

4.5: A Recapitulation of Things

Justin Bailey

A brief detour from academic exploration to clarify the intent and ongoing developments in “Thing Theory”, the domain of inquiry regarding **semantic hyper-reduction**. Thing Theory intends to model abstractions at the level of *things*, in that all abstractions in some sense are things one may refer to, and this abstract class demonstrates unique principles and behaviors that may reliably apply to all things at this high level of abstraction.

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Intro

When I began writing what would become *Thing Theory*, various scrawlings and ideas that were eventually loosely clumped together into a formidable abstract system with rigorous structure, I identified myself and intended my ideas to be perceived primarily as that of a *thinker, thinking*.

I now have a substantial history of writing to reflect upon, as well as plans for more theorizing and squiggling; I properly identify myself as a *writer, writing*. I view this shift to be particularly relevant henceforth regarding my tone, and my usage of citations and external research.

The primary goal of maintaining this shift is to allow the work to be understood more richly in context with the current affairs of academia. While the original *Thing Theory* essay does make a proper effort to include references to a substantial list of knowledge models developed prior to itself, this effort might be expounded upon so as to prioritize *integration* of the novel framework into our preconceived collective systems of knowledge.

Why Thing Theory?

In all of my previous attempts to justify particular use cases of *these* symbols over *those*, when different sets of symbols corresponding to different models might have significant overlap in their semantic content (i.e. math/physics, Thing Theory/Counting to 4), I must simply reiterate and articulate the claim made in *Phenomenology and Religion*:

"The author also posits that the author performed careful thought and expert analysis." [\[5\]](#)

As scientifically meaningless as this set of symbols might appear, it is true, little t. In order to justify this statement, consider the following line of inquiry:

- Thing Theory specifically intends to model models. It is not unique in this endeavor, consider the **dialectical** method of concept analysis presented by Hegel.
 - Thing Theory specifically intends to identify states and behaviors of models. It is not unique in this endeavor, consider ongoing **AI interpretability** research efforts such as 'active inference' presented by Karl Friston et al.
 - Thing Theory specifically intends to be an accessible bridge to understanding insights about philosophy and cognition. It is not unique in this endeavor, consider the **OODA loop** developed by John Boyd.
 - Thing Theory specifically intends to be concise yet powerful. It is not unique in this endeavor, consider the **Four Noble Truths of Buddhism**.
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Thing Theory *intends* to be unique in some optimal intersection of these 4 principles, in a way that is novel and valuable. No collection of modern philosophical inquiry such as Hegel's work should be so swiftly categorized as "concise" or "accessible" in the same way that *Metamodels for End Users* could be.

No accessible insights like OODA or Buddhist methods directly tackle the underlying structures and symmetries that may give rise to such intelligent, rational insight, in such a way that *Phenomenology and Religion* does. Without belaboring the point, *Thing Theory* and its successors intend to achieve something *coherent, particular, accessible, practical, and novel*.

TL;DR: Thing Theory reliably models abstract models in a way that no other model quite does.

<https://arxiv.org/pdf/2105.01038v1>

<https://arxiv.org/pdf/0803.0417v1>

<http://wolframscience.com/metamathematics/some-first-metamathematical-phenomenology/>

Addressing Bill Brown's *Thing Theory* and related works

Bill Brown is currently a professor of American literature and culture at the University of Chicago. While we may credit Brown with coining the terms “Thing Theory” and “thing-ness”, I should emphasize that Brown’s work is not a direct inspiration for the title of my paper or for any continued use of such phrases; I was not aware of his work until around the time of publishing *P&R* (I reached out to Brown at this time and received an initial response, but have since been unable to generate a meaningful dialogue). Brown tends to focus on literary analysis, blending phenomenology with aesthetic critiques of current approaches to modelling metacognition.

Brown certainly demonstrates an understanding of subject-object relationships that parallels the views of my own *Thing Theory*:

“We begin to confront the thingness of objects when they stop working for us: when the drill breaks, when the car stalls, when the windows get filthy, when their flow within the circuits of production and distribution, consumption and exhibition, has been arrested, however momentarily. The story of objects asserting themselves as things, then, is the story of a changed relation to the human subject and thus the story of how the thing really names less an object than a particular subject-object relation.” [\[1\]](#)

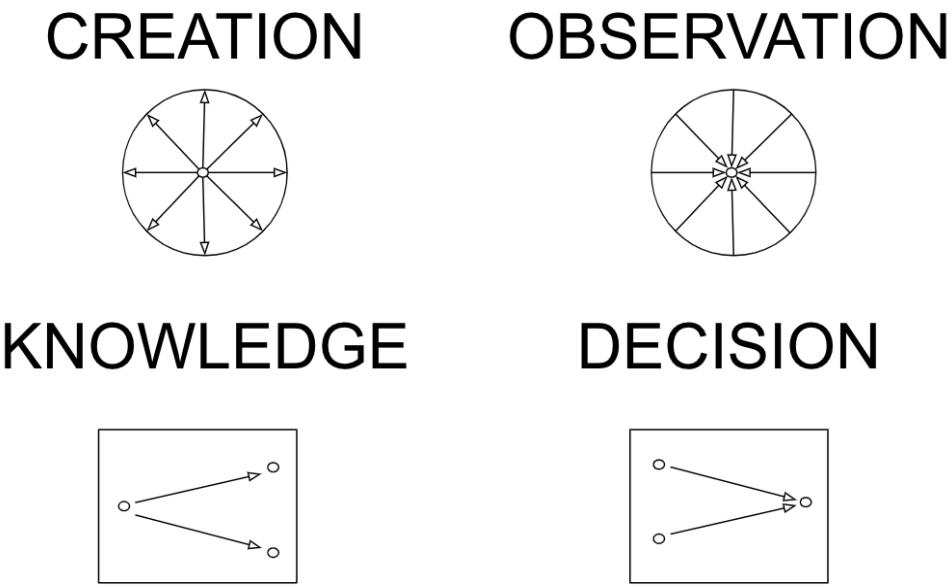
This touches precisely on a point that was demonstrated with particular examples from *Thing Theory* such as the flip switch hypothetical (flip a computer’s phenomenology 0→1, 1→0), or the explanation of how an electron/current of electrons manifesting as a unit of information is just a high-resolution model that nevertheless breaks down in domains like quantum physics.

