# Armamentarium Phantasmagoria

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## ABSTRACT

**Purpose** – This author will argue for the establishment of a formalised area of study and science centered around the objective, observable phenomena of **ideas** and **ideation** and the creation of a formalised Armamentarium (guide, toolkit and practicum) to serve as the foundation for such a science and practice.

**Methodology** – What would someone who practices and studies ideas and ideation need to conduct work around such concepts? This question is the core of creating a science of ideas. Previous attempts at creating such a science will be discussed. Observations shall be made pertaining to common themes and patterns that can be observed about ideas. The Idom Hypothesis will be introduced, alongside avenues of experimentation. Current technologies and techniques will be considered on the merits of relatedness and usefulness in researching, understanding and working with ideas and ideation as both a micro and macro phenomenon. By extension, significant consideration will be given to how ideas relate to physics and how one might study them non-anthropocentrically. Connections will be made across disciplines, as ideas permeate them all. By making such connections one can state the goals needed to connect the world's scholarly pursuits into one large interdisciplinary science, with 'the study of ideas' as the binding agent. This author contends that with a formalised debate and framework **Ideonomy** would not only be practically possible, but inevitable.

**Value –** Ideas are an integral part of all intelligent pursuits. Being able to understand their properties, limits and dynamics furthers the greater need for creative solutions in our sciences, technologies, and social systems which garner more complex problems. All professions require more flexible and creative thinking in the context of their work. The advent of technologies like artificial intelligence, augmented reality, virtual reality, and mixed reality finds these tools in need of application. Their very nature is based around creative potential. Ideonomy and a common ideonomic literacy would inform the average individual and the professional practitioner on how to create new ideas and track old ones. For sciences that often have difficulty translating their concepts to one another, it would be used as a medium for avoiding linguistic traps. Ideonomy would inform on how rigidity of language leads to assumptions of fact. It would create the tools for representing ideas better and for understanding why some worked and others did not. It would inform how time affects ideas. An armamentarium for Ideonomy would give us the knowledge needed for the world, work, and problems of the near future. It would help prepare us for the professions that have yet to be invented.

**Keywords:** Ideonomy, Idom, Expressiant, Theory of Ideas, Ideodynamics

## 1    Introduction

The following shall function more as a condensed list of topics that ought to be included in an Ideonomic Armamentarium. One will explain the author interpretation of ideas as a phenomena in 'The Idom Hypothesis', followed by the 'guide' on matters of scholarship, 'toolkit' on matters of technology and technique, and 'practicum' on matters of application and reality, each being argued as necessary requirements for anyone who might call themselves, "Ideonomist".

## 2    The Idom Hypothesis

Many a [***time*** and ***place***] [can, did and could have differently], **inspired** the [reasons, courses and paths of explanation] for this hypothesis, but at this *t͡ime*, it shall begin with the following:

> At the time of writing the physics community has begun to look actively into the possibility that the structure of physical space comprises <u>many</u> more dimensions than the conventional three. Ignorance of the existence, or simply the possibility, of such higher dimensions could represent a blind spot of a larger nature by precluding the proper–or any– perception of many diverse–and especially many anomalous– physical phenomena whose existence would make sense, or be absolutely meaningless, in the absence of the added dimensions. So <u>ONE MOTIVE</u> for considering what our ignorance could be is that we may thereby recognize, remove, or mitigate, scientific, intellectual or personal blind spots that spring from ignorance. (Gunkel, 1989, p.121)

Ignorance or lack of knowledge is important to Ideonomy. By knowing how much we know and comparing it to how much we don't know, we can begin to see what roles creativity, imagination and ideas can play. The first axiom of the Idom Hypothesis is asserted as follows:

1) If we think in terms of time and space, both one's possible knowledge and ignorance are infinite, but they differ in density. The infinity of our possible knowledge will be smaller than the infinity of our possible ignorance, through the expanding nature of time and space, coupled with how much time it takes to discover new knowledge and the subsequent ignorance that is revealed with the uncovering of that knowledge (see fig. 1). There will always be more to learn. This is considered self-evident.

