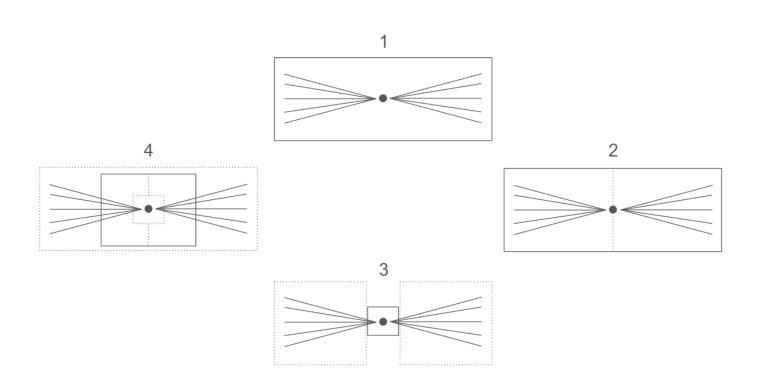
# PHENOMENOLOGY AND RELIGION

How to Count to 4 and Do It Again



Phenomenology and Religion: How to Count to 4 and Do It Again Justin Bailey

#### **ABSTRACT**

Phenomenology has been historically presented as a rigorous pursuit of understanding about knowledge and experience, while religions generally offer a faith-based pursuit of understanding about knowledge and experience. Regardless of their methods, both of these labels and the domains to which they refer have proven to resonate with end users as a means to enhance one's own well-being and satisfaction with the world as they perceive it.

The following essay demonstrates a meta-structure which constructs categories of abstract structures, both phenomenological and religious, and defines/arranges these categories according to the integers as a least reducible ontological construct. Any given knowledge structure (commonly referred to as a phenomenological structure in this essay regardless of rigor) posits unique, distinguishable symbols which may correspond to abstractions of phenomena; in general, any set of symbols should reliably align to integer-based principles per the inherently discrete manner in which end users may interact with symbolic representation.

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#### Introduction

When analyzing religious and phenomenological models, one may note the necessity of constructing some mapping between symbols, given by a model as "fundamental", and a corresponding set of referent meta-phenomena for which there is no proper mapping or ordering, but rather a purported best fit in accordance with the model's inherent perceived utility.

To assert that the fundamental mapping of a given model is proper is to assert that the modelled phenomena are known. To assert knowledge of a phenomenon is to assert constraints on the boundaries of the phenomenon. Religious and phenomenological models, however, *specifically intend to model that which cannot be constrained, or exactly the constraints themselves*. To assert that the mapping is proper is to assert that one's assertion that the mapping is proper, is proper. One cannot constrain one's own assertions rationally without instantiating **the mapping problem**<sup>[1]</sup>.

To assert that the fundamental mapping of a given model is not proper, but rather in accordance with an articulate set of axioms, is to assert that subjective knowledge is subjective, and objective knowledge is less subjective.

Therefore, any given religious/phenomenological model may posit a mapping with particular intentions as to the structure, context, and integration of the mapping onto one's mode of being. This model may credit itself as fundamental in some sense, but this notion is *necessarily* bounded to within the framework of the model itself, as well as any external model which might call upon it as such for any reason.

One could argue that every human necessarily operates on some loosely formed unified phenomenological structure, and when that phenomenological model aligns with others' phenomenological models, this alignment forms a communal basis akin to religion.

Let's demonstrate this principle of alignment by arguing something quite dramatic: this essay is a fundamental phenomenological text that will give the reader deep insights into the divine. The fundamental symbols posited are the counting numbers 1, 2, 3, 4, and 0 as a special case. The phenomena to which these symbols point are whatever you believe they point to, you just have to *believe*. One would likely find it much more difficult to argue from the perspective that this model has zero correspondence with any particular set of relevant phenomena.

What exactly is the intention of this particular phenomenological model? Perhaps to align your phenomenological model with that of God. Perhaps to align your phenomenological model with that of the author. One will note the historical human trend of seeking to align external phenomenological models to one's own for selfish purposes by means of false prophecy.

The author posits that the author has good intentions with this essay. The main intent is to demonstrate the relative intercorrelation between a diverse range of models which intend to respond to similar phenomena: particularly consciousness, reality, being, and the processes of abstraction and intentionality.

The ways in which these models/modes demonstrate their mappings outwardly are precisely the modes in which they are perceived as different from one another, as any proper culture asserts themselves unto the world confidently and uniquely. The arguments that follow will attempt to deconstruct these demonstrations and nomenclature into abstract principles (via some admittedly fallible phenomenological model) and consequently use these principles to analyze the nature of classification and phenomenology with respect to the natural counting numbers (1, 2, 3, 4) as a primary technique of meta-classification.

## Simplicity and Coherence

Let us begin by examining *1-systems*, or phenomenological models which posit a single fundamental symbol. A 1-system describes some phenomenon, and asserts a principal text or reference point to which all notions of value and meaning correspond. Any attempt to measure some phenomenon must be abstractly passed through the lens of some 1-system, as the phenomenon is decidedly a single phenomenon; a set of multiple distinguishable phenomena may also constitute a single phenomenon as they adhere to a coherent conceptual structure, the set. Everything is a thing.

A given 1-system denoted as  $\underline{A}$  asserts itself as an arbiter and metric for describing all processes relevant to the given phenomenon of interest (namely the self or reality), known and unknown, observable and unobservable.  $\underline{A}$  may not explain in sufficient detail the nature of its relationship to that which it intends to model, yet it asserts this relationship nonetheless.

The generalized diction "N-system" refers to the category of phenomenological structures and models which assert N number of fundamental sub-components, sub-processes, or user-accessible symbols which constitute and manifest the primary functions of the given model.

The letters  $\underline{A}$ ,  $\underline{B}$ ,  $\underline{C}$ ,  $\underline{D}$  correspond to particular given instances of these 1-system, 2-system, 3-system, or 4-system models respectively. Monism is loosely equivalent to the notion of 1-systems; any philosophical argument or model founded on some monistic approach may be reliably analyzed as some phenomenon  $\underline{A}$  under the lens of 1-system mechanics.

#### Monotheism

One might be inclined to rigorously analyze specific manifestations of monotheism in an effort to demonstrate the validity of the claims made here regarding monotheism. One might also argue that this work has been done by others, and the goal of this chapter is to articulate final meta-claims about the inherent nature of what is possible under the lens of monotheism as well as monistic perspectives, rather than to deliberate on the manifest effects of this nature.

Monotheism provides all of the comfort and stability of any 1-system by assigning a symbol (God) to both the cause and effect of everything, with little regard for the effect of asserting this claim as Truth.

Relative to monotheistic perspectives, polytheism and multi-faceted systems generally allow for a more diverse interpretation while sacrificing the benefits of conformity and community among like-minded believers. Polytheism and atheism prioritize pluralism on the grounds that no one dogma may explain all that reality has to offer. Perhaps these grounds in themselves form a meta-dogma of nihilistic rejection with implications analogous to those from Kurt Godel's ideas of Incompleteness.

Any system may offer a convincing justification of its utility relative to other types of systems, but monotheism stands on the grounds of self-assertion in the face of the unknown, as opposed to pluralist structures and polytheistic perspectives which may reject any assertion of knowledge of purportedly unknowable Truth.

Each methodology has benefits and drawbacks; each tends to attract certain types of people with certain values that inherently align with the underlying values of the given system.

Consider people who value conformity, personal responsibility, work ethic, and rational sensibility, commonly referred to as Type A people, relative to Type B people who value abstract identity, personal freedom/leisure, diversity, and social cohesion. Type A people are more likely to move to a big city, where lots of things happen all the time, and life moves quickly. Type B people are more likely to either move to a small town, or remain in their hometown due to lack of location preference or a desire for simplicity in their life.

Note that those people who are likely to move to big cities will consider the same set of big cities, while those who are likely to move to smaller cities consider an arbitrary set of small cities. There are more options for small cities to move to; therefore regardless of whether there are more Type A or Type B people, the Type B will be split amongst themselves in different cities, and the Type A people will congregate in the same cities. Consider the pigeonhole principle as a useful metaphor: There are less options for those who prefer big cities, so the big cities continually get overloaded with those people; the small cities are each one of many options to consider, so there is naturally less overcrowding/overlap in those cities.

Type A people are more likely to be considered "neurotypical", relative to those considered "neurodivergent". The complementary notions of neurodivergent/neurotypical refers to a specific tendency (or lack thereof) to consider the values of others in an effort to integrate and align values as a community. Neurodivergent people prefer to consider their own values when making judgements, rather than conform to the values of others. This is simply a matter of preference and there is no discernible ordering of the relative utility of these values, except on a case-by-case subjective basis.

Type A people are more likely to be Republican in the United States. Regardless of political and moral stances, Republicans are relatively focused on asserting their limited model upon society in an effort to reliably consolidate labor and abstraction, as opposed to Democrats who prefer to seek knowledge and fund social programs, with little regard for a cohesive end goal beyond the notion of supreme utopian success to guide them.

Republicans are more likely to be White Christians than any other particular combination of race and religion. This correspondence is likely marked by the underlying values of personal responsibility, homogeneity, modesty, etc. This particular appeal to one's desire to engage with like-minded individuals of similar creeds manifests itself across the board with monotheism, Type A people, Republicans, and radical fascism.