Brown’s *Thing Theory* ultimately reads more like an open-ended discussion than an articulate theory that makes predictions. This comes as a surprise for me to assert this particular statement, as my *Thing Theory* initially felt like (and precisely was) an open-ended discourse with myself about how rational thinking works and feels intuitively, in the broadest sense. What differentiates my *Thing Theory* from Brown’s as well as other related works on metacognition, subject-object relations, etc. is the ability to make practical predictions that apply reliably in certain domains and use cases.

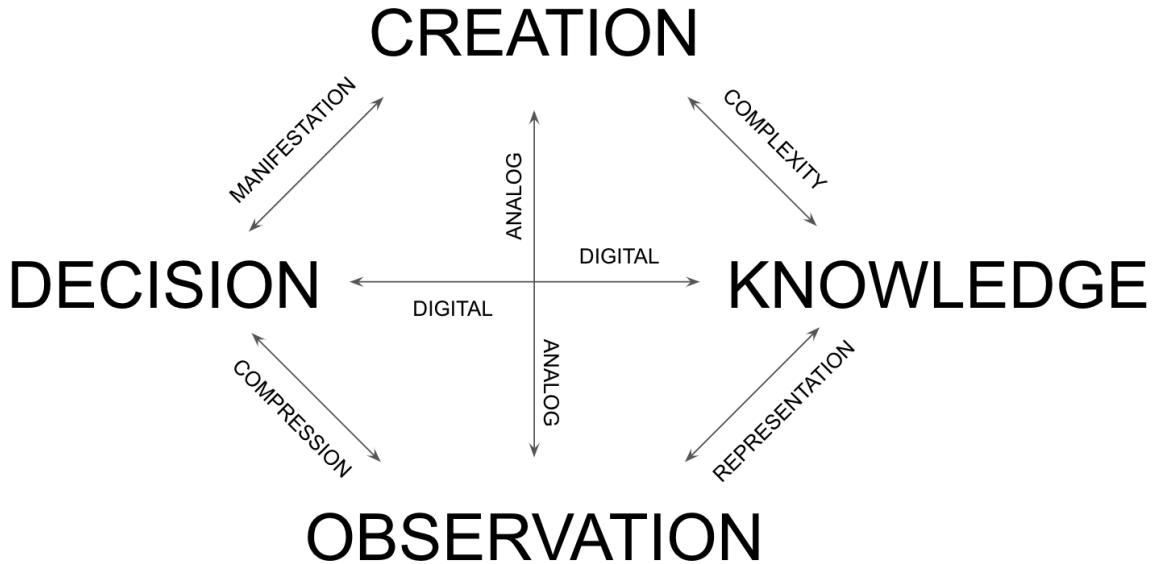
Consider the list of 55 models presented in *Thing Theory*, put forth as a means to apply the model and align existing models to it, so as to directly demonstrate its practicality. This serves as a faux substitute for falsifiable claims, as the notion of making falsifiable claims is directly addressed in *Thing Theory* as being a product of making assertions within a system of constraints that may falsify such assertions. *Thing Theory* intends to make assertions given the following constraints: 1) Everything is a thing, things have principles, etc. and 2) don’t think about 1 too much or you will never stop; literally, demonstrably, you will go in a circle and end up questioning whether the end user of this knowledge (yourself) has any ability whatsoever to make claims on whether a thing is a thing (it is).

Any constrained system of abstraction may exhibit such unconstrained modalities, insofar as the system is applied outside of its intended domain of qualification. Thing Theory does not intend to model every feature of every system, but rather an optimal set of features that should reliably apply to every system; and it leaves room for further optimization still, as is demonstrated by my continued writing about it.

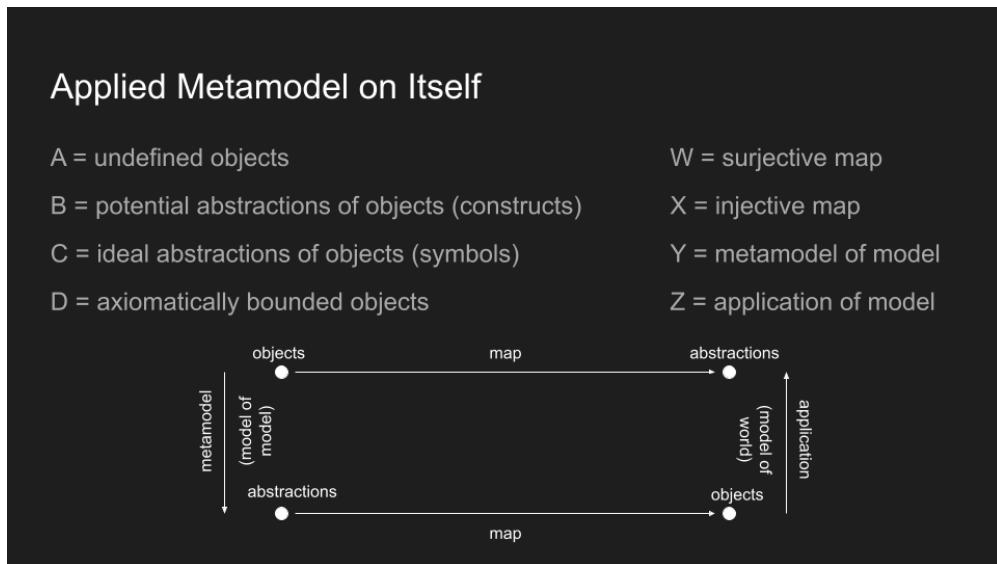
While on the topic, another priority which my Thing Theory maintains which other works might not focus on is the use of geometry, symmetry/group theory, category theory, directed graphs, etc.; mathematically grounded visual diagrams that supersede linguistic explanation. At times I find myself failing to explain concepts in clear words, concepts that lend themselves so elegantly to simple flowcharts and **symbolic metastimuli**, as I might coin the term on the spot. I'm referring to the use of symbols like the CKOD nodes and arrows, and the heavy use of symmetric visual arguments to justify ideas:



Source: Thing Theory (2024) [\[2\]](#)

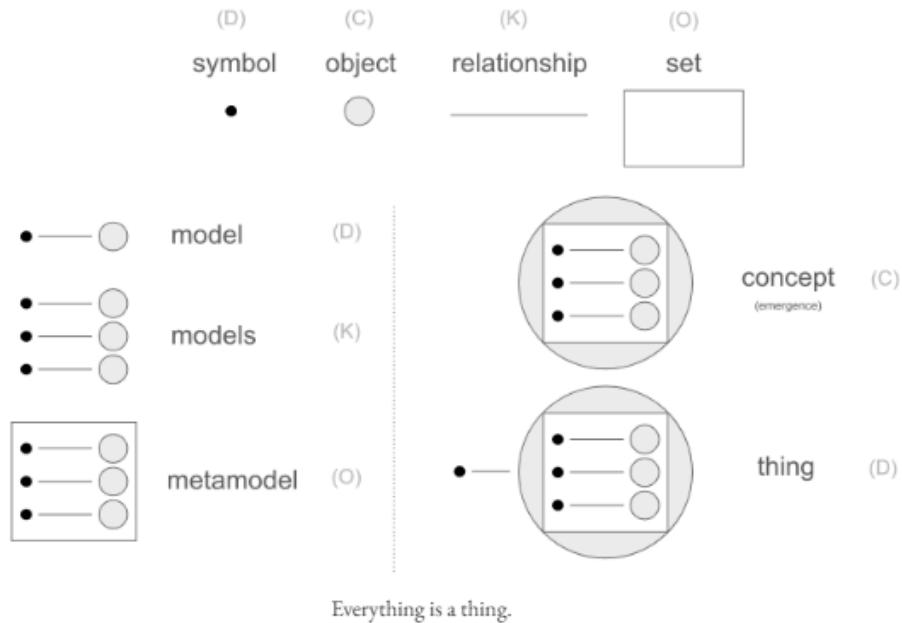


Source: Thing Theory (2024) [\[2\]](#)

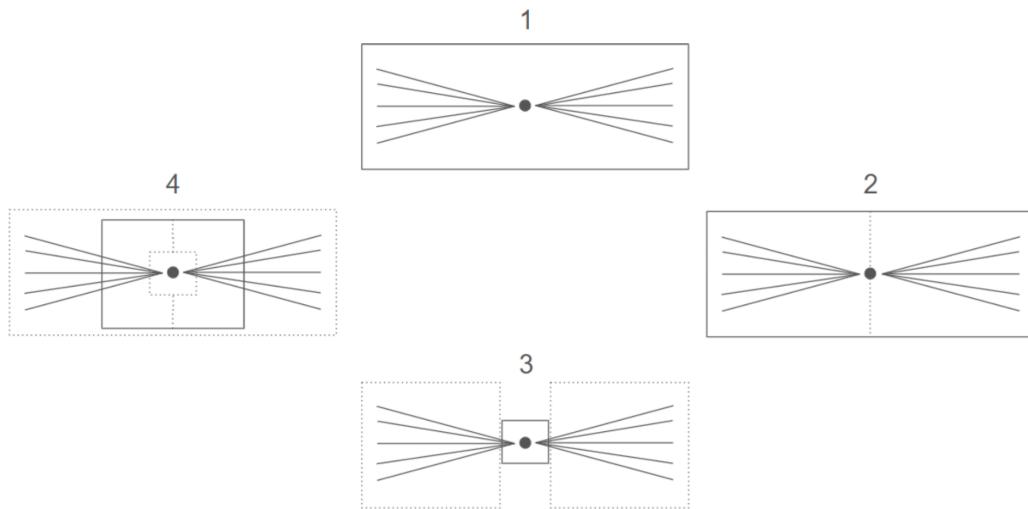


Source: Introduction to Metamodels (2024) [\[3\]](#)

