that seeks plurality can be teamed with deductive thinking (or even frequentist) that seeks freedom from an overbearing induction (or hypothesis). For the purpose of hypothesis testing, R.A. Fisher (in Statistical Methods and Scientific Inference) recommends the possible actions of rejecting the null hypothesis or failing to reject the null hypothesis, but never accepting it. Fisher was a frequentist. Defeating this tired induction (the null hypothesis) brings an end to the older time cycle, and permits rebirth among the plurality. Nevertheless, for the new voice to prevail it must repeat itself too, while inventing its own heart-beat with repeated patterns that can be recognized through the inductive proclivity; and this is despite the offering of infinite plurality that may conceal the new voice.

Deduction defeats its wayward induction by stipulating a counterfactual that ask "what if?" The generality offered by induction should include all cases, even those particulars that are found inside the counterfactual. Nevertheless, through "trickery" the counterfactual is found contrived to contradict the induction. The doubting deduction is found working in the negative, to bring on a catharsis that will free induction from its hopefulness. The purgation comes with a run to freedom. Nevertheless, the run to freedom is only temporary, because sensibility eventually returns. The old induction heals itself, and returns changed by a process of reinvention by Peirce`s "abduction." The desire to run ends when a transcendent desire is recognized as source, coincident with the archetypical threeness given by induction, deduction, and abduction.

Time must permit these two passages: both deductive cause-and-effect tending to one-pointedness; and the inductive heart-beat of renewed patterns that may give themselves over to habit. Note that irritability and one-pointedness cannot end with narrow deduction that is forever exalted, because it points only to escape by Karl Popper`s (1965, Chapter 11) refutation of induction with an eventual return to the euphoric habit and drum beat (its opposite). Like Hume, Popper was a deductivist (see Stove 1998, Chapter 3). It`s the journey.

Time polarizes itself into deductive causation and inductive habit, or into the proclivities of particularity versus generality, or into doubt and hopefulness (for lack of better words). Or time polarizes to indicate Brouwer`s first act of intuition (fragmentation by two-ity) and his second act of intuition (generation of new forms); see Van Atten, 2004, Chapter 1. What holds the polarity together is a middle-term that is found beyond our one-sided words that are hung-up on either hopefulness or doubtful strife. The archetypical threeness is as far as we can go, assuming our discussion is limited to mere words.

Both time and causation remain important, and must be explored.

4. Time

To experience time, awareness of frequency becomes essential: the ticks of a clock; the repeating heart beat and tuning.

Parmenidies`s timeless vantage point can, in theory, observe change that sees frequency. Heraclitus immersed his vantage point in the flux of becoming, and still recognized unity in opposites. That which is unmoved must necessarily reside in the middle-term that holds Heraclitus`s Logos together, and this

provides one way to resolve the conflicted views offered by Parmenidies and Heraclitus. Otherwise, the views of Parmenidies and Haraclitus have strangely polarized, each describing two aspects of time: as Heraclitus`s change and Parmenidies`s foundation that rest unchanged. The two aspects again come with an emotive middle-term (the felt precondition), given that Parmenidies and Haraclitus may never find agreement beyond a heated argument. Nevertheless, the two aspects, and the felt middle-term, return to the unchanged emotion that gives witness to the vast plurality. The archetype reappears (the Logos), where Heraclitus is found agreeing with Parmenidies. But note that the question of time escapes through the middle-term.

Time can be thought of as a uniform pattern of ticks, each tick of uniform duration. This simplistic view is misleading because there is no way to judge what is uniform and unchanging in absolute terms. A clock looks to have uniform ticks only because there must be a master clock to which all comparisons can be made. For example, each tick from one clock looks uniform because the ticks all correspond to one second on the master clock. If the master clock had uneven ticks, then the lesser clock may look to exhibit irregular ticks by comparison. But we could not observe the uneven ticks in the master clock, they would still look even because the master clock can only be compared with itself. The question of time is found slipping away.

Perhaps time can be objectively and safely measured by the distance traveled by light? No! Such a distance can only be measured by the duration required for light passage. Duration and distance are hopelessly intertwined. We can attempt to measure distance by lesser than light speed activity, for example, by the laying of a ruler end to end. Nevertheless, this activity requires time for intuitionist construction (an energetic expression). There can be no guarantee that this distance is separate from time, i.e., by defining time in terms other than by referring back to time.