### Monads/Qualia

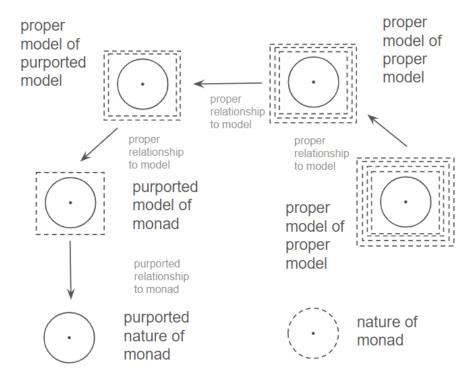
Monism is a philosophical umbrella term which refers to any perspective that points at a singular entity and considers it to be fundamental, or causally related to all other entities in reality.

Monotheism, on the other hand, assigns a label ("God") to this entity and generally treats this entity as sentient or proto-conscious. One will note the often tedious tendency of philosophers to continue making up labels to distinguish arbitrarily specific notions, when the anomaly of relevance is neither this nor that but the relationship and comparison between them; this particular distinction may have been important historically, but generally this mode of abstraction does not promote rigorous thought, *it can be tedious* and computationally demanding, and it is not relevant to this paper. This tendency to generate arbitrarily specific labelling systems without bound is philosophy itself, and the "solution" is roughly to stop thinking about philosophy with words and instead apply philosophy to something useful and relatively stable, like math.

Monism is a 1-system. Everything is equivalent to the thing, whatever the thing is. Monotheism varies between a 1-system and a 2-system depending on the creator's relationship to the created. If the relationship between creator and created is the identity case, i.e. God exists in all aspects of all things, then this system acts as a 1-system. If the creator and created are fundamentally distinguishable and irreconcilable, this results in a "dualist monotheism"; otherwise known as a 2-system.

The notion of a "monad" is generally used to reflect a perspective in which any given observable thing can *a priori* be understood as a manifestation of the monad, whatever that thing may be. If one were to ask a philosopher about the nature or essence of a monad or the Monad, the philosopher might likely respond by asserting that this is the wrong question. A monad intends to conceptualize the essence of *essence-ness*, or whatever it means to be an essence. The answer to understanding the nature of the Monad is precisely defined by the Monad.

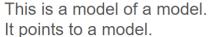
If one were to probe a model of a monad on the value of its relationship to the monad, the mapping problem ensues as this probing requires a model to measure the value of the relationship, however this new model has a relationship with the monad model. Each new relationship requires a model to ensure its contextual validity, and each new model instantiates a relationship to the previous model, a relationship which once again requires a model.



The nature of any given relationship between a phenomenon and some model of it is such that the value or validity of this model must necessarily be verified by some external model, i.e. the mapping problem. The relation between "purported" notions and "proper" notions in this case refers to the idea that the monad is purportedly referenced by using this symbol, however this relationship only exists in the minds of users. A proper notion ensures that the given model identifies each individual phenomenal component to which it refers as a model of some less abstract phenomenon, thereby ensuring the relative validity of its constitution. To assume a model reliably refers to that which it intends to refer to, is to take its symbols at face value.

A proper model, therefore, necessarily asserts its status as a model to the end user in order to make proper abstract assertions according to some axiomatic structure. A purported model makes purported claims about the nature of things, while making no claims about the nature of its relationship to the things, or itself, the purported model. A proper model asserts a relationship to itself in an effort to bound its own assertions.

#### Consider the following:





If one were to inquire on the nature of the relationship between the symbolic representation of the monad (circle + center point) and the actual notion of a monad, this relationship may not be expressed clearly in a finite set of symbols, and the philosopher will likely note that the representation, the monad itself, and the relationship between them are all, in fact, aspects or manifestations of the original monad, in some unseen spooky way. Just trust them.

If one were to inquire on the nature of the relationship between the symbolic representation of the model of the monad (text right) and the actual notion of a model of a monad (small rectangle + contents), this relationship is expressed explicitly via the big red arrow.

One will note the representation of the model of this model (text top) does not point to the metamodel explicitly with an arrow or symbol, but rather assumes that this model does exist, and references it as such. The act of reference follows the form of a 3-system, in that there is a model, a referent to which the model refers, and *the reference itself*. The top text refers to the model of the model, and this referent is explicitly expressed all within the larger rectangle. The model of the model refers to the model of the monad, and the reference itself (big red arrow) is explicitly expressed.

The model of the monad refers to the monad; the monad asserts some self-reference implicitly, expressed as a function of the monad according to its modelled representation. Consider that the symbol which refers to the monad is precisely a symbol; the word "monad" is a symbol which itself is a referent of one's subjective notion of a monad. Bob thinks about monads, Bob refers to the word monad, Alice thinks about monads because Alice and Bob have an aligned notion of "monads". Both may refer to the symbol "monad" or the circle symbol as contextual reference points within their philosophical metamodels.

A metamodel refers to symbols that are aligned to other metamodels in such a way that the symbols are viewed as tightly correspondent to some given phenomenal models, and those phenomenal models are assumed to be understood by equivalent metamodels aligned to those particular symbols. Bob assumes Alice knows what a "monad" is when he uses the word, otherwise the word causes confusion (the mapping problem).

Bob models Alice as roughly analogous to himself, in that Bob and Alice both use metamodels to analyze phenomena. Bob consequently outputs a symbol which his own metamodel refers to as a proper symbol that reliably refers to particular phenomenal models as should be understood by metamodels that are roughly equivalent to his own. The metamodel refers to itself as a means of justifying the use of particular symbols to appeal to certain types of metamodels.

To refer to a monad without proper consideration of the nature of this reference, is to refer to God and assume that this reference holds.

To refer to a monad after ample philosophical consideration of the nature of this reference, is to refer to God and assume that this reference holds.

The reference loosely holds in any case.

### Counting to 1

1-systems offer promise of stability and unambiguous interpretation of the world. Despite their ultimately fallible nature as constructible systems, they tend to work well within specific domains, provided they adhere strictly to only that which they may claim to understand.

 $\underline{\underline{A}}$  considers itself to observe the unobservable in some limited (or perhaps unlimited) capacity. The relationship between phenomenon and representation thereof is the identity case; that they are ultimately one and the same, and the degree of utility/practicality in any given representation (or any phenomenon) is roughly determined by  $\underline{\underline{A}}$ 's relationships to the phenomenon and the end user.

Any observable or process is taken as a manifestation of  $\underline{A}$ .  $\underline{A}$  exists and causes/explains everything, therefore any observable thing is taken as necessarily dependent on  $\underline{A}$ , regardless of one's ability to properly demonstrate this dependence.

#### What's Next?

While stability is tempting, any attempt to observe the mechanics of a given 1-system inevitably results in the discovery that a model could never conceivably constrain and manage itself in such a way to account for all of its own shortcomings. A model is either infinitely precise and useful across all domains, or it has shortcomings and fallibility in particular domains. In those domains, the given 1-system is no longer valid, and its own self-assertion as "the explanation for all things" seems to fall short. If there exists a number after 1, it should come next.

### **Relation and Integration**

Relative to a given  $\underline{A}$ ,  $\underline{B}$  poses itself as an attempt to continue learning and understanding the anomalies of the Universe and reality.  $\underline{B}$  modifies  $\underline{A}$ 's self description by asserting  $\underline{A}$  as "the explanation for all things in a specified domain". The generalized case would be  $\underline{A}$  as an explanation for all things considered "known" to some degree, while  $\underline{B}$  serves as a process for considering relatively "unknown" phenomena.

This initial transformation in perspective emphasizes careful analysis of the relationship between a structure of knowledge and that which it intends to model. As previously demonstrated,  $\underline{A}$  asserts the relationship between phenomenon and representation as constrained by  $\underline{A}$  to be a proper relationship, but perhaps fails to ponder the nature/utility of this relationship to the relevant phenomenon.

#### Generalized Dualism

As follows from the previous explanation, monism corresponds to  $\underline{A}$ ; the model asserted by monism perceives the world as a consequence of that which monism intends to refer to. Dualism, meanwhile, understands monism as a useful perspective in particular cases, while also attempting to consider that which monism may declare as some illusion or fallacy rather than giving a proper explanation; that being the observable notion of multiplicity in the world around us. There are many things, and there should be an articulate reason as to why 1 thing appears to be many.

Per a meta-phenomenological interpretation of dualism, there are at minimum 2 useful perspectives to impose upon the world, that of monism and dualism. Any non-monistic interpretation may be considered as a manifestation of the suppositions of dualism: that multiplicity exists, and that monism is insufficient to explain this.<sup>[2]</sup>

Consider the relationship between religion and science. Religion focuses more on maintaining social coherence, self-regulation, and will of spirit, as these may only be "known" and understood per some given subject; alternatively, the scientific method intends to demonstrate a least subjective method to translate "unknown" questions about the world into "known" models. Science performs poorly in the realms of subjective value judgment by design, as does religion in the domains of objective practical inquiry. While religions, cultures, or ideas may assert themselves as objective, this is decidedly a subjective assertion in any case.

Interestingly, while science intends to study only that which is understood as a consensus phenomenon, the models that scientists develop must be constructible, falsifiable hypotheses that are subjectively understood and known by humans, as without this understanding the theories/phenomenal systems may certainly exist (or not) without being known. This necessity of subjective mastery is inseparable from the current state of scientific affairs, and this suggests an irreconcilable dependency on subjective values in order to make progress.

That which is unknown may only be perceived and integrated relative to that which is known. That which is known belongs to a phenomenal model of the greater unknown.