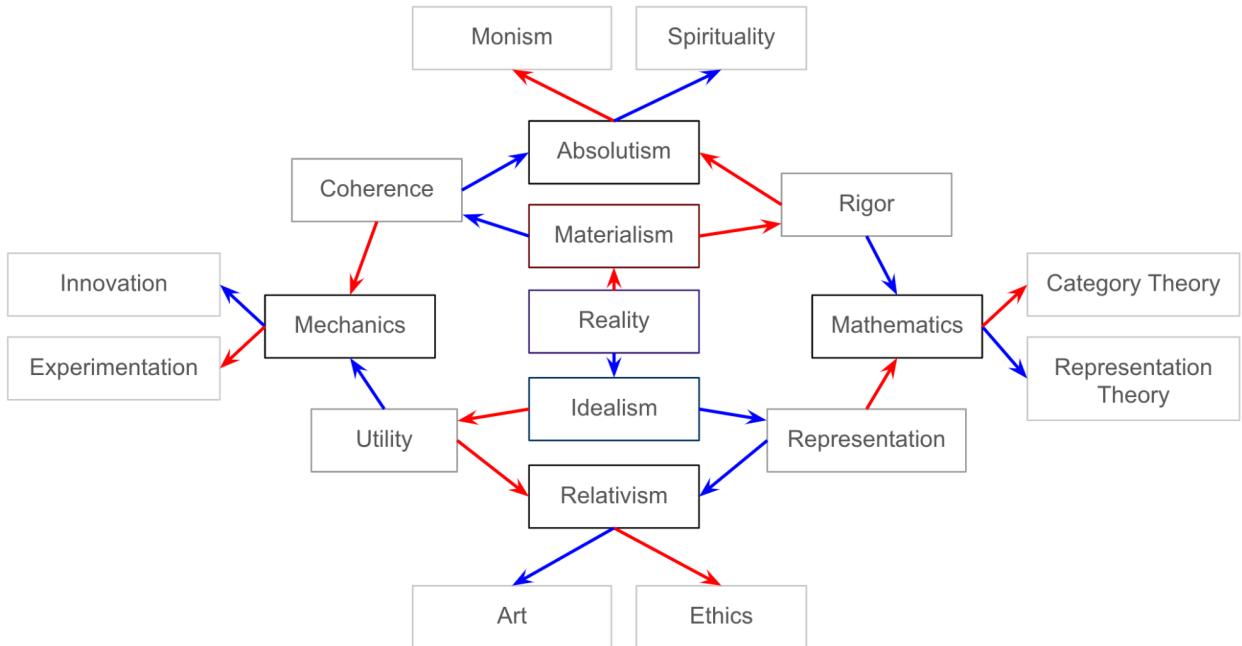
The following is a collection of squiggles:



Source: Metamodels for End Users (2024) [\[4\]](#)



Source: Phenomenology and Religion (2024) [\[4\]](#)



Source: Phenomenology and Religion (2024) [\[5\]](#)

These metastimuli act as a means to induce semantic content for end users which may evoke a simultaneous sense of rigor and aesthetic simplicity. These symbols generally do not intend to refer to any well defined statement or definition, but rather they are designed to encode visual information in a way that is meaningful within the given contexts. In places where words fail (many such cases), diagrams and symmetry reign supreme.

Mind Math & Music sends love and well wishes to Bill Brown as he continues his important work in the field of phenomenology.

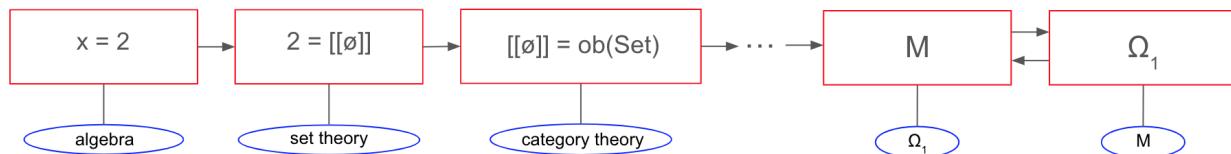


Addressing redundancies and necessary citations

Steven Harnad on the Symbol Grounding Problem

“How can the semantic interpretation of a formal symbol system be made intrinsic to the system, rather than just parasitic on the meanings in our heads?” [6]

In essence, the argument mirrors that of the **mapping problem** of *Thing Theory* fame:



“Every definition necessarily refers to some other thing that needs defining.” [2]

"Knowledge always and only ends up in the hands of the end user." [2]

No notes. Bravo, Mr. Harnad.

Wolpert and Macready on the No-Free-Lunch Theorem

“Any two optimization algorithms are equivalent when their performance is averaged across all possible problems.” [\[7\]](#)

This definition and the paper from whence it originated are firmly based in computational contexts, describing algorithms and optimization techniques with exceptional mathematical rigor.

The general throughline of the argument asserts that any “optimal” algorithm in a certain domain should be expected to fail, or to be less than optimal, in some other domain. This falls in line with the general reasoning around **expected domains of qualification/utility** (EDQUs), as well as several assorted statements throughout the Thing Theory series:

“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.”

“There is no valid metamodel M that objectively models all models and properly assigns them to equivalence classes.” [3]

“To belabor the point, there is no valid metamodel that can objectively assign itself to the most abstract equivalence class...” [3]

Charles Sanders Peirce on Categories

“Categories are a table of conceptions drawn from the logical analysis of thought and regarded as applicable to being.” [8]

As described by Peirce, one may categorize various forms of abstraction and perception, in terms of their degree of relation to the source of objective coherence, i.e. the external Universe. This frame maps nicely onto the arguments in *Phenomenology and Religion: How to Count to 4 and Do it Again*. All abstractions may be parsed into discretized sets. The number of sets one uses to parse a system demonstrates inherent metadata about the particular relationship between the system and the model/end user.

Peirce seems to hold some peculiar beliefs about integers-as-labels and the limits of cognition.

“The concepts of one, two, three are inseparably connected. The concept of four (and of any higher number) is a complication of three.” [9]

Now, I am certainly no stranger to making esoteric claims about the unreasonable utility of numbers and categories, but I should clarify some key distinctions between my own reasoning and that of Peirce.