At this point we might leap to the conclusion that time is an illusion, while pointing to special relativity. But if two past light cones overlap, the overlap region will show time ordered events that won`t change despite possible time dilation. There was never any way to judge a clock`s ticks to be uniform without referring to a master clock, and so time dilation is not the magic bullet that will bring time to its death.

General relativity may be considered, and abstraction on abstraction can be built into the Gödel universe to formalize time. The conclusion may come that time is not real because time travel is impossible (see Yourgrau 2006). Nevertheless, building the Gödel universe is an intuitionist construction that requires time, and what is demonstrated is only that time can`t be formalized. Gödel fell for his own self-reference! The laws that went into the formality are only one-sided abstractions (not the two-sided synthetics that they are, as we will see) that have somehow exalted themselves into Plato`s world of ideal forms, even over Parmenidies and Haraclitus`s agreement, even over the unchanging emotion.

And if time is an illusion, what are we to make of space? Einstein felt that time and space are unified, so we must also leap to the conclusion that space is an illusion too. And all the action principles that make up the laws of nature come as space-time equations, so these actions must also be illusions. This would be the complete denial of everything self-evident, to be followed by a hopeless fall into solipsism.

What is self-evident is that time polarizes space, and events show themselves through actions that are two-sided. There are three crude spatial dimensions, and these are sufficient for the self-recognition that shows itself in Parmenidies and Haraclitus`s agreement; I treat this subject elsewhere, see Smith (2009). This is a non-dual recognition, but the question of time slips away through the middle-term again.

Time is completely confounded with Spirit, and so it must be that time is two-sided too. Therefore, an analysis of time may bifurcate, to indicate a psychological preference or a preferred method of analysis. The irony extends even to the subject of statistics, and beyond the Bayesian and frequentist interpretations (noted in Section 2), in that the statistical analysis of time series is also found coming in two flavors: (1) The time-domain analysis is marked by one-pointed unfolding that is otherwise deduced and resembles a Markov chain; (2) The frequency-domain analysis returns the time series to a periodic pattern that may be correlated with an infinite basis representing waveforms, where a periodic signal may repeat to support induction.

5. Causation

And what are we to make of this sentient precondition that predates thinking? A.N. Whitehead (1969, Chapter VII) believed that emotion is the primitive we are now looking for, and that it is this primitive that connects with causation.

We might turn to science to attempt an answer to this question. To experiment is to control and setup a precondition to be watched. This is the act of sending. To record the observations that follow is the act of receiving. Therefore, science must act only in the confines of sending and receiving, and the synthesis of sending and receiving now defines information. But as in any synthesis, the middle-term that holds the sender to its receiver is now undeclared, and undefined. So much for science! But wait!

The laws of nature are sometimes declared fundamental; in error in my view. But what are these so-called fundamentals? They are actions that operate upon a symmetry, and as such they are also restricted by the activity of sending and receiving. The laws are time symmetric, and hence the actions are two-sided! The asymmetrical second law would seem to be a glaring exception to fact that all laws are restricted by synthetical nature of sending and receiving. But if this law is presented as a universal derived from statistical interactions, then this derivation fails. Such an attempt meets only a fatal equivocation: that which is represented by statistical mechanics is intended to be equal to that which recognizes order and dissipates heat. To represent is to send, to recognize is to receive. The second law is equally two-sided, and is unable to escape the limits in place that are given by the activity of sending and receiving. The middle-term is always beyond laws that are declared fundamental.

This is enough of the rehash of my take on laws. Where did this talk of causation come from? Answer: Aristotle! It was Aristotle that introduced material, formal, efficient, and final causes. However, David Hume (in An Enquiry Concerning Human Understanding) noted that our understanding of causation did not follow from reason, but depended upon experience. In other words, our understanding of causation did not come from science or philosophy, but from something other! It is only that causation can be better vetted in philosophy, than science. And indeed, what is found fundamental in science is not a one-way causation, and this must have been something that Whitehead appreciated.

This has not stopped scientists from injecting Aristotle`s understanding of efficient causation into science. This has unfolded naturally from the engineering imperative that gave us combustion engines, clocks, and conveyor belts, etc. However, much to the horror of some scientists, a one-sided understanding of efficient causation cannot be taken as fundamental. And so much of what is called science depends on this one-sided interpretation that is now found outside of the synthesis of sending and receiving. You see this over-extension when statistical mechanics is thought to explain the arrow of time. You see this over-extension in evolutionary psychology, where human behavior is said caused by natural selection. You see

it in complexity theory (e.g., our climate models) where tacit acceptance of efficient causation is enforced by way of computer simulation. System thinking, as it is called, is all about the one-way flow of cause-and-effect. It is a surface feature hung-up on multitasking (Hegel`s being), all breadth and no depth (no becoming). It is all space and no time. Its all reaping, but no sowing: a one-sided Yang bashing in the name of political correctness.

