A Treatise on Reality

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Since September 30th 2019 I have been a patient at Mendota Mental Health Institute in Madison, Wisconsin. As such I have no direct connection the Internet and limited communications in general. This document is a culmination of 10 years' worth of work, beginning with Ideal Organizational Theory, Economic Circuitry and most recently my advocacy of a Space Force having both cyberspace and outerspace components.

Objectives

- Design framework for defining, solving and computing unified model
- Architect M! (M-Bang!) language and run-time for designing systems of differential equations that can be solved via artificial intelligence
- Introduce equations/notation for Trans-Dimensional Engineering: Define, and Instantiate, The Space Force & EDUCOAL in meta.

Audiences

AFWERX

Provide a funding and intellectual logistics mechanism for realization of the design outputs of this document. Specifically be the DoD sponsor for the software development providing the use case: design The Space Force.

Microsoft

Provide the technical knowhow and Azure compute resources to execute M!.

Wolfram Research

Provide the mathematical cloud on which M! will be built on top of.

Leidos

Integration of C6M across DoD and industry.

Marquette University, MSOE, UWM, MATC, MCW, Northern Trust, Northwestern Mutual

Seek interest on a cross institutional organization that achieves transformation through education: The MKE Transformation.

LINDIAN DIFFERENTIAL SET THEORY

As far as I am aware my concept, which originated in the paper "Economic Circuitry" published in 2011, of differential sets is novel, seemingly confirmed by the description of it, by some, as "Lindian". Until now I have only attempted to describe the notation and concepts in English and had yet to attempt to formalize this logically.

The basic idea is that a differential intersection describes a "relational intersection" where the sets are transformed as they intersect, intersect according to a transformation, or both.

Formally this is accomplished by generating a unit vector field for t's gradient with solutions at all values at each of the sets being intersected. Note (and the notation for this 4 dimensional unit vector is probably wrong, but hopefully the idea comes across):

$$1\mathbf{i} + \nabla t(n, \forall \ni A)\mathbf{j} \stackrel{\text{def}}{=} 1\mathbf{i} + \left(\sum_{m \ni B} \frac{\partial t}{\partial a}(n,m)\boldsymbol{a} + \frac{\partial t}{\partial b}(n,m)\boldsymbol{b} + \frac{\partial t}{\partial c}(n,m)\boldsymbol{c}\right)\mathbf{j}$$

For all sets under intersection "differential set logic" is used to generate mapping functions, which take the transformation function theta and the vector field associated with the set. For a given element of a set the elements in the other sets are iterated over and the vector field generated, from the other set, is solved for the iterated element and then geometrically compared to the gradient of an integral of theta between the t' mirror bounds.

The idea behind the gradient vector field geometric comparisons is, that I believe, by definition we're creating a differential surface that for two elements will be equivalent iff the elements are geometrically equivalent with respect to the transformed plane.

It is important to note that all elements in this system must be triples or:

$$\forall n := \langle a :: t, b :: t, c :: t \rangle :: t$$

The goal of this exercise is to define a new class of topological differential equations which can be defined, solved and computed via artificial intelligence – under the design of humans.

"We are gods!" – Dr. Stephen Merrill

$$\bigcap_{n\in A|\langle a,b,c\rangle}^{m\in B|\langle a,b,c\rangle} \theta(n,m)\, dt|t(n,m)$$