#### **Uncertainty Principle**

The uncertainty principle refers to a behavioral model derived as a means to explain the limits of our understanding of physics and signal processing, though the underlying logic may be applied to more generally understand the limits of measuring complementary observables.

One inherent complement of any given observable is a system of knowledge which intends to constrain the metric of observation and its significance to the corresponding behavior of the phenomenon. Adding constraints to the process of observation constitutes bounds on the extent of its reliability in various generalized domains.

A model which intends to model something very specific may not respond well to abstract generalized observables, as the constraints on this model provide domain-specific context and meaning to its processes and judgements. This meaning dissolves outside of the relevant domain of inquiry. Persistent, recurring states and behaviors of concrete judgements are better modelled by abstract features belonging to some external model.

A model which intends to model generalized principles related to a more concrete phenomenon may not respond well to making concrete judgements about the phenomenon itself, as concrete judgements require a concrete phenomenological system with constraints to properly respond to the relevant behavior as intended. The model in question intends to respond to abstract features and behaviors of the phenomenon, rather than concrete measurements regarding the nature/status of the phenomenon. The particular form and behavior of abstract features are informed by large sets of concrete judgements in any given instance.

According to this philosophical analysis of the uncertainty principle and its implications, one may observe the following set of principles that adhere to a generalized model of complementarity:

### Principles of Complementarity

- For any given observable X which adheres to a metric system A, there exists a complementary metric system B to which some observable Y adheres, where B constrains the utility of A.
- 2) For any given metric system, there exist trivial techniques to constrain it, including assessing A's ontological nature as an abstract model, and assessing A's utility across diverse domains.
- 3) For any given complementary system of observables X and Y, there exists an underlying structure M to their complementary nature, namely the particular relationship between the given metric systems A and B to which they correspond respectively. M responds to the observables X and Y, as well as their relationships to A and B, as a means to explain the underlying structure as a single unified model rather than an interaction of complementary metric systems.
- 4) M represents an optimal case of modelling the complementarity of [A, B, X, Y]. However, M adheres to Principle 1 as A does. For any known metric system M which models complementary systems, there exists an observable P which adheres to M, as well as a novel complementary metric system N with observable Q. This 4-system of [M, N, P, Q] is isomorphic/applicable to the initial structure consisting of [A, B, X, Y].

### Political/Gender Binary

The notion of dualism generally refers to a relationship between some thing, property, behavior, etc. and the negation or absence of that thing. The correspondence loosely holds from the  $\underline{A}/\underline{B}$  categorization to that of any conventional dualistic phenomenal model.

Political systems and values, particularly those of the modern United States in which the author resides, tend to align nicely to binary spectra as a means to distinguish groups along a *meaningful* axis.

Note that any set of entities may be categorized by any arbitrary set of constraints and labelled according to any arbitrary language. The goal of these binary spectra is not to create arbitrary categories for their own sake, but rather to identify meaningful spectra along which measurement might be a useful thing to do.

The dichotomy of "left wing" and "right wing" is not a well-defined categorization technique. Those who align more with a particular set of values than another are more likely to be categorized with that party to which those values correspond. People are not inherently "left-wing" or "right-wing" except by self-identification.

The distinction does not refer to a group of people, or a set of values, or a divine antinomy of reality. The label "left-wing" refers to those who generally value openness and social virtue, relative to those who might value conformity and personal responsibility more; these values, and therefore this definition, is subject to change. Much like in the philosophical fable of Theseus' ship, when the substrates of party values are inevitably replaced with new ones over time, the only pieces which remain are the labels themselves, "left-wing" and "right-wing".

The point of creating the distinction between "left-wing" and "right wing" is not simply to create an arbitrary model with no phenomenal correspondence to anything relevant. The point is to create a distinction which allows subjects to align their own interpretations of the given categories to the spectrum, provided that the spectrum and the interpretations of the categorical extremes are *meaningful*.

The labels do not point to anything concrete. They align meaning by allowing subjects to point to them as emergent properties of systems. Consider this sentiment as it applies to the following statement:

Left wing is girls ( $\underline{B}$ ), right wing is boys ( $\underline{A}$ ), loosely.

### Counting to 2

2-systems act as a counterbalance to the inherent instability and spontaneity that 1-systems inevitably manifest across diverse domains. 2-systems generally provide some novel process or technique that directly integrates anomalous information into a particular given 1-system, without necessarily intending to detail the nature of unknown phenomena beyond acknowledging their existence and relevance.

 $\underline{B}$  considers itself to represent the process of discovery and integration of the unobservable in some limited yet stable capacity. The relationship between phenomena and representations is modelled relative to the given  $\underline{A}$ , and the utility of a given representation under  $\underline{A}$  is determined by consensus application of  $\underline{B}$ .

 $\underline{B}$  intends to constrain  $\underline{A}$ , and may assert constraints on the domains in which  $\underline{A}$  is qualified to perform.  $\underline{B}$  may assert that some unobservable process/event is the source of consensus reality, yet to assert itself as the newfound source of Truth and reason relative to some initial  $\underline{A}$  will only force the user to inevitably treat this  $\underline{B}$  with the equivalent scrutiny of some  $\underline{C}$  as  $\underline{B}$  does  $\underline{A}$ .

#### Is This It?

 $\underline{A}$  is a model which intends to respond appropriately to one given phenomenon.  $\underline{B}$  is a model which intends to respond appropriately to one given phenomenon that is  $\underline{A}$ .

In the next section, let us continue by exploring how to construct and analyze some  $\underline{C}$  relative to *two* given phenomena: both phenomenological models  $\underline{A}$  and  $\underline{B}$ .

# **Meta Perspectives**

As  $\underline{A}$  considers the unknown,  $\underline{B}$  considers  $\underline{A}$ . As  $\underline{B}$  considers the unknown,  $\underline{C}$  considers  $\underline{B}$ , which necessarily considers  $\underline{A}$ . This new paradigm fundamentally asserts at minimum 2 external phenomenological systems  $\underline{A}$  and  $\underline{B}$  which may intend to respond directly to phenomena that are often only considered in some indirect fashion by  $\underline{C}$ .  $\underline{A}$  and  $\underline{B}$  serve as representatives of known information about the world, and  $\underline{C}$  intends to analyze the correspondence of each to their given expected domains of qualification/utility as well as the integrated relationship between  $\underline{A}$  and  $\underline{B}$ .

The key distinction of 3-systems is their inherent intentions to model multiplicity and complementarity directly as a part of the system.  $\underline{A}$  asserts that it corresponds to all phenomena within a given domain, and may address the nature of multiplicity internally within the constraints of  $\underline{A}$ , but given any particular phenomenological model X, one may assert that  $X \approx \underline{A}$  and there exists some  $\underline{C}$  relative to this  $\underline{A}$  which is external to  $\underline{A}$  and addresses the multiplicity of phenomenological models that are roughly equivalent to  $\underline{A}$ , namely  $\underline{B}$ , and trivially  $\underline{A}$ .

The multiplicity addressed by  $\underline{C}$  is necessarily abstracted from the principles upon which  $\underline{A}$  is founded, while the multiplicity addressed by  $\underline{A}$  is abstracted from the behavior of the phenomenon by an arbiter of observation, an end user or a group with some shared consensus about the phenomenon.  $\underline{A}$  addresses multiplicity of phenomenal behavior,  $\underline{C}$  addresses multiplicity of models equivalent to  $\underline{A}$ .

In this attempt to consider the relationship between  $\underline{A}$  and  $\underline{B}$ ,  $\underline{C}$  must consider that which allows for the multiplicity of models: *the model-maker*, the end user of representations and knowledge. Just as  $\underline{A}$  asserts its own ability to assess the "phenomenon-maker" (i.e. the Universe or the Creator) as a means to address multiplicity of phenomenal behavior and the dissonance of complementary causal explanations,  $\underline{C}$  asserts its ability to assess this "model-maker" as a means to address abstract multiplicity and the dissonance of complementary values.

### Meta-Undecidability

In general, the intent of any given  $\underline{C}$  is to provide perspective on some given  $\underline{A}$  that  $\underline{A}$  may not be capable of expressing or considering due to its inherent nature as a bounded phenomenological system. For  $\underline{A}$  to make claims about the nature of  $\underline{A}$  constitutes self-reference and would likely generate the mapping problem due to its unbounded self-referential requirement of justification; a given  $\underline{A}$  may only be considered useful when some entity points to it and claims that it is; else the given system is not "known" in any proper sense. This entity necessarily points to itself as a source of justification.

A given meta-perspective  $\underline{C}$  should not hold itself as "unbiased", though it often does, as does  $\underline{A}$ . The goal of  $\underline{C}$  is not to be "unbiased" per se but rather *independent* and *external* so as to remove any attachment to the value judgments posed by  $\underline{A}$  and  $\underline{B}$ .

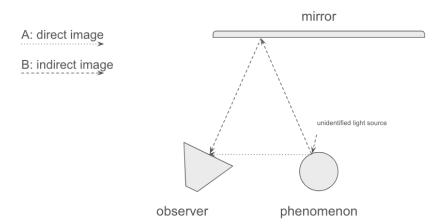
Moral relativism is a classic example of a meta-perspective which may hold itself as "unbiased" by asserting claims about the fallibility of all claims, thereby addressing/treating itself as an abstract description of all values. One may note the all-encompassing nature of this purported assertion; consider that the given claim "all claims are fallible" is itself a fallible claim that follows the same line of argumentation as the claims at the crux of Kurt Gödel's First Theorem of Incompleteness, which loosely purports that any given axiomatic structure is liable to external constraint.