2) Thought affects language, language affects thought. Time and time again, the relationship between language and thought, language and perspective, language and culture or language and reality, has been established (Trager *et al.*, 1956, Boroditsky, 2001, Sera *et al.*, 2002, Dilkina *et al.*, 2007, Luo *et al.*, 2021, Walsh and Oakley, 2022). Language and thought both deal with information and symbolic mediums for representation. They are intertwined with ideas, which occur as a matter of representation, language, symbols and thought.

3) Ideas either *answer a question* or *solve a problem*. In order to have an idea of what a cat is, one must ask 'what is that?', whilst gesturing at a cat. Before we had an idea of something, we first had to not know what it is in order to take the lead in defining it. Ideas also crop up when it comes to problems. When one has a problem we need to seek applicable solutions, a solution, requires an idea or selected set of related ideas.
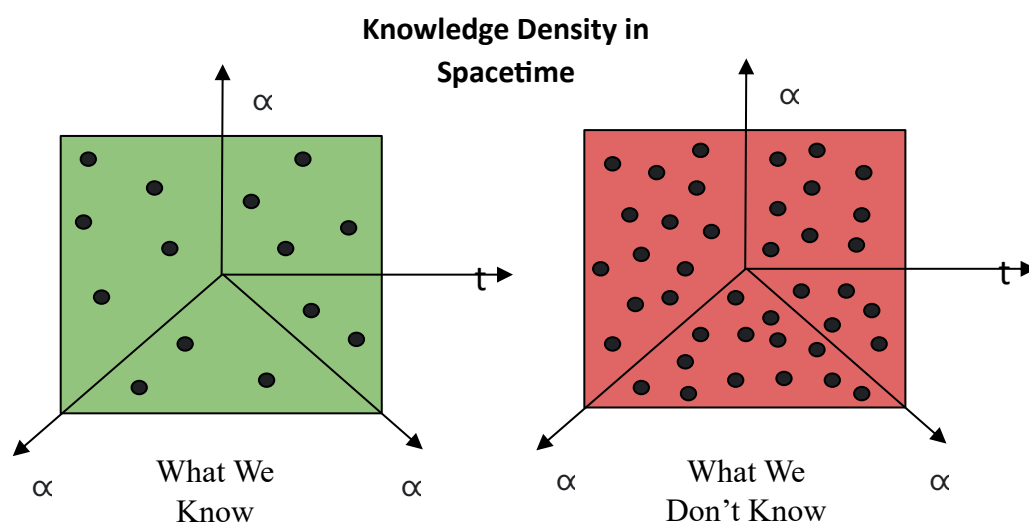


**Figure 1:** *Knowledge density in Space time*

So in essence an idea requires a who, what, when, where, why or how. Does this mean that the idea of a thing simply does not exist if there isn't someone around to question it? No, but it does mean that in a practical sense if there is no one to question, then the "idea" as we know it would most likely not exist. There may exist idea-like phenomena via a consciousness-like phenomena, but not human ideas, and not via human consciousness. Based on these three observations, the concept of the Idom is born.

With these three observations in mind, one may find it easier to think of an "idea" in terms of a sphere of infinity. Until the idea of something is generated or transferred, that idea can be considered every version of itself. They are all of the different concepts needed to describe and define that idea, mixed with every language (all the different subjective definitions of the words or models used) of any and every entity in the universe capable of ideation. These abstractions with uncertainty, that make up the sphere of infinity of an idea; we can call an **Idom**. Under this hypothesis, the idom is the smallest unit of an idea. The idoms of an idea are not only ideas themselves, but rather more condensed versions of those ideas when in reference to the greater idea they are a part of. Once you have established ideas and their idoms, we must then talk about the entities in our physical universe that "ideate," in which the choice to separate from the concept of consciousness is purposeful as that is not the quality required for studying ideas. We can call an entity capable of ideation an **Expressiant**. In order to maintain objectivity in a field that would work heavily with the unknown and the subjective it is paramount to maintain every level of non-anthropocentric thought when considering expressiants and their ideation. Presently, types of expressiants include Homo Sapiens and Artificial Intelligence. Both of these entities are capable of ideogenetic behaviour. There are other entities which could be suspected of being expressiants as well, but for now we will stick to the two.