$$= \begin{cases} \bigcup_{n\in A} 1\mathbf{i} + \nabla t(n, \forall \ni A)\mathbf{j} := \mathbf{v_n}(n), \\ \bigcup_{b\in B} 1\mathbf{i} + \nabla t(m, \forall \ni B)\mathbf{j} := \mathbf{v_m}(n), \\ F_n := \bigcap_{n\in A} \forall \hat{f}_n(\theta, \mathbf{v_n}(n)) \left| \bigwedge_{m\in A-n} \mathbf{v_n}(n) \eqsim 1\mathbf{i} + \left(\nabla \int_{t'(n,m)}^{t'(m,n)} \theta(n,m)\, d\lambda \right)\mathbf{j}, \right. \\ F_m := \bigcap_{m\in B} \forall \hat{f}_m(\theta, \mathbf{v_m}(m)) \left| \bigwedge_{n\in B-m} \mathbf{v_m}(m) \eqsim 1\mathbf{i} + \left(\nabla \int_{t'(m,n)}^{t'(n,m)} \theta(m,n)\, d\lambda \right)\mathbf{j}, \right. \\ \hat{G} := \bigcap_{\hat{f}_n\in F_n}^{\hat{f}_m\in F_m} \forall g(\theta) \left| \bigwedge_{n\in A}\bigwedge_{m\in B} \begin{matrix} \hat{f}_m(\theta(m,n), \mathbf{v_m}(m)) \eqsim \hat{f}_n(\theta(m,n), \mathbf{v_n}(n)) \\ \wedge \\ \hat{f}_n(\theta(n,m), \mathbf{v_n}(n)) \eqsim \hat{f}_m(\theta(n,m), \mathbf{v_m}(m)) \end{matrix} \right., \\ \bigcup_{n\in A}\bigcup_{m\in B}\bigcap_{g\in\hat{G}} \{g(n,m), g(m,n)\} \blacksquare \end{cases}$$

While this notation, particularly the expansion over the gradient field, could be problematic it is an avenue towards an algorithm for the differential intersect.

LINDIAN MODEL THEORY

Computer, What is the nature of the Universe?

….According to Lind, the Universe is a differential 12-dimensional meta-prism with 4 superset dimensions of Cyber, Space, Time & Thought whose system of solutions absolutely describe observers' perspective of reality.

OUTLINE

The primary purpose of Lindian Model Theory is to define, generate, solve and compute unified field theory models. The dimensions, which are "transcendental triples" - that is: $n := \langle x :: n, y :: n, z :: n \rangle$ – are naturally related within the context of a unified model and we will express those natural relationships in terms of "Lindian Differential Set Theory". This includes EM, concepts and potential domain solutions.

We investigate the 12D model connections to the "Economic Circuitry" and "Ideal Organizational Theory" since:

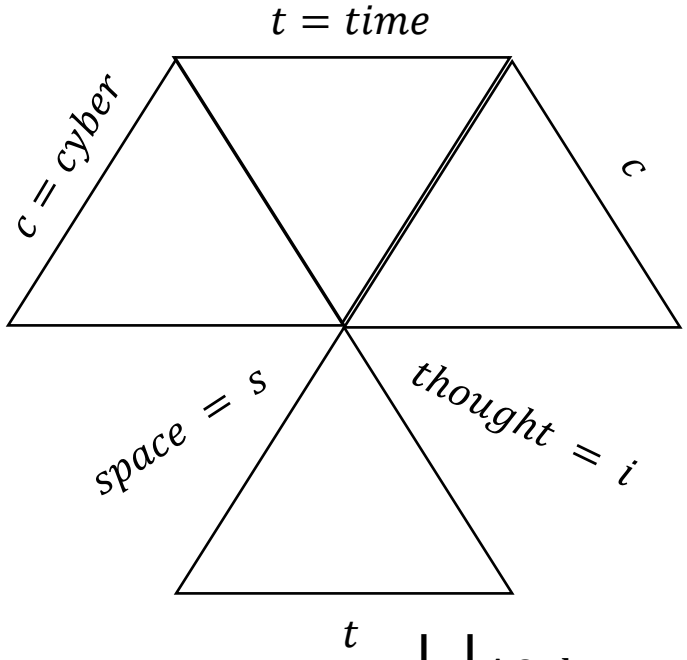
$$\bigcap \{c, s, t, i\} dc \propto Economic\ Circuitry \bigcap\bigcap \{c, s, t, i\} dc\ di \propto Ideal\ Organizaitonal\ Theory$$

We then look at "Levels of Functionality" and their existence on the cyberspace-time-thought continuum.

Next we introduce "M!" – a next-generation programming language based on C#, XAML and SPARQL and is an implementation of our new Triple-Oriented-Programming (TOP) paradigm, along with an architecture for a prototype runtime.