In order to address the fallibility of this claim, one might assert 1 of 2 constraints:

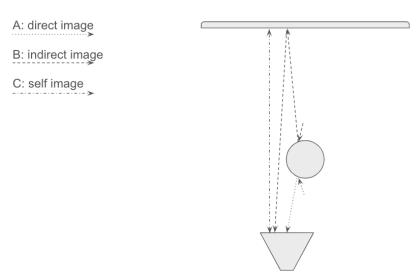
- 1) Not all claims are fallible; some claims are decidedly anti-fallible.
- 2) The metric of "fallibility" as purported by the claim is stochastic; the results are not always consistent and computable.

Moral relativism and any given  $\underline{C}$  may manufacture self-justification by asserting itself as a member of the anti-fallible class of claims according to the 1st constraint, yet the inevitable least fallible claim across domains is not mysterious, and it is generalizable: it is precisely the 2nd constraint which purports the fallibility of "fallibility". That which may be understood as a metric of successful behavior is itself a behavior that may be understood as fallible across domains.

### Infinity Mirror



Imagine a phenomenon which reflects light towards a mirror. The light bounces off the mirror and continues to scatter and fill up the room. If there is an observer in the room, they may observe the light which reflects off the mirror, and see an image of the phenomenon. This is precisely an *image* of the phenomenon as opposed to the phenomenon itself, and this perspective aligns with 1-systems, in that there is one pure relationship between the phenomenon and the observer.



Now the observer steps directly behind the phenomenon, rather than at an angle to the mirror, and notices an image of *themself*, *the observer*. One can justifiably reason in this instance that the image of the observer corresponds to some phenomenon, namely the observer, which is decidedly separate from the original phenomenon, as there exists the initial perspective where the image of the observer is out of frame and not visible to the observer, yet the image of the phenomenon remains.

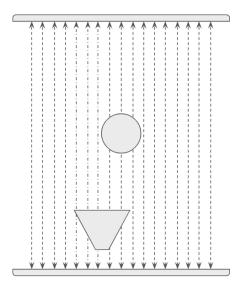
One may analyze this new perspective as corresponding to a 2-system, in that the observer recognizes that perspective which it observes, as well as the alternative perspective where the observer is not in the frame. This is directly analogous to  $\underline{B}$  considering an external perspective on  $\underline{A}$  which includes the original perspective  $\underline{A}$  as well as novel information corresponding to  $\underline{B}$ .

If it were the case that the new perspective provides no novel information, in that the quantity of observables remains constant as a 1-system, then the new perspective is decidedly equivalent to the original perspective, save for the subjective qualitative experience of the perspective. If  $\underline{B}$  observes  $\underline{A}$  as a system yet makes no further claims about its nature,  $\underline{B}$  inherently provides no utility, as  $\underline{A}$  asserts itself confidently, and  $\underline{B}$  may only constrain the utility of  $\underline{A}$  by observing its behavior indirectly and externally.

A: direct image

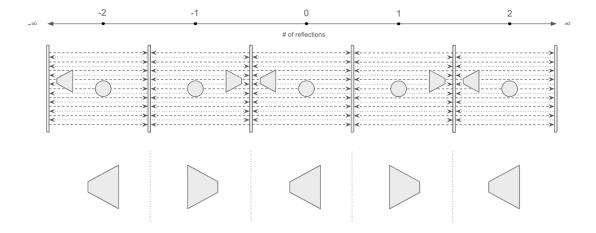
B: indirect image

C: self image



Imagine now that the observer provides another mirror  $\underline{B}$ , and places it behind the phenomenon, directly in line with it and the first mirror  $\underline{A}$ .

The observed effect is known as an *infinity mirror*, where the light from the phenomenon bounces between the mirrors, and each bounce of the light precisely corresponds to another perceived layer in what becomes a seemingly infinite set of mirrors and phenomena. So long as information travels back and forth continuously between  $\underline{A}$  and  $\underline{B}$ , the series of mirrors continues expanding with no coherent notion of any process to constrain/bound this behavior into some finite domain.



This is the nature of 3-systems, they tend to express nuances of the given phenomenon in a limited capacity, necessarily analogous to the very limited correspondence any particular image may have to the nature of the phenomenon to which it is associated. C models the model-maker as that which articulates upon some perspective via its given limited correspondence to the phenomenon.

To assert the model-maker's capacity to observe the behavior of the phenomenon as unbounded, unlimited, or True in any sense is to assert a monistic interpretation, which corresponds more tightly to some  $\underline{A}$  rather than a  $\underline{C}$  relative to an  $\underline{A}$ .

As all phenomenological models are models that assert themselves as useful, any given phenomenological model X may be understood as some  $\underline{A}$ ; the very notion of this described understanding corresponds to a version of  $\underline{A}$  in that all phenomena X are inherently modelled as some version of  $\underline{A}$ . Any  $\underline{C}$  may be modelled in some limited capacity as  $\underline{A}$ ; however the unique nature of  $\underline{C}$ 's externality to the given  $\underline{A}$  and  $\underline{B}$  provides specific insight into the very nature of insight and model-making itself.

Roughly,  $\underline{C}$  posits that the thing in the middle of the mirrors exists relative to the mirrors, as one may observe the unified image of both the mirrors and the phenomenon in the same context under  $\underline{C}$ . Observing a single mirror results in an image of the phenomenon; observing 2 mirrors reflecting off one another results in an inherently recursive manipulation of some original image which corresponds to the given phenomenon. The recursive nature of the image provides insight into the nature of the interaction between the given  $\underline{A}$  and  $\underline{B}$ , namely that the interaction of any given  $\underline{A}$  and  $\underline{B}$  results in an image which adheres to some nontrivial manipulation of the original phenomenal image.

 $\underline{C}$  also posits that the mirrors exist independently relative to the phenomenon, as one may observe the removal of the phenomenon from between the mirrors and consequently note the lack of any observable phenomenal image. The same is true with a system that includes only one mirror, however perhaps the case of infinity mirror analogy marks an ability to bound some observable notion of unboundedness, if only when that unboundness is decidedly reducible to some simpler bounded behavior. In this case the manifest observable image is reducible to some function of the given image of the original phenomenon, as opposed to some unforeseen emergent property of the phenomenon-mirrors system causing the unbounded image distortion.

### Holy Trinity

The Christian concept of the Holy Trinity presents itself as a prime example of a 3-system: The Father corresponds to A, the Son corresponds to B, and the Holy Spirit corresponds to C.

Consider this analogy as it corresponds to the Freudian model of the human psyche: ego, id, and superego, respectively.

Consider any analogies which may correspond to the given schematic principles of 3-systems.

Consider these analogies considered.

The first sentence in this subsection corresponds to a 1-system  $\underline{A}$  which reflects the unified nature and ontology of 3-systems.

The second sentence corresponds to a 2-system  $\underline{B}$  which integrates novel information relative to the given  $\underline{A}$ .

The third sentence corresponds to a 3-system <u>C</u> which generalizes the notion of information integration as it relates to the ontology of 3-systems.

The fourth sentence is depressing and meaningless; and yet, there is a fifth sentence.

The current concrete topic is the Holy Trinity, which was only mentioned explicitly in the title and first sentence of this subsection. The rest of these sentences are abstract jargon which pretend to talk about the Holy Trinity via some abstract correspondence.

Consider analogies to this situation; consider these analogies considered.

### Counting to 3

 $\underline{C}$  recognizes the nature of models, model-makers and the relationship between them. A given  $\underline{C}$  may pose some  $\underline{A}$  and  $\underline{B}$  relative to each other, and analyze their relationship.  $\underline{C}$  recognizes in some limited capacity that  $\underline{C}$  is a model created by a model-maker, and may assert limited statements on the nature of its own relationship to the model-maker by means of assessing other models' relationships to the model-maker and abstracting some generalized nature of relationships to model-makers.

 $\underline{C}$  asserts that relevant unobservable phenomena are observed by  $\underline{A}/\underline{B}$ , and the relevant observables are  $\underline{A}$  and  $\underline{B}$ . The relationship between unobservable phenomena and observable representation is precisely understood as an *abstract relationship*, a system of models which allows for indefinite accumulation of noise and unrestricted sensitivity to environmental conditions, which may collectively distort a given phenomenal image into some final output image that the inferred "end user" may "observe" by an undescribed process (consciousness).

<u>C</u> asserts that this paper sucks and it's too long; <u>Metamodels for End Users</u> was better.<sup>[3]</sup> The current paragraph is simply to inform and justify to the reader that a conscious human being wrote this essay in the year of Jesus Christ 2024. This is also just a funny place to switch the tone of the writing entirely. It's almost like there are no rules.



Which one is the symbol, and which one is the object?

How do you know this?

#### It's So Over

The particularly limited nature of  $\underline{C}$ 's scope and applicability is a prime catalyst of moral relativism, and consequently profound nihilism. The overarching point of this essay makes itself: there is some  $\underline{D}$  to some  $\underline{C}$ , and perhaps some  $\underline{E}$  to some  $\underline{D}$ , and so on. The intent of this entire hand-waving demonstration is not to assume the reader is a child who cannot abstract out what's going on.