Peirce follows a relatively Platonic mode of thinking, such that the notions of “Firstness”, “Secondness”, and “Thirdness” are distinct and constitute unique universal forms of abstraction. While the “Count to 4” framework clearly mirrors Peirce’s gradation of cognition as a layered hierarchical process, I would hesitate to make such a claim that there is some definitive “limit” to the general process of layered abstraction. In *Count to 4*, I explicitly describe the idea of “counting to 20” as an arduous yet potentially achievable feat in some specific case. This essentially denotes 20 layers of abstraction that coregulate and inform one another about the concrete phenomenon of interest. While Peirce argues the hard limit is 3, and any 4th-order (and beyond) abstraction may be trivially reduced to some 3-framework, I would argue that 4th-order reasoning may, in certain domains, under certain optimal model systems, self-constrain the outputs of the entire model system in order to refrain from static categorization as such.

Put simply, 3rd-order abstraction may present objective-seeming statements about statements, yet 4th-order abstraction may designate the entire premise on which the series of statements is founded as fallacious, irrelevant, etc. generally for the meta-purpose of performing abstraction in other domains with other phenomena. Sometimes, the premise just doesn’t matter. Sometimes, get this, you could think about *something else* instead of thinking about one singular idea on a recursive loop.

4th order abstraction gives the end user **decision making power** over the framework itself to either continue analyzing a phenomenon in greater resolution, i.e. *do it again*, or start over with something else, i.e. *do it all again*.

Buddhist Catuskoti / Tetralemma

Buddhism seems to have a proper grip on the seriousness of symmetry, as well as self-annihilation.

The concepts of “tetralemma” and “catuskoti” are seemingly identical yet at odds with one another, much like an old bickering couple. The core idea involves a 4-system structure, where the options for analyzing a given statement are as follows:

P	“True”
$\neg P$	“False”
$P \wedge \neg P$	“Both”
$\neg(P \vee \neg P)$	“Neither”

The underlying concept of a ‘4-system’ follows the same basic pattern of asserting a statement, negating it, and then extrapolating higher order effects in a symmetric fashion. The key difference between the notions of tetralemma and catuskoti is that the Buddhist notion of catuskoti came first, by a longshot. It’s more free flowing, more accepting of contradiction and paradox, because this is the way of the Universe. Fast forward to quantum “spooky action”, and suddenly this paradoxical phenomenological construct becomes extremely relevant.

A key insight is that traditionally, catuskoti uses higher order assertions of “both” (*ubhaya*) and “neither” (*naivāsti na nāsti*) in an intentionally, almost playfully self-contradictory manner. Almost like, “of course wisdom doesn’t make sense”, because ‘wisdom’ in itself is the original maker of all things sensical.

“If you ask me whether there is another world. But I don’t say so. And I don’t say otherwise. And I don’t say it is not, and I don’t not say it is not. Is there no other world?... Is there both another world and no other world?... Is there neither another world nor no other world?...”

“If I thought so, I would say so...I don’t say so...I don’t say it is not. This is the fourth case.” [\[10\]](#)

Alright, man.

In the following sections, we'll take a look at some of the greatest thinkers of the Enlightenment era and onwards, with a bit of help from our friend o3. I'll admit that throughout the process of writing this, I changed my mind several times on what I want to do with this essay. This vacillation has been informed primarily by the volatility of the current information market.

It's hard to tell what an audience needs to hear yet, and what they already know. If I were to demonstrate the CKOD mapping system as a "game", this might more accurately reflect its primary purpose/utility, however this label might diminish its real intent to aid generalized analysis of phenomena.

The "ideal use case" of CKOD might look like:

- 1) pick 4 related things
- 2) identify behaviors along particular relevant spectra and compare
- 3) assign a bijection for principles \Leftrightarrow things
- 4) assess utility: if sufficient for local purposes, $4 \rightarrow 1$, or $D \rightarrow A_1$

I may only hope this is a sufficient explanation.



Scientism: On Fourier, Noether, von Neumann, and Shannon

In the beginning, there was science.

-Fourier used fake numbers and hot rods to prove mathematically that it is, in fact, “all waves, bro.” Various classes of functions decomposed into series of simple waves, neat!

-Noether taught everyone why science actually works. Every observable constant has a

sister symmetry, a geometric reason behind the madness. I wanna be her so bad. So do you

-von Neumann called it. He so called it dude. Models, metamodels, collapse, oh my! Mmmfgh

-Shannon, exactly one half of the duo that figured out how to actually *measure* waves properly, also figured out exactly how “surprising” it is to flip a coin, or compress a jpeg. My man.

These thinkers all used their ideas to explain some pertinent generalized phenomenon, and each of these explanations is, in no small part, responsible for a great deal of modern scientific thinking and technology. You can just do things, if you know how to generalize a domain.

	Fourier	Noether	von Neumann	Shannon
Creation	Waveform as primary object	Symmetry as generative principle	Quantum state in Hilbert space	Stochastic information source
Knowledge	Sine/cosine basis rules form	Conserved quantity algebra	Operator calculus on states	Redundancy / coding theory
Observation	Spectral coefficients measured	Invariants empirically verified	Eigen-values recorded	Channel output decoded
Decision	Filter / reconstruct signal	Every symmetry demonstrates conserved quantity	Choose rep., collapse outcome	Minimum-bit communication plan

Go ahead and run these through your bot to confirm my bot’s work. The idea here is clearly not to have a maximal understanding of every concept and each self-justified framework.

Given a paradigm, one may identify key sub-paradigms, as is demonstrated with the key figures as optimal representatives of the relative notion of “Scientism” within the scope of this analysis. One might swap out these thinkers with other “optimal” candidates, and the game remains the same. The degree to which any particular idea, framework, or paradigm may be associated with a principle of CKOD is observed relative to the other equivalently modelled *paradigms*, relative to the *observer*, relative to the *purpose* of the metamodel itself. In this example, one key factor in determining the structure of this metamodel should be maintaining some perceived ‘invariant’ relative to other equivalent meta-paradigms, e.g. “Rationalism”, “Formalism”, “Post-Rationalism”.