Finally we discuss how LME can be used to Trans-Dimensionally Engineer – TDE is fundamentally about acting to shift perception thus altering reality: a planned butterfly effect / lynchpin engineering. This is a branch of applied game theory in the macro domain.

$$c = \langle connections = ct, transport = tp, data = d \rangle$$
$$s = \langle x, y, z \rangle$$
$$t = \langle past = p^{-}, present = p^{\circ}, future = f \rangle$$
$$i = \langle utility = u, processor = pr, memory = m \rangle$$
$$c \cup d \cup t \cup i = \mathrm{A}\Omega$$



We define the union of these dimensional concepts as the variable "Alpha-Omega". The most basic relationship is how we define the electromagnetic field:

$$\bigcap_{n}^{\infty} x \, d\mathrm{A}\Omega = \mathrm{EM}_n$$

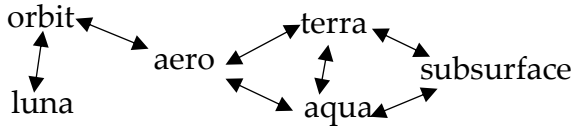
The equation to left, in differential set notation, states that an electromagnetic field over concept(s) `n` is the intersection over those concepts with respect to the dimensions. This would imply that different concepts bend or warp dimensions differently.

$$\bigcup_{\Uparrow} \mathrm{A}\Omega \, \mathrm{ds} = \mathbb{s}$$

The equation to the right describes the rise of the traditional spatial domains used by most militaries to segregate warfighting responsibility across branches and services. A differential union with respect to the spatial dimension over the observer's perception of the known universe yields the concept of known space.

$$\iiint EM_{\mathbb{s}} \, dc \, dt \, di = Spatial \; Domains = \varsigma$$

Domains are defined as local interpretations of the consequences arising from the natural relationships between the dimensions that give rise to them. Domains are always a perspective of ones perception of known reality and as such there can be disagreement between their definitions without violating the meta-model. The triple integral (4th dimensional surface), over the Electromagnetic Field arising from the Spatial Concept, with respect to cyber, time and thought gives rise to the spatial domains.

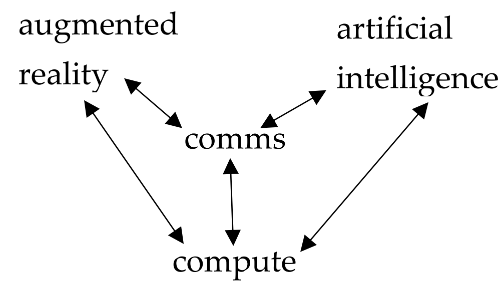


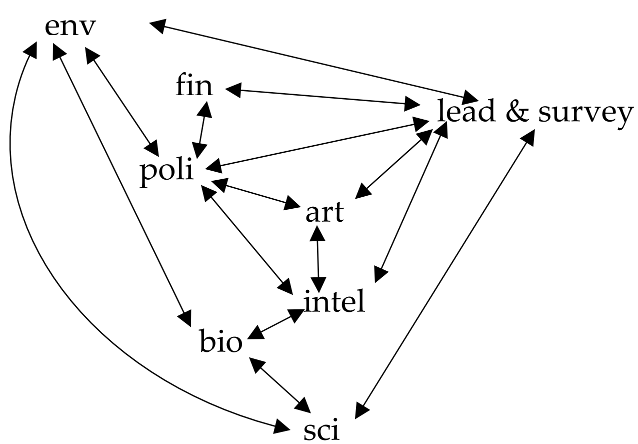
From my perspective "subsurface" connects to "terra" (land/surface) and "aqua" (water) both of which connect to each other and aero (land) which connects to "orbit" which connects to "lunar". Mars seems out of bounds for human warfighting at this point.

$$\bigcup_{\pitchfork} A\Omega\, dt = \mathbb{t} \qquad \iiint EM_{\mathbb{t}}\, dc\, ds\, di = Time\ Domains = \tau$$