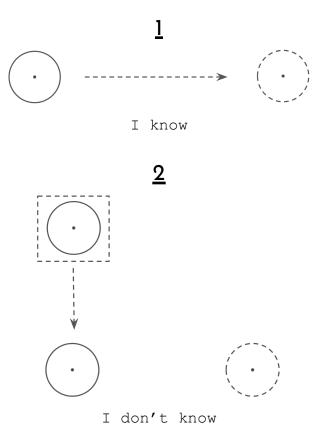
The recursive nature of the arguments was clearly detailed in the Principles of Complementarity from Section 2, as well as in the title of the paper "How to Count to 4 and Do It Again". This recursive behavior was again probed indirectly via the Infinity Mirror metaphor, while the dangers and tedium of nihilism were demonstrated in the riveting analysis of the Holy Trinity. One must inevitably move forward in pursuit of rigor and consider the most pressing matter at hand:

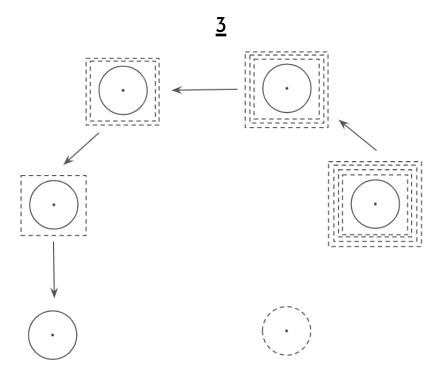
What comes after 3?

# Symmetry and Complexity

The overall intent of the integer-based categorizations of N-systems is to demonstrate a particular behavior which is loosely observable from an external perspective. Consider the following statements and images which intend to correspond to some relatively articulate behavior/feature of N-systems for each given number N:

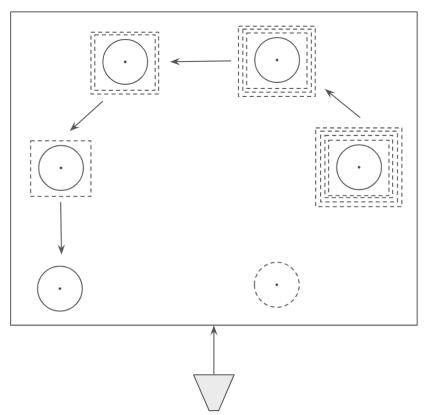
- 1) I know
- 2) I don't know
- 3) I really don't know
- 4) I know that I don't know
- 5) I am in relation to myself
- 6) It is in relation to me
- 7) It is in relation to itself, each is in relation to its own
- 8) Each is in relation to another, I and it are in relation to relations



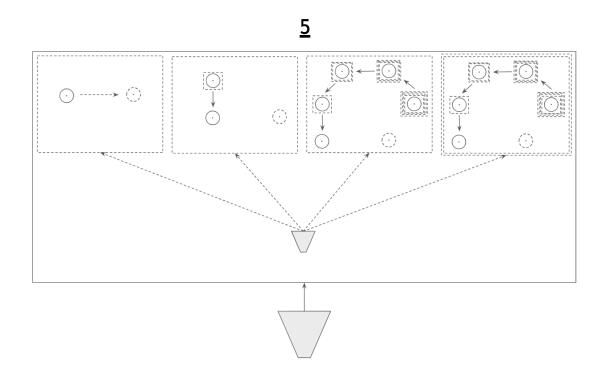


I really don't know

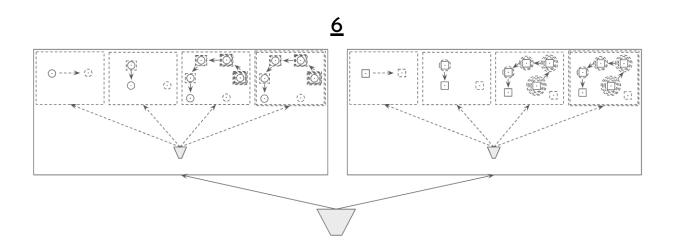




I know that I don't know

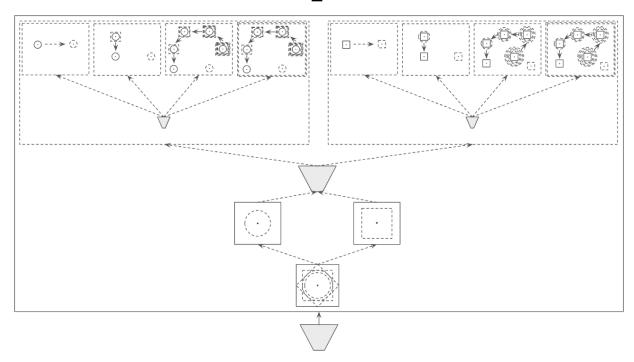


I am in relation to myself

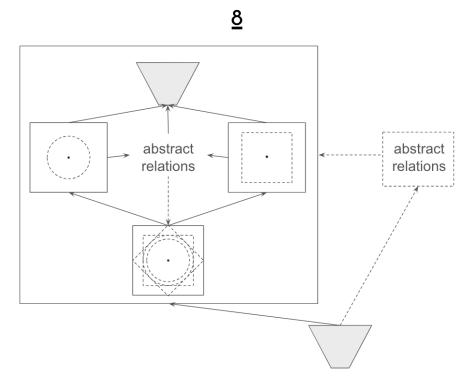


It is in relation to me

<u>Z</u>



It is in relation to itself, each is in relation to its own



Each is in relation to another,
I and it are in relation to relations

This system generates a series of recursive models that form abstract perspectives, each relative to the previous. The intent of any N-system is to observe and expound upon the nature of a given phenomenological system by including information that exists external to the given (N - 1) system.

As the integers are countably infinite, so too are the capabilities of this meta-phenomenological categorization according to the integers. The main bound on this system's progression is utility.

Imagine a phenomenon, and consider a simple model of it. We'll call this "counting to 1". Imagine "counting to 20" based on the techniques described in this essay. Construct  $\underline{A}$ ,  $\underline{B}$ ,  $\underline{C}$ ,  $\underline{D}$ , etc. all the way to  $\underline{T}$ .

This is an inconceivably abstract task with little to no generalizable utility. <u>C</u> directly addresses the limits of unbounded recursion, and yet the task at hand requires 20 separate recursive models which intend to correspond to "unique, meaningful" information.

This is all an effort to establish the diminishing returns on the meta-structure presented here. "Counting to 20" is perhaps possible, and it is quite possible to write an essay about how to go about "counting to 20"; yet this strategy necessarily involves enormously complex self-referential statements and computations about the nature of observable natures of things. "Counting to 4" is tedious enough.

In most situations, "counting" higher than 4 is intractable, as the 4th instance of this recursive process involves observing that which justifies the model maker, namely positive qualitative subjective experiences/frameworks. To justify any model's self-assertion beyond that of some meta-optimization towards a specific goal in a specific domain, one must justify the very notion of constructing any such goal and maintaining this pursuit of desire, as opposed to simply having less goals in order to conserve energy.

Goals are decidedly goals by their nature of being inaccessible/distant to the subject. For a subject to construct a goal and persist towards it, there must be some subjective understanding that this goal is a valuable goal. The subject must justify any metamodel of knowledge systems as a *good* model; True, rigorous, proper, optimized, etc. A subject must observe a model, regardless of the nature of the model's maker, and label the model as relevant, so as to intentionally pursue the goal(s) that the model presents as desirable.

The key is that metamodels present knowledge as the desirable goal. The end result of this process is infinite information within a single specified domain, based on the  $\underline{A}$  on which the model is founded. Infinite information is not desirable. *Optimized information* is desirable.

Rigor and complexity are good. Brevity and clarity are good. For any assertion of value, there exists a complementary assertion that is equally valid in some regard, yet contradicts the original assertion.

If an original statement has no complement/opposite, it provides no relevant information content as the values on which it is based may not be falsifiable. A valid complement to the previous sentence would be "original statements may take on many distinguishable meanings, and subjective analysis of the relationship between its meanings may demonstrate some novel complementary nature; objective falsifiability is technically not inherently correspondent to Truth or meaning." So we still eventually arrive at a self-contradiction (one coherent statement with many distinguishable yet relevant meanings), then back at  $\underline{\mathbb{C}}$ , relativism.

In this regard, any set of subjects who may label a given phenomenal model X as valuable corresponds to an entity  $\underline{A}_1$  which models X itself as well as that to which X corresponds.

$$X \approx \underline{A} < \underline{C}$$
;  $\underline{D}$  \* n subjects  $\approx \underline{A}_1$ 

The author will not bother to explain the meaning of this equation in words; the marvel is not that it is necessarily rigorous but rather that it is *relatively coherent and generalizable*.

#### Four Noble Truths

The Four Noble Truths are a set of principles related to self-discipline from Buddhism as follows:

- 1) Suffering happens and is largely inevitable.
- 2) Desire and suffering have a meaningful integrated relationship.
- 3) There exists an accessible path to achieve subjective cessation of desire.
- 4) The path is subjective yet may be traversed reliably in discrete steps (Eightfold Path)

#### Consider the following statements:

- 1) A phenomenon may exist, according to an observation.
- 2) Desire of phenomenal knowledge and justification of a phenomenon's existence/coherence have a meaningful integrated relationship.
- 3) To stop desiring knowledge is to see everything as it is genuinely presented subjectively.
- 4) Subjective experiences appear to align nicely to the integers due to the intrinsically discretized nature of observations relative to the fluid phenomena they observe.