The establishment of these concepts are at the core of the hypothesis, as a means of creating a fundamental basis for talking about ideas as a science. via this interpretation, one begins to see ideas as a tool by which we can become better at 'shooting into the dark,' or mining the edge of knowledge. They can be used, observed and studied as something that is naturally fluid and uncertain, much the same in concept to quantum mechanics. This fluidity and its dynamics are affected by how idoms of the past were entangled, how they are entangled now and how they will be entangled in the future. As a working extension of these terms and their interpretation, the following are also useful terms:

| Ideodynamics | The movement and interactions of ideas/idoms through spacetime. |
|---|---|
| Expressial Stop | Where an idea/idom's defining qualities end. This can only be determined by an expressiant. |
| Ideocosm | A "space" where the ideas/idoms of an expressiant interacts with the ideas/idoms of the environment or another expressiant. Used by Gunkel to refer to "The infinite universe of all possible ideas,..." (Gunkel, 1990, p. 49) |
| Entangle | The interaction between ideas/idoms. |
| Translection | When one translates within a language rather than between languages. (ie. Between fields of study) |
| Status | Whether an idea/idom is activated/inactive in the universe, and possible/impossible by the laws of physics. |
| Dactum | A new idea, first of its kind to be activated in the universe. |
| Inspirion | An idea/idom, or set of ideas/idoms that act as a direct catalyst in the ideogenesis of another idea/idom or set of ideas/idoms. |

## 3   Guide

### 3.1   History of Ideas

In *Towards a Science of Ideas*, Guido Enthoven notes various attempts to establish a formal Idea Science (Enthoven *et al.*, 2022, p. 1-12). The Ideonomist, like everyone else, must know the context of what came before them. The main contenders for such according to Enthoven are, Antoine De Tracy's "Ideology," Genrich Altshuller's "Theory of Inventive Problem Solving" (TRIZ), and Patrick Gunkel's "Ideonomy", whose name for the science has been adopted by this author.

In order for someone to study ideas and discover new and better ways of implementing them, the ideonomist must know and continue to study the history of idea science as well as the overall history of ideas, in all its forms, no matter where they come from. Additional peer contributions would undoubtedly be needed to hash out and compile such a complete history and explain their connections. Here, the beginning of a compilation will start. The following table contains what this author believes qualifies as important ideonomic history and contains inspirions to the idom hypothesis.

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|---|---|
| Toward a Science of Ideas: An inquiry into the emergence, evolution and expansion of ideas and their translation into action edited by Guido Enthoven, Seweryn Rudnick and Rico Sneller | The Meaning of Meaning: A Study of the Influence of Language upon Thought and of the Science of Symbolism by C.K. Ogden and I.A. Richards |
| Ideation: The Birth and Death of new ideas by Douglas Graham and Thomas Bachman | The Invention of Yesterday: A 50,000-Year History of Human Culture, Conflict and Connection by Tamim Ansary |
| The Dawn of Everything by David Graeber and David Wengrow | Zen and the Art of Motorcycle Maintenance by Robert Pirsig |
| On Quality: An Inquiry into Excellence by Robert Pirsig | The Melancholy Anatomy of Plagiarism by K.R. St. Onge |
| Liber Novus: The Red Book by Carl Jung | The Science of Can and Can't by Chiara Marletto |
| A History of Knowledge by Charles Van Doren | The Omnivore's Dilemma by Michael Pollan |
| The Archeology of Knowledge: And the Discourse on Language by Michel Foucault | The Hidden Intelligence: Innovation Through Intuition by Sandra Weintraub |
| Creativity in Technology Education Facilitated Through Virtual Reality Learning Environments: A Case Study by Gisli Thorsteinsson and Tom Page | Future Mind: Artificial Intelligence: Merging the mystical and the technological in the 21st Century by Jerome Glenn |
| Introduction to TRIZ by Stan Kaplan | According to Plan by Rob Kovitz |
| Mechinamenta: The thousand year quest to build a creative machine by Douglas Stay | The Structure of Concepts by Frederick Hayes-Roth |
| If Science is to Save Us by Martin Rees | Idea Stormer by Bryan Mattimore |
| Applied Imagination by Alex Osborn | Brainsteering by Kevin and Shawn Coyne |