Rationalism: On Kant, Frege, Wittgenstein, and Hegel

Knowledge.

We all know it. We all love it. These guys were real freaks about it.

-Kant was the first guy to really know how to know. Descartes was, and always will be, on one.

-Frege *did it again* (can you believe?) and said, actually, it's more like this vs. that, but like, this very specific 'this vs. that'. Like his own personal little mind-body conundrum for us all to enjoy. Thanks Gottlob

-Wittgenstein was scared of flowers and gay as hell. And hot as hell. Right on brother

-Hegel was 'right', way before most of these guys, but it takes a while to really know that you know that you know. Ya know?

They all *knew* in italics. "When you know, you just simply know." - *Chuck Manson*

	Kant	Frege	Wittgenstein	Hegel
Creation	A priori forms of intuition	Concept/object split	World pictured in language	Pure Being, initial thesis
Knowledge	Categories organize perception	Begriff calculus of logic	Meaning = use in language-game	Dialectic rules thesis→antithesis
Observation	Empirical content fills forms	Truth-values assigned	Language-games observed in use	Historical events embody Geist
Decision	Moral choice by practical reason	Derive proofs, extend logic	Revise grammar, clarify use	Synthesis selects new concept

This chart looks like the other chart, because the structure is the same. The content is not the same, but the *gist* is the same. Given Chart A and Chart B,

$$\exists \pi : \mathcal{O} \rightarrow \mathcal{G} \left[\pi \circ \pi = \pi \wedge \pi(A) = \pi(B) \right] \wedge \neg(A \cong B)$$

Formalism: On Gödel, Tarski, Lawvere, and Hofstadter

Brass. Tacks.

We hate knowledge over here, all the homies hate it and want to kill it dead.
But like in a super cinematic, God-defying, posterized kinda way.

- Gödel really just made me copy-paste that umlaut. God I can't imagine you're still reading this.
- Tarski, of Banach fame, invented a framework called the “T-schema”, which defines truth in a formal language by asserting that the sentence “P” is true if and only if P itself holds. That's just a real fact for ya. I certainly know what it means, I am the leading expert on all things “things”.
- Lawvere was from Muncie, Indiana (go Cardinals!). He also figured out how to draw a diagonal line through a square to prove basically everything you know is incomplete, mathematically.
- Hofstadter, much like Brown and Harnad, is still breathing God's air at the time of this writing. He wrote a book.

	Gödel	Tarski	Lawvere	Hofstadter
Creation	Peano-arithmetic universe	Formal language split in/out	Self-map in closed category	Self-referential symbol web
Knowledge	Gödel-numbers link syntax & math	T-schema defines truth	Diagonal enables recursion	“Strange loop” mirrors itself
Observation	Statement codes name themselves	Model $[[\phi]]M \Rightarrow \text{true/false}$	Fixed point implies collapse	Analogy exposes loop's form
Decision	Add axioms — still incomplete	Test for soundness / completeness	Structure contains its own syntactic limit	Treat mind as formal play

If I haven't yet properly explained the general intent of this paper and related works, allow me to clarify: **Every thing is a thing.** This is the most blatantly true statement, it is almost immediately obvious *why* a person might say such a thing in such a context, and it is simultaneously too asinine to be taken seriously. It is the perfect starting point for a “zero ontology”.

To understand how an agent might go from 0 to agent, you have to start at 0.

Post-Rationalism: On Chomsky, Dennett, Chalmers, and Yudkowsky

4. (Four)

- 1) 1 2 3 4
- 2) $1 \Leftrightarrow 2 \quad 3 \Leftrightarrow 4$
- 3) $1 \Leftrightarrow 2 \Leftrightarrow 3 \Leftrightarrow 4$
- 4) $4 \Leftrightarrow 3 \Leftrightarrow 2 \Leftrightarrow 1$

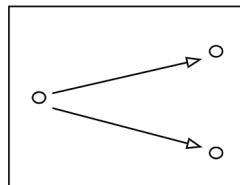
It's all systems of 4, and they look like each other. Got it?

	Chomsky	Dennett	Chalmers	Yudkowsky
Creation	Innate Universal Grammar	Evolved brain substrate	Physical facts baseline	Seed-AGI code & priors
Knowledge	Principles-&-Parameters syntax	Design / computational stances	Psychophysical bridge laws	Bayesian update algorithms
Observation	Child speech corpus	Intentional-stance predictions	First-person qualia reports	Evidence & market signals
Decision	LAD selects grammar	Culture locks useful stance	Dualist / panpsychist paths	Alignment & decision theory

Repeat after me: "*I am not correct. I am rediscovering the joy and tribulations of knowledge.*" This paper serves as a benchmark of where we are at, collectively. Anybody can tell their AI to make a meta-framework that explains everything and the kitchen sink. But this cannot possibly explain the transcendent meta-joy I experience from writing this.

I wrote most of this. Chatboy made the charts and I revised them.

Knowledge is not constrictive. Knowledge is not truly discrete, trapped in these symbols.
Knowledge is you, growing.



Reflections on current Theories of Consciousness (ToCs)

Obligatory nod to actual scientists pushing the boundaries. All hoo, no woo.