The Four Noble Truths are a 4-system which refer to an 8-system. All N-systems refer to a 1-system as all N-systems are decidedly N-systems, and the notion of N-systems is observable via a unified (1) subjective perspective. All 1-systems generate meaningful N-systems which should recursively refer to the given 1-system for any number N.

### Thing Theory

**Thing Theory** is an explorative attempt to model metacognition and integration of complementary perspectives. The principles are defined as follows.

Any given "thing" to which an observer may refer manifests some relationship with:

- 1) a coherent phenomenon
- 2) a system of states/behaviors
- 3) an end user/perspective
- 4) a domain of qualification/utility

The coherent phenomenon which is observable for any given thing is labeled as "thing-ness"; this is treated as a monadic property with quasi-objective qualities.

The system of states which is observable for any given thing corresponds to the number of categories in the given phenomenological N-system to which the end user refers.

There is no end user that may observe *any* given thing, however for any given observable there exists an observation technique and an observer of the technique's output.

No thing has unbounded qualification/utility, however a model may include a limited representation of its own qualification/utility in specific domains.

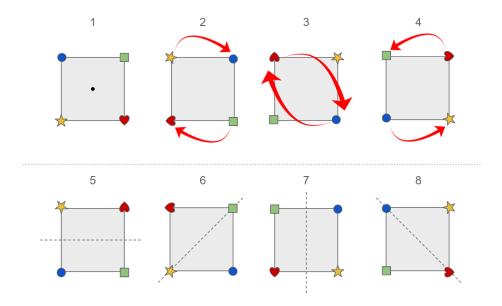
Every abstract knowledge model in the history of cognition on Earth was decidedly the result of an intentional process performed by a human. The justification for any given model depends on 1) predictive power 2) careful thought and expert analysis.

Outside of the demonstrable predictive power of Thing Theory and the counting technique to practically analyze phenomenological models, these models assert the counting numbers as a least reducible symbolic structure to which the underlying metamodel intends to align itself. Any observation made according to these models will allow the user to understand and categorize any given phenomenological system in terms of integer-based principles, rather than based on words or intuitions alone.

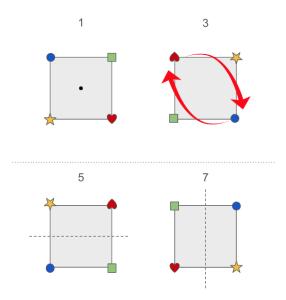
The author also posits that the author performed careful thought and expert analysis.

$$2 + 2 = 2 * 2$$

Consider the dihedral group D4 from group theory, the set of symmetries of a square.

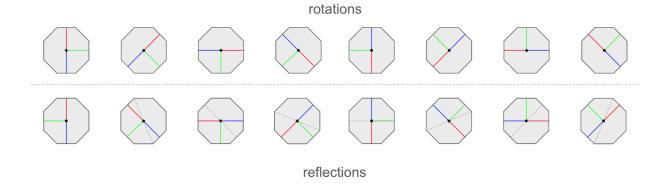


Consider the subgroup V4, the subset of symmetries for a rhombus or rectangle.

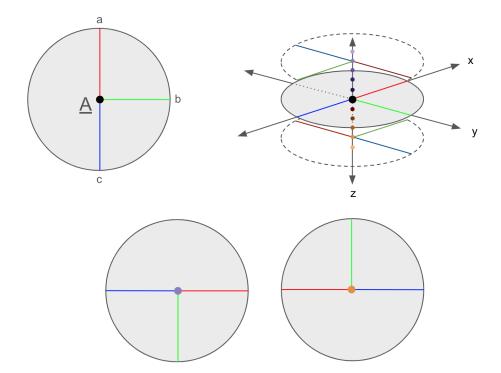


D4 contains all elements of V4 by definition, as well as another set of elements including 2 90° rotations and 2 diagonal reflections. V4 is a group, and D4 is another group which includes V4 as well as the other members which align to a redefined group action based on novel emergent symmetries manifest in D4.

For any n-sided regular polygon, there exists 2n symmetries on the polygon: n reflections + n rotations. Reflections include stabilizers (points that don't change with respect to a given symmetry) within the group, while rotation stabilizers exist at the origin relative to the polygon.



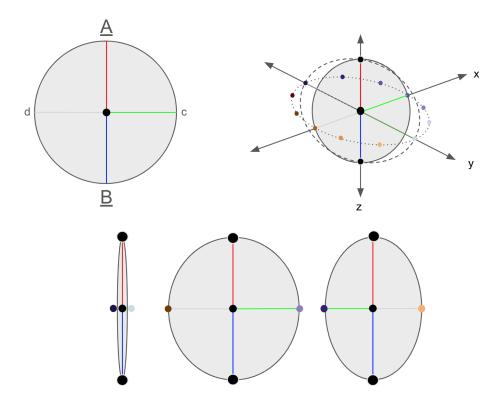
Consider a model which compares phenomena to one another and asserts its own relationship to each of them, while asserting its own stability and correspondence relative to the set of phenomena.



The lowercase letters refer to the relevant phenomena modelled by  $\underline{A}$ . The purple and orange dots may refer to discrete periodic states in the phase space of  $\underline{A}$ , e.g. members of a group, or purported maps constructed by a model onto the set of phenomena. The diagram aligns points on the vertical Z axis to rotations of the given shape.

Given an N-system and N phenomena, there exists N! potential maps from symbols to phenomena. An arbitrary symbol may correspond to any of N phenomena, however any mapping which includes this particular correspondence must map any of the remaining symbols to one of (N-1) phenomena, as each symbol must demonstrate a unique correspondence to constitute a proper bijection on the set of phenomena. Any mapping which includes these 2 correspondences maps some other symbol to one of N-2 phenomena, etc. This process results in N\*(N-1)\*(N-2)\*...\*(N-(N-1)) = N! potential mappings between a set of N phenomena and N symbols.

Consider a model which includes itself and some complement as a member of the set of relevant phenomena to observe.



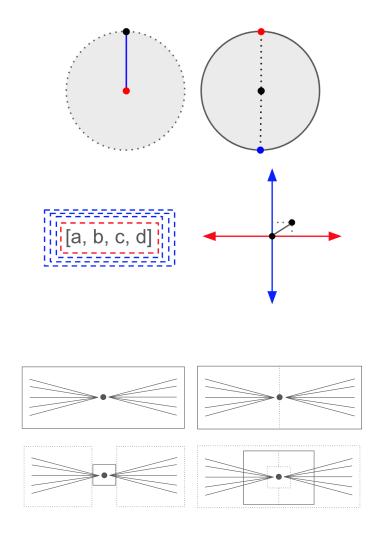
From this perspective, any reflection is a 180° rotation about the Z (vertical) axis, and the points on the X-Y plane corresponding to rotations about the Z may refer to some meaningful *stretch transformation* of the given shape, as viewed relative to the original X-Z plane. Note the colored dots on either side of each example on the bottom row, denoting the 2 endpoints that mark the particular diameter of the rotated circle embedded within the 3-d space, while the ellipses represent the distorted projection onto the X-Z plane.

Reflections demonstrate exploration of phenomena and their mappings relative to a model and its complement, allowing for increased stability/constraint on the potential structures of mappings. Rotations demonstrate periodic behaviors which may contain abstract information content corresponding to the sets of mappings to group members that are being manipulated.

Rotations are for boys, reflections are for girls, loosely.

Any given model and its complement may be observed as:

- 1) a coherent system of models
- 2) a model and its complement
- 3) a collection of observations
- 4) a novel event of complementarity



### Counting to 4

4-systems act like 2-systems in that the given pair  $[\underline{A}, \underline{C}]$  may correspond to some 1-system  $\underline{A}_1$  with the pair  $[\underline{B}, \underline{D}]$  corresponding to some 2-system  $\underline{B}_1$  founded upon  $\underline{A}_1$ .

The key difference between 4-systems and 2-systems is marked by the multiplicity of multiplicities. 2-systems analyze one singular model relative to another, while 4-systems analyze a pair of paired models in an effort to consider the nature of multiplicity and complementary behavior under a singular coherent meta-phenomenological system <u>D</u>.

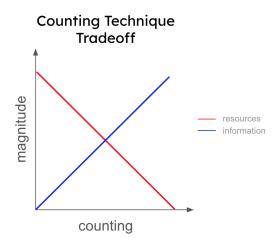
 $\underline{D}$  is loosely equivalent to  $\underline{B}$  and  $\underline{C}$  in that it asserts the unobservable as such (while  $\underline{A}$  might reject this claim), yet  $\underline{D}$  asserts itself confidently in a particular domain as  $\underline{A}$  does. Generally,  $\underline{D}$  has some rigorous assessment included in  $\underline{C}$  and  $\underline{B}$  which distinguishes it from  $\underline{A}$ , yet the inevitable conclusion of any constructible  $\underline{D}$  with observable utility is that this  $\underline{D}$  will consequently be taken as some  $\underline{A}$  according to any subject which observes its superior utility.

"Counting to N" generates some optimized 1-system, and all 1-systems generate N-systems via "counting to N".

#### We're So Back

The purpose of "counting to 4" is not to do it again. "Counting to 4" is an intentional process which requires resources such as time, space, energy, and in some cases, money. Doing it again requires more resources.

The goal of doing it again is to trade resources for information. If the goal is information, do it again. If the goal is resources, stop "counting" and gather resources, for scarce resources are precisely that which do not exist solely in abstractions. If the goal is resource/information management, "count" to the highest number that is consistently executable, then execute on that model and start over. 4 is good; sometimes more or less, but 4 seems right.