| | |
|---|---|
| Adventures of Ideas by Alfred Whitehead | The Selfish Gene by Richard Dawkins |
| The National Strategy for AI: Discussion Paper: NITI Aayog | Beyond Good and Evil by Friedrich Nietzche |
| On the Genealogy of Morality by Friedrich Nietzche | The History of Sexuality by Michel Foucault |
| Gödel, Escher, Bach: An Eternal Golden Braid by Douglas Hofstadter | The Structure of Scientific Revolutions by Thomas Kuhn |
| Pedagogy of the Oppressed by Paulo Freire | What We Owe The Future by William MacAskill |
| Handbook of Creativity by Robert Sternberg | Stamped from the Beginning: The Definitive History of Racist Ideas in America by Ibram X. Kendi |
| The Invisible Landscape: Mind, Hallucinogens, and the I Ching by Terrence and Dennis McKenna | Food of the Gods: The Search for the Original Tree of Knowledge: A Radical History of Plants, Drugs and Human Evolution by Terrence McKenna |
| Information Hazards: A Typology of Potential Harms from Knowledge by Nick Bostrom | Tar For Mortar: The Library of Babel and the Dream of Totality by Jonathan Basile |

## 3.2 Research

In *Towards a Science of Ideas*, Enthoven establishes 7 necessary points on the research agenda for Ideonomy:

1. Definition and Meaning; Ideas and Ideonomy need to be defined.
2. Origin and Genesis; We need to know where Ideas come from and how they are generated.
3. Taxonomy and Classification; Ideas need to have a formal sorting system.
4. Evolution and Development; We need to know how ideas evolve and develop beyond ideogenesis. What are their dynamics?
5. Patterns and Working Mechanisms; What drives ideas and what are their dominant processes?
6. Acceptance and Legitimacy; How do ideas gain traction and usage by expressiants?
7. Realisation and Valorisation; How do some ideas stay as just concepts and others become a part of our everyday reality? (Enthoven *et al.*, 2022, p. 12-14)

In order for Ideonomy to be realised, research must be conducted with 'ideas' at their core. Here, some research and some potential suggestions for ideonomic research will be suggested. In terms of Taxonomy and Classification, we can turn to Gunkel, who through his *Ideonomy Project*, created a wide array of tools that help taxonomically. To put it lightly, Gunkel's work via the Ideonomy Project and its five volumes is intimidating and extensive. The Yellow Volume, or the glossary, is 101 pages long by itself, mostly due to Gunkel's inability to "dumb down" anything. Right from the beginning. However, an extensive categorising system emerges. According to the *Ideonomy Glossary*, **Organons** (Gunkel, 1990, p. 75) are defined as, "Literally any [tool of thought or ideonomic device]." **Genus** are defined as, "A [relatively or absolutely] general idea or category of idea."(Gunkel, 1990, p. 35). Each of these words also have many distinct 'Gunkelian' subdivisions and types of genera and organons. These are but a few types and styles of idea classification from his works and glossary, if there is to be a Taxonomy of ideas, one might start there.