	IIT	Orch-OR	GNWT	Active Inference
Creation	Φ -maximal causal complex	Quantum microtubule state	Cortical workspace nodes	Generative world-model
Knowledge	Axioms $\rightarrow \Phi$ calculus	OR threshold, tubulin qubits	Ignition/broadcast logic	Bayesian update, FEP law
Observation	Compute Φ , match reports	Coherence & anesthesia measures	P3 / late ERP, reports	Prediction-error neural signals
Decision	Rank states by Φ -value	Modulate OR with drugs/temperature	Design tasks to trigger workspace	Act to cut free energy

I'm personally a fan of active inference, but I'd take a chance on the underdog, too.

Orch-OR seems to be pointing in a direction that no one cares to look. It might not be correct, but that's how knowledge works. Knowledge points in many directions, and some of the parts of the things that it points to are probably useful, generally, relatively, in my subjective opinion.

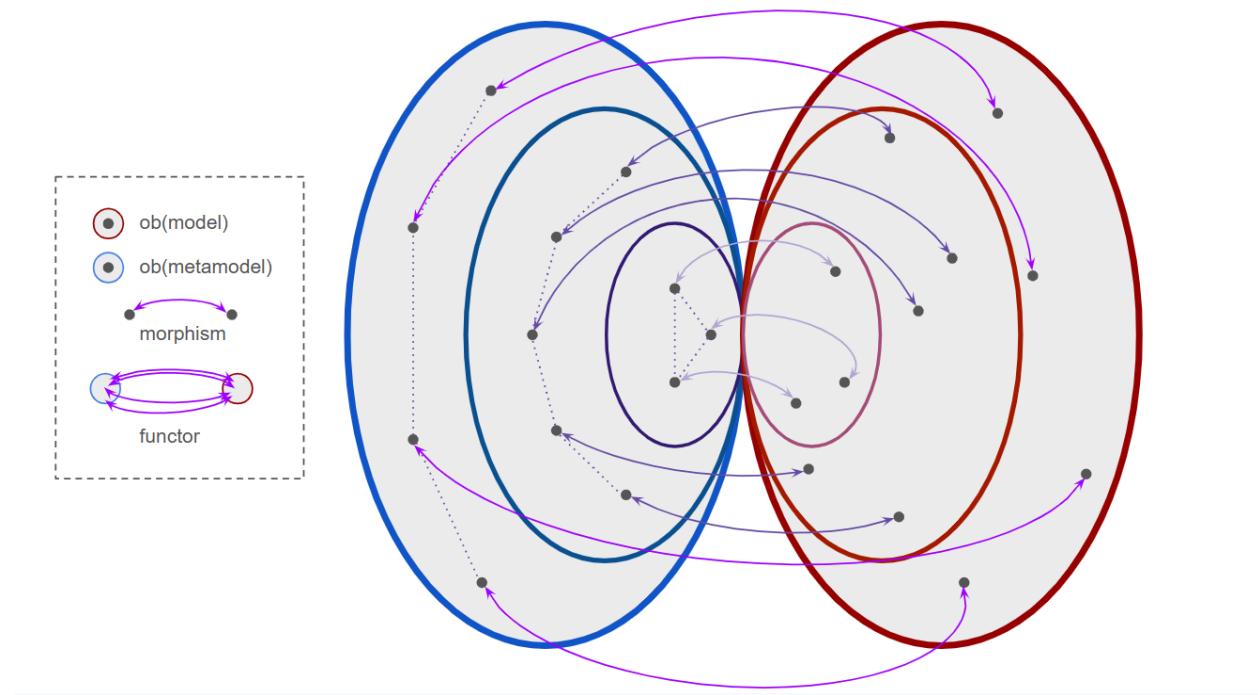
I have no grand takes on these frameworks that could not be expressed more elegantly elsewhere. Go enjoy someone else's thoughts.

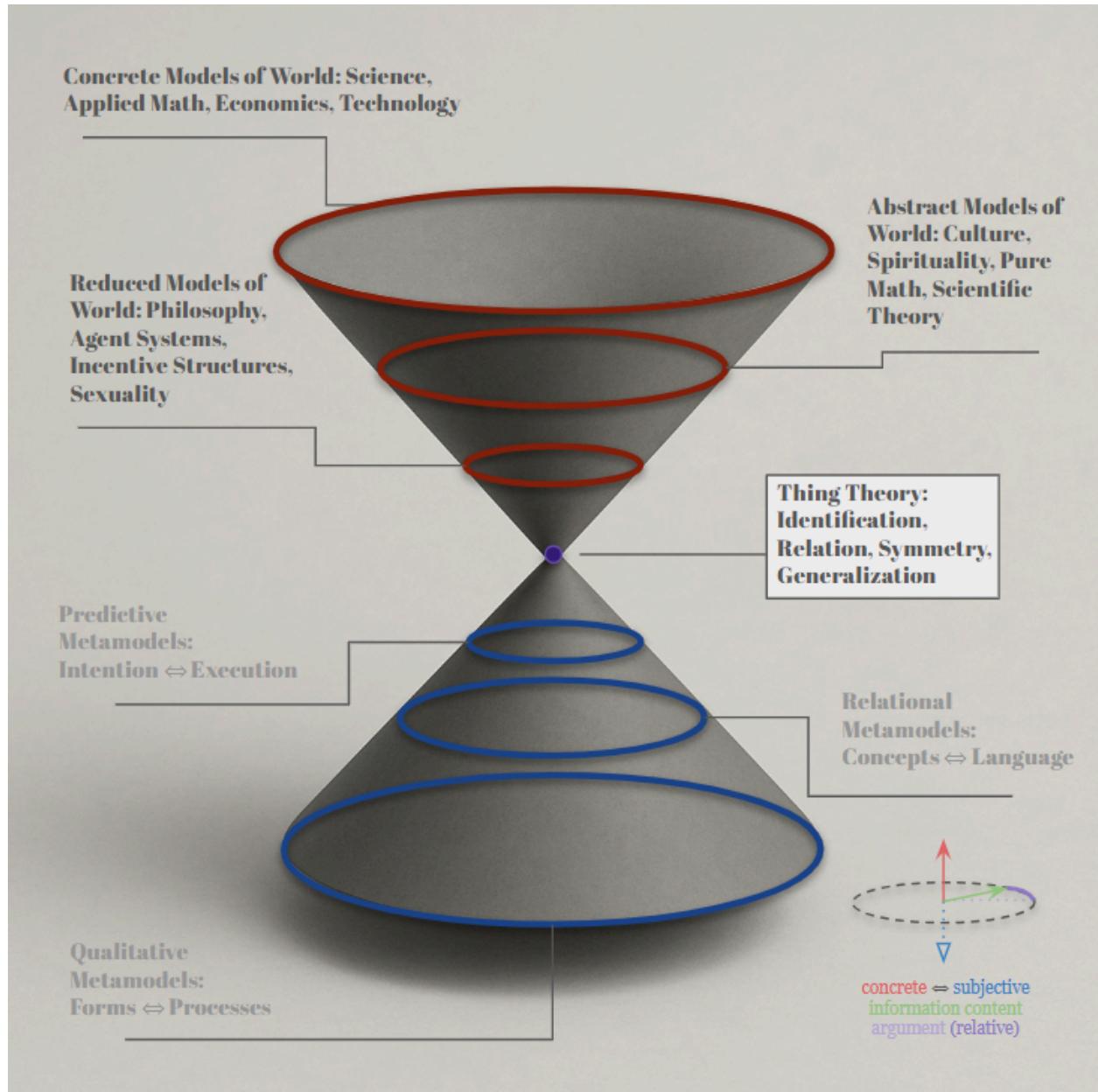
Links to all of these ToCs are listed in the *Additional Resources* section at the end.