#### Recursion and Self-Reference

The underlying assumption with using this counting technique is to consider all known models as precisely models, which may diminish their relations to reality and conscious qualia. Generally, any given system  $\underline{A}_n$  may refer to a set of sub-processes  $[\underline{A}_{n-1}, \underline{B}_{n-1}, \underline{C}_{n-1}, \underline{D}_{n-1}]$  which compose it, and this  $\underline{A}_n$  may generate a meaningful set  $[\underline{A}_n, \underline{B}_n, \underline{C}_n, \underline{D}_n]$  that acts as the referent to some  $\underline{A}_{n+1}$ . The nontrivial exceptions to this principle may be observed in 1 of 2 cases:

- 1) The given  $\underline{A}_n$  refers *directly* to some interaction/event of conscious qualia.
- 2) The purported  $\underline{A}_{n+1}$  may be referred to *directly* by a sufficient set of end users.

In the first case, the set  $[\underline{A}_{n-1}, \underline{B}_{n-1}, \underline{C}_{n-1}, \underline{D}_{n-1}]$  refers to conscious qualia, which would decidedly purport some novel information addressing the hard problem. The counting technique breaks down in this case, as it does not purport to address the hard problem.

In the second case, the set  $[\underline{A}_n, \underline{B}_n, \underline{C}_n, \underline{D}_n]$  is represented by a set of meaningful symbols. The representation can be as such  $(\underline{A}_n, \underline{B}_n, \underline{C}_n, \underline{D}_n)$ , or it may exist in some other capacity. The key is that the purported  $\underline{A}_{n+1}$  must be a *meaningful progression* upon  $\underline{A}_n$ ; To continue "counting" without purpose or constraint will necessarily generate a rather meaningless string of models with no integrated context. In this regard, any  $\underline{A}_{n+1}$  that may be accessed through means more efficient than the counting technique should decidedly avoid the counting technique, as it necessarily demonstrates its own relatively inferior utility in some particular domains, namely these 2 described exception cases.

# Recursion/Recontextualization

 $\underline{D}$  generates a model of the set of all relevant models, including itself, as a means to holistically analyze a phenomenological structure. Consider an  $\underline{E}$ , which considers this set of  $[\underline{A}, \underline{B}, \underline{C}, \underline{D}]$  as a set of phenomena [a, b, c, d]. The nature of the phenomena is dependent on the nature of the given  $\underline{A}$ , and  $\underline{E}$  asserts that there exists a multiplicity of potential 1-systems, and consequently a multiplicity of 4-systems founded upon those 1-systems, which may equivalently correspond to the same relevant phenomena as  $\underline{A}$ , while also providing equivalent utility.

 $\underline{A}$ 's given role is severely diminished at this point; it intends to assert itself as a unified model of some set of phenomena, yet by simply "counting to 5" it must necessarily generate some valid  $\underline{E}$  which directly contradicts this by asserting a multiplicity of potential equivalent 1 systems. While "counting" past 4 might be applicable in certain cases, there seems to come a natural stopping point when one has considered a phenomenon properly from various informed perspectives and integrated the information in a meaningful way to take further action.

## Halting/Self-Reference

As stated, the goal of this philosophy is to develop a structure that may be applied *with proper constraint*. "Counting to 20" in any case would be quite an ambitious task, if not entirely exhausting and lacking in any proper utility beyond the pursuit of rigor.

The intent is to assert a meaningful phenomenological structure which does not necessarily apply in any *proper* way to all systems, yet it does intend to apply directly to all domains/systems which claim to assert any proper knowledge of all systems, e.g. phenomenology and religion.

Consider the halting problem presented by Alan Turing and Alonzo Church. This problem presents a categorization problem fit for a 2-system, all those algorithms that reliably halt, and all those that do not. The first category H (for "halt") includes all algorithms that run on your computer in a finite amount of time, perform some process or return some output, then *halt*.

The second category L (for "loop") should include all those algorithms whose execution does not necessarily halt in a finite amount of time. The trivial demonstration of this idea looks like this:

while True: pass

This code demonstrates:

- 1) an assertion of valid parameters (True)
- 2) a loop with a required parameter to check (while)
- 3) a "do-nothing" action (pass)
- 4) a valid class L algorithm

Unless there exists some God-given way to check all algorithms at once, the only known way to check all algorithms is to *check all algorithms*. Some algorithms decidedly take time to run before one may categorize them properly, so one must run every algorithm with the ability to *predict* that a given algorithm will not halt. If one had genuine ability to predict the nature of any given algorithms as described, this would trivially solve the halting problem.

Loosely speaking, unless the solution to the halting problem exists, it doesn't exist. To continue considering the halting problem despite maintaining an understanding of this undecidability is to refer to God and assume that this reference may or may not hold.

Consider Russell's paradox, a.k.a. the barber's paradox, presented originally by Bertrand Russell. This problem presents a categorization problem fit for a 2-system, all those sets who do not contain/reference themselves, and those that do (or those who do not cut their own hair, and those who do, if you're a freak like the author). The first category N (for "normal") includes all those sets which do not reference themselves, they only require an end user (a barber) to represent/reference them accordingly, then *halt*.

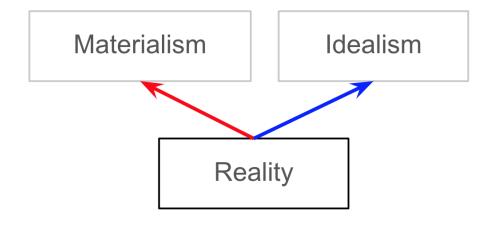
The second category A (for "abnormal") should include all those sets which may reference themselves in some form, the simplest demonstration of this being that a given set may be referenced by a particular symbol which also happens to be referenced by/included in the set itself. How to go about articulating or computing any abnormal set is well beyond the scope of this philosophy, what is relevant is the intuitions behind the unboundedness of class A sets and class L algorithms.

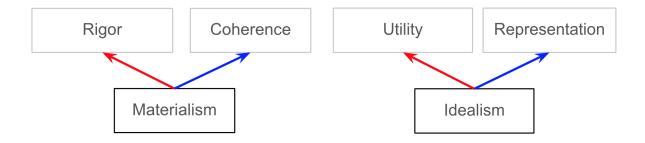
The key to the halting problem is that the general class L contains an uncountably infinite set of algorithms that have yet to be categorized, and the problem suggests any attempt to constrain the set of class L algorithms under some meta-algorithm is precisely an *algorithm* that is yet to be categorized, generating a paradox by recursion and self-contradiction.

The key to Russell's paradox is that the general class A contains an uncountably infinite set of sets that have yet to be categorized, and the paradox suggests any attempt to constrain the set of class A sets under some meta-constrained set of entities is precisely a *set* that is yet to be categorized, generating a paradox by recursion and self-contradiction.

## Metamodels

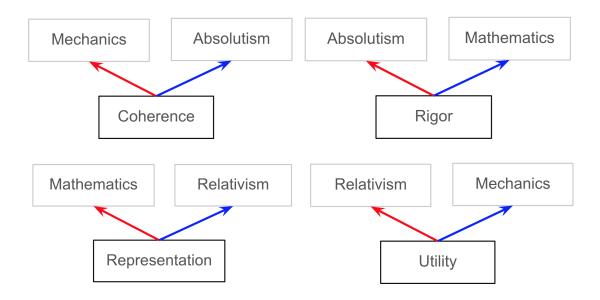
Consider the progression of diagrams on the following pages as it expresses the recursive nature of human phenomenological models of reality. Red is for boys, blue is for girls, loosely.



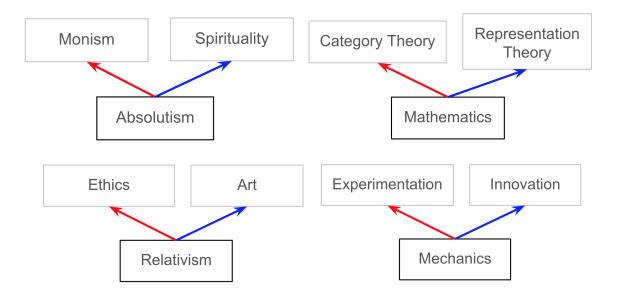


At first, these distinctions seem trivial, if not motivated.

Observe the following 4 diagrams as they relate to one another: the red arrow of any given diagram references that which is referenced by some blue arrow in one of the other 4 diagrams.



Let us expound upon this emergent cyclic pattern by demonstrating equivalently rigorous consideration of the new set of models.



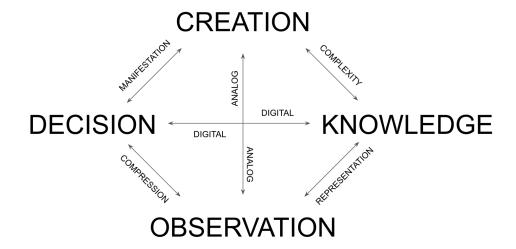
Spirituality Monism Absolutism Coherence Rigor Materialism Innovation **Category Theory** Reality Mechanics Mathematics Experimentation Representation Theory Idealism Utility Representation Relativism **Ethics** Art

All together now, these models integrate to construct the following metamodel:

Each red arrow denotes a distinction corresponding to some  $\underline{A}$ , relative to some  $\underline{B}$  denoted by a complementary blue arrow; each complementary mapping roughly follows from the first diagram, which demonstrates relatively materialist frameworks as corresponding to red and relatively idealist frameworks corresponding to blue.