Aside from taxonomy, here are a few possible experiments or questions for studying ideas along with the corresponding number category from Enthoven's Agenda:

Ask both AI and Human participants to complete a series of sentences (beginnings of ideas) after being given a prompt. Compare idomic content. Ask again, but without a prompt. Compare. Ask again but ask participants to use different ideogenetic techniques when completing the sentence. Does prompting or a setup for an idea change the idomic content of an idea? **Evolution and Development, Patterns and Working Mechanisms**

Pick a specific idea. Decide for the purposes of the experiment what the different versions and iterations of that idea might be. After defining said idea set, trace the history of usage of that idea, in all forms. What is the range of application? When was the idea first activated? Did the idea activate multiple times, or in different spaces? Did the idea ever deactivate? How could this be visualised? **All Agenda Categories**

Have actors improv characters, after being given the character's philosophy on existence. Compare how different actors with different personal philosophies represent their character. Then, after mapping the idomic content of, the actor (expressiant) and character (actor expressiant + perspective of character entanglement expressiant). Next, watch how the idomic content entangles and interacts with another newformed expressiant, or character. How many different ways can you alter the idomic content using actors? Human actors? AI Actors? The expressiants generated would be akin to an "Ideonomic Homunculi". **Evolution and Development**

To what level upon level of detail do each organon and the ideas and idoms within activate for an expressiant, through time? How could you [visually represent] and [measure] the [complexity and timing] of the [active or inactive influence] generated by an expressiant's ideogenesis through spacetime? An experiment that attempts to look at the real time application of different ideas in an expressiant, to generate a new idea. How detailed and deep would the fractaling lists of each different idea become during ideogenesis? Which ideas and idoms are more detailed and fractaled than others? Why? **Origin and Genesis, Evolution and Development**

Additionally, this author has found that taking an ideonomic perspective when observing the creative processes of others, or having others describe their creative process and then translating these explanations into ideonomic terms, yields interesting results and insights.

Research is important to the ideonomist for not only its ability to gather generalizable knowledge for Ideonomy as a whole, but also as a way to discover new bridges between all sciences. A win for ideonomy is essentially a win for all researchers. Although this connection can be argued, it can also be said that some disciplines are more intimately connected to ideonomy, and to the ideonomist, knowledge and research in these areas ought to be pursued and followed as well. For example, David Deutsch's Constructor Theory, further explained in Chiara Marletto's *The Science of Can and Can't,* could hold the secret to exploring ideas via Physical Laws (2021). Note that due to the lack of a name for some of these disciplines, a placeholder has been chosen. They are: Philosophy, Philology, Psychology, Physics, Etymology, Linguistics, Biology, Phenomenology, Heuristics, History, Historiography, "Automatology" (The study of AI) and "Verimutology" (The study of Virtual, Augmented, Mixed or other Extended Reality).

## 3.3 Ethics of Ideation

Ideonomy has the potential to create, mine, discover, interact with, influence the creation, destruction or avoidance of, infohazards (Bostrom, 2011). The term "infohazard" here is used with a spectrum of such in mind. Because this is the case, ideonomy, ideonomics, ideometry or any other such sub- or superdivision of idea science, requires a set of ethics. This topic; however, is too important to either do alone, or do in one section. Such thoughts require time and their own separate work. It shall be said here; however, that to misuse Ideonomy, would be akin to the misuse of whatever combining a nuke and the most toxic parts of the internet would be. Without ethics, it is both a matter of danger, and power.