So there you have it. One-way causation, or efficient causation, cannot be taken as fundamental (i.e., alone, or by itself). And if we grant Hegel`s Notion that guides the dialectic, then an apparent causation must also meet a reception that carries teleology (reverse-time causation that hides behind, and gives its support to, the apparent one-way causation); reception permits deep tuning and the reality of induction that is well beyond a mere surface feature offered by deduction`s one-way causation. Deep tuning involves time itself, and as a receiver it gives its support to the appearance of one-way flow. But it was never the effect at the end of cause that we seek at the end of time`s long road, but the "journey" that sources the middle-term offered by our action. Time escapes, with Spirit, through the middle-term! It`s the journey!

This is the only way that our DNA has been so extremely coopted that our very few 25,000 genes were never human genes to begin with.

Heraclitus`s Logos becomes self-evident, but I would not leap to the conclusion that this realization is without a precondition. The apparent Logos is its own precondition, and the stripping away of pre-given presumptions is better described by Husserl`s phenomenology.

There remains an issue of a presumed rejection of vitalism by those that still over prescribe biochemistry, and chemistry. In fact, life can`t be explained by chemistry. Moreover, all the laws of nature are time symmetric, or two-sided as in the case of the second law (noted above). To say that chemistry explains away vitalism is to exclude the middle term that holds the two-sided laws together; it can`t be done. To say that vitalism is safely excluded is to commit the fallacy of excluded middle. Life`s vitalism is self-evident by the fact that the whole is not explained by its parts, and hence the middle-term is found active and is found impacting on the question of causation.

6. To a Universal Grammar

Kant`s Critique of Pure Reason describes the “third antinomy” and gives the dual arguments where it is possible to argue that freewill is real, or that all is a product of an overreaching causation. Kant found the arguments to be equally valid, but it is now clear that the antinomy is felt in heated argument given the rift between generality and particularity. The certitude of feeling is enough to explain the antinomy as I noted before (Smith 2007), and heal the rift in general terms; if not in particular. It is possible to turn the antinomy, and its dynamics, into a universal grammar that follows a path that resolves felt tension.One side of the third antinomy represents freedom and the suspension of judgements (granted to a particularity that departs from generality), the other side represents natural law and teleological judgements (found in a return to generality). Both sides are held together by the ineffable middle-term, and that is as far as we can go, almost. We can progress forward because the middle-term is also felt, but it rest beyond literalism and yet remains accessible by intuitionist investigations.Many are seemingly free because we are "alone," we are alone because we are One. Both sides of the third antinomy are found agreeing, but egocentric freedom is not an absolute.What is felt is sense-certain. What is felt signifies a call to action (when what is felt is unacceptable and judgment is needed), and it also signifies resolution

(when feeling as messenger need only be accepted and permitted its freedom). Therefore, feeling reduces to both sides of the third antinomy. When words that carry feeling are reduced to what is starkly real and signified by the third antinomy, communication is realized. This realization is mostly subconscious, but it is nevertheless guided by the universal grammar; e.g., following the interplay of deduction and induction noted in Section 3.The universal grammar pertains to what is most primitive, the most innate feeling that sources the antinomy (or the middle-term). It is the cultivation of this innate that constitutes evolution, in my view. I have already noted that all of physics is contained by the sender-receiver unity: the acts of sending and receiving. Only the middle-term must be flushed out to reveal the grandness of evolution, including the mystery of biological information. The universal grammar is found as a panpsychist organizing principle. The third antinomy indicates the act of becoming: the movement from the Many (freedom side) to the One (judgment side); and from the One to the Many. Speaking precedes from the One to the Many, and listening returns back to Many from the One. The convergent dialectic is now the resolution of felt tension that underwrites our words, when One and Many are found agreeing in the wake of becoming. The bipolar dialect (non-convergent) indicates blockage, where One and Many are unable to agree. They indicate something outside the sender-receiver unity, mere assertions that are never tested by science and yet are invoked to force a one-sided presentation of the antinomy while leaving the felt tension in its nakedness. The grand plurality of words (nouns) is now permitted their articulation, given that one side of the third antinomy indicates the Many. But the Many must make sense to the One, and hence words come in sentences that flow where the verb is primary and connects subject to object. The plurality of feelings makes sense to the One, as permitted by the third antinomy. Therefore, plurality and singularity are resolved. This resolution extends to verbs.