<u>C</u> marks the potential for unbounded progression of this dichotomous process, while <u>D</u> manifests as *this particular diagram* relative to any other equivalently constrained diagrams.

Consider the analogous structure presented as a primary crux of Thing Theory:



The 2 diagrams on the previous page both demonstrate a pattern which intends to correspond to itself in the following manner:

Absolutism : Coherence :: Creation : Manifestation

Mathematics : Rigor :: Knowledge : Complexity

Relativism : Representation :: Observation : Representation

Mechanics : Utility :: Decision : Compression

Note the intended correspondence between each of the 4 emergent models from the cyclic set to the *idealist* value which precedes it. Each choice of words for each diagram represents not a specific definition, but rather a *relative meaning* within the context in which it may be observed.

This intentional decision by the author attempts to suggest underlying wave mechanical properties of models; Consider the Nyquist-Shannon sampling theorem, which asserts that in order to model a wave-like observable signal by digital means, one must accurately sample the signal at twice the rate of the desired maximum frequency for some range of frequencies.

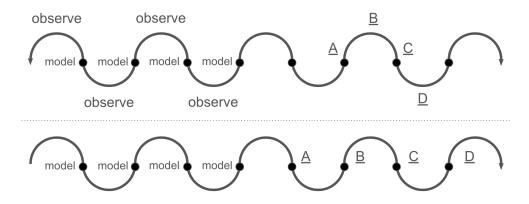
In practice, digital audio equipment employs standard sample rates which correspond to 2 times the highest possible frequency that the given sample rate may reliably represent. Humans generally demonstrate a frequency range of around 20Hz to 20kHz within which they are able to perceive sound, therefore the standard sample rate must exceed 40kHz; common sample rates start at 44.1kHz and continue with 48kHz, 96kHz, 192kHz etc. These higher rates are primarily used in professional audio recording settings. Higher sample rates may not necessarily produce meaningful differences in perceived audio quality, however the goal of capturing high-fidelity audio in a recording studio eventually includes manipulating and processing the signal, which may produce noticeable differences as the processing complexity scales depending on the quality of the raw audio.

Noisy signals are simply less unique relative to the *noise floor*, a concept denoting the *identity case* of a high-volume signal, that of a perfectly noisy signal with constant amplitude across all frequencies of the given spectrum. Clean, high-fidelity audio is a goal that may be achieved by means of professional equipment and techniques, however this is merely a goal that some arbitrary entity may construct. The goal of recording music is not precisely to capture high-fidelity audio, but rather to capture *meaningful* audio. Meaning is neither unique nor common, therefore high-fidelity audio recording practices are neither required nor dismissable.

Given any initial set of phenomena modelled by some  $\underline{A}$ , there exists some set of symbols posited by  $\underline{A}$  which each purport some contextual relationship to the particular phenomenon to which it is mapped. In order to maintain coherence with the given metamodel  $\underline{A}$ , a set of symbols may also be partitioned into subsets, e.g. sentences, paragraphs, books, axioms, degrees of freedom, qualitative experiences, musical rhythms, textures, models; any discernible thing.

This set of symbols intends to correspond to a metamodel of the phenomenal models in some meaningful way. These symbols may temporarily act in place of rigorous observable articulations of the phenomenal models themselves; however, any attempt to articulate observations inevitably results in a model framework. Meaningful symbols must correspond to meaningful frameworks, and meaningful frameworks must demonstrate meaningful symbols.

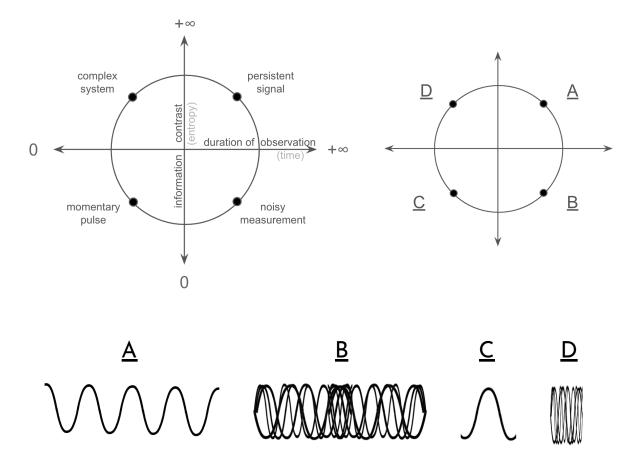
The "counting" framework demonstrates a structure which intends to indirectly model itself by asserting perspectives which correspond directly to a least reducible meaningful construction, the integers.



Note that the constructs [A, B, C, D] may correspond to either the nodes of the signal (representing a convergence of abstract activity; an emergent model), or the complementary dual process of experiencing observations and generating models of the experience. In theory, some construct which maps to the top wave diagram might serve as a model of some construct which maps to the bottom diagram, via an extrapolation from the foundations of the Nyquist-Shannon theorem: the purported models occur twice as frequently on the top wave relative to the bottom wave, which may justify some intent to sample semantic content that directly corresponds to to the connections between the given nodes on the bottom wave.

This relationship further demonstrates the complementarity of all models as suggested by the Principles of Complementarity; the models asserted by Thing Theory as well as the counting technique intend to directly address this general irreconcilability of uncertainty across domains.

#### Uncertainty Principle of Wave Mechanics

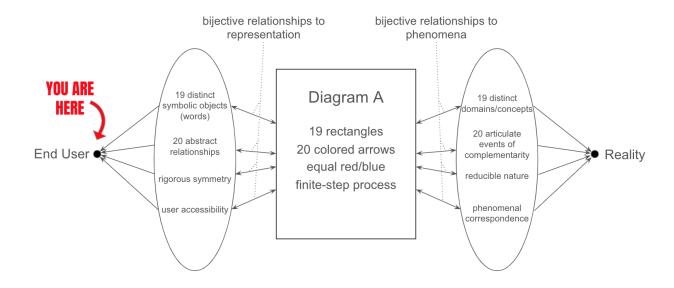


Metamodels intend to demonstrate relevant bijections between observable instances of complementary models, in an effort to maintain coherence and simplicity. For each red arrow, there is a blue arrow, and metamodels should intend to capture these particular symmetric behaviors. The nature of representation is not relevant; one need not use red and blue arrows, or any particular systematic language, to denote bijections other than to confidently assert that the bijective property is manifest phenomenally and representatively.

Constructing models and metamodels is a process that may continue without bound as demonstrated, and any attempt to demonstrate these bijections as such inevitably results in some asymmetric relationship to the relevant phenomena, in that demonstrations of models are inevitably the result of a collection of representative symbols, and these symbols may only *purportedly* manifest a bijection upon the set of relevant phenomena. The symbols suggest the phenomena, but the phenomena do not necessarily suggest the symbols.

The demonstrated bijection in the diagram is the 1:1 correspondence between red and blue arrows, as a means to justify the meta-claim "There exists a  $\underline{B}$  for every  $\underline{A}$  and vice versa."

The necessarily intended bijections which are indirectly demonstrated by the metamodel are its own correspondences to both the phenomena and the end user. Consider the following diagram, which refers to the previous metamodel diagram as Diagram A.



# Counting to 0

"Counting to 0" is the trivial *identity case*; you are "counting to 0" right now, and always. You are also arguably "counting" to other numbers in a way that is directly analogous to the counting technique presented in this paper. 0 is the absence of content, a placeholder for a dimension that demonstrably exists but may not be applicable in all cases. This essentially denotes an origin from which the counting process arises; however, if the author were to claim that "counting to 0" is an articulate process, this claim would more so be demonstrating "counting to 1" by operating on the given assumption that passive awareness is decidedly a process that may be articulated. "Counting to 0" is exactly, precisely what *you* believe it to be.

#### Where are We?

The author is not quite sure; who's to say? Perhaps the diagram on this page will suffice.<sup>[4]</sup>

\_\_\_\_\_

### Works Cited

- [1] Bailey, Justin. "Thing Theory: An Explorative Approach to Phenomenological Analysis (or 'Doing Math on Words')." Mind Math & Music, 29 Feb. 2024, www.mindmathmusic.com/philosophy/thing-theory.
- <sup>[2]</sup> Bailey, Justin. "Introduction to Metamodels as Generalized Structures" Mind Math & Music, 20 Apr. 2024, <a href="https://www.mindmathmusic.com/philosophy/metamodels">www.mindmathmusic.com/philosophy/metamodels</a>.
- [3] Bailey, Justin. "Metamodels for End Users" Mind Math & Music, 4 Jul. 2024, www.mindmathmusic.com/philosophy/end-users.
- <sup>[4]</sup> Bailey, Justin. "Phenomenology and Religion: How to Count to 4 and Do It Again" Mind Math & Music, 27 Aug. 2024, <a href="https://www.mindmathmusic.com/philosophy/count-to-4">www.mindmathmusic.com/philosophy/count-to-4</a>.

### Transparency Disclaimer

This essay was <u>organized</u> with the assistance of a large language model known as Claude 3.5 Sonnet, developed by Anthropic PBC. At no point during the writing process did Claude generate a complete sentence that appeared explicitly in this paper. Claude was specifically prompted to write using fragmented bullet points to collaboratively generate a detailed outline of the paper's initial structure. The entirety of this essay was written and reviewed by the author, Justin Bailey.

Yes, I put the disclaimer at the end. Take it or leave it. Consider analogies to this situation.