## 4    Toolkit

### 4.1  Techniques

For innovation, purposeful or active imagination, craftsmanship, aesthetic arts, or other kinds of creative thought, of which I will collectively refer to as ArTechnics, has many different styles and research traditions. It ought to be the ideonomists invocation to study these different techniques. Knowing what, how and why, of these techniques would help prepare the ideonomist to implement them, and act as support to creatives as a foil and soundboard. This is a list of techniques utilised in various spaces for the purposes of ideogenesis:

Brainstorming (Putman and Paulus, 2011), Idea Mapping (Nast, 2006), Reverse Brainstorming (Evans, 2012), SCAMPER (Serrat, 2017), 5 Whys (Voehl, 2016), Pugh Matrix (Olabanji and Mpofu, 2020), Morphological Analysis (Alvarez and Ritchey, 2015), 6 Thinking Hats (Kivunja, 2015), Bodystorming (Oulasvirta *et al.*, 2003), Brainwriting (Litcanu *et al.*, 2015), TRIZ (Kaplan, 1996), Diverging/Converging (Zhang *et al.*, 2020), Lateral Thinking (De Bono, 1970), Business Wargaming (Oriesek and Schwarz, 2009), SWOT Analysis (Namugenyi *et al.*, 2019), Thought Experimentation (Arcangeli, 2010), Delphi Technique (Hsu and Sandford, 2007), Stage Gate (Cooper, 2008), Kano Model Analysis (Rotar and Kozar, 2017), The Disney Creative Strategy (Barton *et al.*, 2012) and many more. Such techniques should be known, understood and practiced by the ideonomist. This way, they would not fall into the habits of any one discipline and can know when to utilise specific techniques or sets of techniques to a particular situation or how to combine and create new techniques from old ones.

According to Gunkel (in relation to "proseases" and symbiotes as positive pathogens), "To the extent that such symbiotic relationship is normal, stable, ancient, universal, or even necessary, sheer custom discourages us from thinking of it as illustrative of infection, much less of a prosease. Yet such arbitrary habits of language and thought shackle the mind, and to the ideonomist they are a scourge that should be fought everywhere until they are extinguished."(Gunkel, 1989, p. 108). This author is inclined to agree. As ideas only go as far as the symbols and sounds used to work them out. An argument must be made for the rapid and personal invention of words. To be able to look at something or engage in a concept with no known name to the expressiant, and create a temporary and fluid placeholder name for such would be a useful tool to the ideonomist. Multiple ideonomists could then create their own words as many times as they please while working through an idea, and then utilise a system of translection to compare ideas with one another. An ideonomist in a way could treat all ideas as both wordless and full of word-potential. If one were to stop an idea, simply due to lack of language and common acyrologia, then many or most new ideas or **dactums** would go unthought, and unmade. The ideonomist must then take care to cultivate their ability to interact with and invent words rapidly.

In addition to ideogenetic techniques there are also techniques for altering the expressiant itself. In humans this can take the form of altered states of consciousness, which have been shown to alter the types and patterns of thought that the person generates (Prochazkova and Hommel, 2020). All of these different ways to alter and interact with ideas can be used to make the toolkit of the ideonomist more versatile, paired with technology this toolkit could become extensive.

### 4.2  Technologies

Patrick Gunkel envisioned different ways to map lists, make lists, create idea maps and trees, and also explored technology for the sake of idea science. "Perhaps what would be offered at some of the descending nodes would be sublists, not of subdimensions per-se, but of other related properties, concepts codimensions, etc. … Perhaps "pseudo-controls" (virtual buttons, keyboards, dials, sliding switches, toggles

etc.) would be projected on one or more side-screens simultaneously with the primary screen displaying and enabling more complex and subtle modifications and programming of operating ideonomic program or 'world'..." (Gunkel, 1989, p 79) This description could easily be mistaken for a description of what we know today as Virtual Reality (VR). Even Gunkel foresaw the use of such a technology for Ideonomy and the possibilities of the modern VR boom, and other Verimutological technologies could enhance the analytical and generative abilities of the ideonomist. Imagine being able to represent an endless web of interconnecting ideas and concepts, in a world of your own creation where any one of those ideas can be modelled, represented and simulated. Such a technology would be invaluable to the ideonomist.

The use and development of Verimutology for Ideonomy is only matched by the rise of Machine Learning and Artificial Intelligence, or Automoatology. The ability to interact with and work alongside artificial ideators, would provide more idom diversity and provide a companion foil to the ideonomist during ideogenesis. In order to realise the full potential of the Human/AI expressant pairing, more research would need to be done, and methods developed to foster a positive working relationship between the ideonomist and ai.