Words are concepts that emerge from concept-formation as indicated by objectivism. However, the concepts are now recognized as Kantian synthetics that reach across the antinomy, they are not products of Rand`s (1990, Chapter 8) “law of identity” that are also conveniently found ignoring the very emotive middle-term that holds concepts together. The law of identity only blunders into tautology, that concept is only concept that it is. Rather, it is the middle-term that signifies the changeless identity. It is the authentic synthesis that supports identity that unites the analytic and the empirical. Even the facts of reality that passes over to human concepts, come as authentic synthetics that are open to less than perfect interpretations. This simple modification corrects Rand`s epistemology. The Many now reconcile themselves with the One, and this implies that knowledge is vastly additive as predicted by objectivism, but coming with a proviso that emotion becomes more fully integrated with logic.

The act of becoming also indicates the movement of time (and finding that which is countable), and this movement must also carry a feeling that also seeks resolution. Freedom passes over to teleological judgment. The equivocation of a-priori foresight and a-posteriori hindsight sheds itself and returns as discernment. What had been is now resolved, and so there is time tense: the past; present, and future. Word movements are permitted their time tense within the structure of the third antinomy.

7. Conclusion

Objectivism failed to accommodate human logic and language, because emotionality cannot be eliminated from reality and pushed into a separate world that is left untended. My intuitionist account of logic and language succeeds, in my estimation, because emotionality finds a better integration in reality. This preserves what is found correct in Rand`s objectivism, and while retracting what is wrong. However, my resolution remains only in general terms, as particular counterexamples may be nominated to contradict my grammar. Despite these possible efforts, my guess is that the above generality will remain.

The generality of threeness does not disappear, even in the confines offered by a non-monotonic logic that permits retraction. It will only be the advocates of a monotonic logic, and a one-sided freedom, that will find themselves unable to return from particularity back to generality. Particularity must return to words that hint of generality, or there is just tension that has failed to articulate its intension.

My intuitionist grammar is agreeable with Husserl`s transcendental subjectivity, where language carries intension and seek affirmation. Language is seen as lest toxic, compared to Brouwer`s intuitionist mathematics. Nevertheless, the above grammar permits strife and a run for freedom to break away from an overbearing induction. What is unique in this grammar is the reinforcement that comes with oscillation and felt frequency. This oscillation may permit the reconciliation of Hegel`s dialectic with intuitionism, in that the dialectic unfolds by the repeated pattern given by the first and second negations. From the intuitionist perspective, the first negation occurs when the felt middle-term is misplaced, and the second negation comes when the middle-term is rediscovered: a previous hindsight is overpowered by foresight; and then an improved hindsight overcomes foresight.

The particularity takes flight, to escape the stricture imposed by generality. But the particularity returns, and finds within itself a need to express itself with perfect generality. This story continues and repeats itself in words and in feelings, even as new conflicts come to the surface. Nevertheless, it is not my place to speak for the vast plurality where the instinct to flight and sought uniqueness is most pronounced; e.g., see the opposing views in Ibrišimovi (2009) and Sepúlveda (2005). My account is only a generality that relates to a self-evident rhythm of renewal, and so my proclivity is to the general.

The grammatical oscillation (between foresight and hindsight) is indicative of the interplay of frequentist and Bayesian statistics. The Frequentist may engineer future statistical outcomes that may refute an inductive hypothesis, whereas in principle the Bayesian can integrate all past observations and build a posterior distribution to reestablish an improved induction.

Foresight leads to fragmentation and active sowing (sending), whereas hindsight permits harvest (receiving) and pulling everything back together. These are the proclivities of the particular and general, respectively. When both are unified by synthesis their oscillation is presented as a felt rhythm. The middle-term that holds particularity to generality is beyond, but as the two proclivities become more authentic the felt oscillation becomes more refined, or unblocked. This provides an ontological justification for a panentheism that reconnects with felt emotion and ecstatic revival. Moreover, the logic is turned into a universal grammar to provide an organizing principle. This restores an active mind to the universe and evolution, thereby endorsing panpsychism.

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