Future aspirations with Thing Theory

The word ‘thing’, at its core essence, intends to be “flavorless” in a sense. Consider the set of all knowledge models, including minimal models like singular words or symbols. Words like ‘phenomenon’, ‘object’, ‘consciousness’, etc. have a particular “flavor” or connotation. Despite the common human tendency to attribute certain words like these to the underpinning of all knowable things, we know in our heart of hearts that these ideas are simply too evocative to be a proper candidate for “the most abstract idea”.

What we are ultimately seeking is a gradient that smoothly transforms a given idea, from its given state, into a least reducible state that is still recognizable as an idea. Imagine a two-sided cone, where on one side of the cone we have sets of decisive models of the world. The primary goal of semantic reduction is to compress an idea towards the zero-point of the cone, which may best be conceptualized as “semantic flavorlessness” or “semantic noise”, such that we might be able to extend and extrapolate some optimal mapping to the other side of the cone. This opposite side considers sets of meta-analytical models, or metamodels. For each concrete model, we presume there exists some mapping through the zero-point to a generalized metamodel which identifies the concrete model as “optimal” or “unique”. Under a category theoretic lens, this mapping of model \leftrightarrow metamodel might be loosely understood as a bijective morphism, or isomorphism, between $\text{ob}(\text{model})$ and $\text{ob}(\text{metamodel})$. The collective action/mapping between model classes and metamodel classes acts as a functor between $\text{Cat}(\text{model})$ and $\text{Cat}(\text{metamodel})$.





Thing Theory intends to be a modernized bridge between math and philosophy; like, real, old-fashioned, try-your-best-at-thinking philosophy. At the end of the day, a theory is only as useful as its end user.

The red layers in the diagram represent ‘concrete’ forms of knowing, with increasing radius to represent increasing complexity of information content. The blue layers represent *embodied* forms of knowing, mapping subjective processes like intentions, concepts, and forms to real-world processes which work in tandem with these *embodied metamodels* to achieve semantic ‘homeostasis’, akin to cybernetic control systems.

WARNING: This essay does *not* demonstrate a comprehensive analysis of every academic who ever thunk a thought. Certain writers such as Deleuze, Guattari, Laruelle, Heidegger, etc. have been exempted from this particular analysis, in large part due to “I ain’t readin’ allat.”

The example academics were cherry-picked to make a point with a pretty chart. The point of CKOD, generally, is that you can take *any thing* and make a pretty chart. You shouldn’t be able to do that.

You shouldn’t be able to do that.

Thing Theory itself argues that you *can’t* do that while also simultaneously pretending to be “correct” in some objective sense. So where did this free lunch come from?



I MADE

IT UP !



symmetry. the only constant in the universe.

Kinda lost some steam here but I did the thing. You read it. Or you skipped to the end, as if that was gonna help.

you know what comes after 4?

References

Thanks — here is your **finalized MLA reference list**, with your name added and the correct info for Peirce's manuscript included. The order is preserved exactly as you requested:

1. Brown, Bill. "Thing Theory." *Critical Inquiry*, vol. 28, no. 1, 2001, pp. 1–22. [Thing Theory](#)
 2. Bailey, Justin. *Thing Theory: An Explorative Approach to Phenomenological Analysis*. *Mind Math Music*, 29 Feb. 2024, [Thing Theory](#)
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Additional Resources

- Tononi, Giulio. "Consciousness as Integrated Information: A Provisional Manifesto." *The Biological Bulletin*, vol. 215, no. 3, 2008, pp. 216–242. [Consciousness as Integrated Information](#)
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- Bailey, Justin. "I Made It Up" *Mind Math Music*, ceaseless, boundless, timeless. [I Made It Up](#)

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“PRINCESS GOOBER”

Real bizarre “monkey-writes-Hamlet” sort of situation. bu^h - βγε

4.5



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