Although many technologies can be considered when talking about ideas, one would allow the ideonomist to explore the potential of "Idea Mining," or attempting to discover an idea without ideogenesis. One such resource for doing so may lie in the Library of Babel website (https://libraryofbabel.info/). In the library is every possible combination of every letter in the English alphabet, in the form of digital books and shelves. Somewhere in this library is every phrase, sentence, paragraph, paper, book and idea. Even the very words of this paper can be searched and found within the library. This means that any previously active and currently active idea to be represented in English, resides there. This also means that any idea that is inactive also resides there. Knowledge about the universe, technologies, histories, philosophies etc. of the future, reside somewhere in that library. To the ideonomist, this is a boon. One might be able to imagine using VR and AI to comb through this library. One could mine the information the library provides and compare it to what we know, what we don't know and to other ideas and their idomic content. Imagine other libraries of similar scope, but using other languages, symbols, models, images etc. What ideas could possibly be discovered while exploring these places?

## 5  Practicum

### 5.1  Foilwork and Community

Considering the techniques and technologies above they would then need to be put to application. This can be achieved by what could be termed **Foilwork**, based on the concept of a literary foil. This would be an individual acting as both a partner or just serve in a supportive role to another. An Ideonomist would be both living knowledge of ideonomy and ideogenetic techniques and tech. Foilwork would be any of the work an ideonomist has to do socially with others to help them with their ideas, but as a supporting role. As a foil, your job isn't to be the centre of innovative attention, but to bolster the ideogenesis of another. It may not stop you from making a major contribution, but that is not the aim. This kind of work would require a community of peers and participants who would accept such work, participants who want this support and peer ideonomists, looking to offer their knowledge and craft. There is no physical or social infrastructure for Ideonomists. They would need similar goals. They would need to find ways to communicate and collaborate. There would need to be common understanding between them. There would need to be something to guide most (see ethics). There ought to be a distinction between the professional community, and ideonomically literate, as well as a way for them to participate in each other's work. The Ideonomist should know how this community works and how to apply communication skills and engage different kinds of individuals.

## 5.2 Ideonomics

If you can ask yourself where the ideas are going, where they came from and how they change, then this creates an interesting paradigm when it comes to this information. The creation of this kind of science would create a large interconnecting system, much like an ecology and economy of ideas being played with and tracked. If foilwork is a micro level of practical ideonomy, studying the system itself would be on the macro end. It ought to be expressed again, that such a system would require a rigorous code of ethics, perhaps on par with the hippocratic oath or greater still. When you are poking the edge of knowledge, weaving the flow of imagination, watching how it moves from place to place and through time, and influencing and utilising other expressants, some of which are conscious, either as practitioner or support, then their ought to be agreed upon standards for how that all should be done. That being said, the larger the system of ideas and ideonomists, the larger and more self-sustaining the ecology of ideas becomes. Like the economist has a higher duty to the economy, and the biologist has a higher duty to the environment, so too would the ideonomist have a higher duty to the larger system of Ideonomics. And so, on top of all else, the Ideonomist must invest time and effort into ideonomics as part of their practical role in society.

## 6    Conclusion

The Science of Ideas, has many different needs and necessary steps to become actualized, none of which can be complete without the Ideonomist. As such it is paramount that the role and necessary knowledge and skill of the ideonomist be stated and subsequently compiled for use. By establishing a guide, toolkit and practicum in the form of a complete "Armamentarium Phantasmagoria," the ideonomist would have the foundational history, research agenda, ethical consideration, technique, technology, community and professional/societal role needed to amplify our collective ideogenetic potential. Allowing us to envision and create the professions, technology, systems, concepts and civilization of the rapidly growing, inevitable future that we seem increasingly wary of and unprepared for.

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