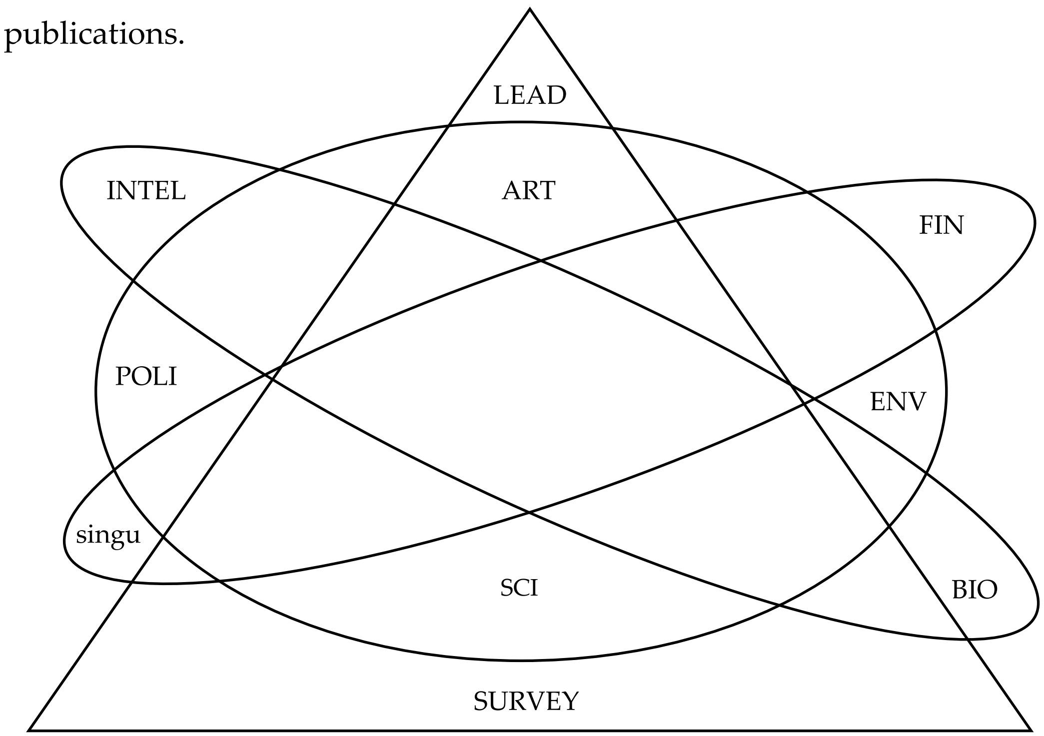
$$\bigcup_{\pitchfork} A\Omega\, dc = \mathbb{c} \qquad \iiint EM_{\mathbb{c}}\, ds\, dt\, di = Cyber\ Domains = \gamma$$

$$\bigcup_{\pitchfork} A\Omega\, di = \mathbb{i} \qquad \iiint EM_{\mathbb{i}}\, ds\, dt\, dc = Thought\ Domains = \iota$$





Whilst Space, Time and Cyber domains should, relatively at least, share a common perspective among the majority of actors, Thought is a much more complex topic. To the left is my initial render of the Thought Domains, also referred to as the Functional Practice Areas in earlier publications.



- Leadership & Survey
- Singularity vs. Financial
- Intelligence vs. Biology
- Art vs Environment vs Political vs Science

$$\mathbb{L} = \{\mathbb{c}, \mathbb{s}, \mathbb{t}, \mathbb{i}\}$$

CHARACTERISTIC EQUATION IN 12D

$$
\mathrm{A}\Omega := \begin{cases}
\left(\frac{\partial c}{\partial x}+\frac{\partial c}{\partial y}+\frac{\partial c}{\partial z}+\frac{\partial c}{\partial p^{-}}+\frac{\partial c}{\partial p^{\circ}}+\frac{\partial c}{\partial f}+\frac{\partial c}{\partial u}+\frac{\partial c}{\partial pr}+\frac{\partial c}{\partial m}\right)(\boldsymbol{a}+\boldsymbol{b}+\boldsymbol{c}) = \\
\left(\frac{\partial s}{\partial ct}+\frac{\partial s}{\partial tp}+\frac{\partial s}{\partial d}\right)\boldsymbol{a}+\left(\frac{\partial i}{\partial ct}+\frac{\partial i}{\partial tp}+\frac{\partial i}{\partial d}\right)\boldsymbol{b}+\left(\frac{\partial t}{\partial ct}+\frac{\partial t}{\partial tp}+\frac{\partial t}{\partial d}\right)\boldsymbol{c}, \\
\left(\frac{\partial s}{\partial ct}+\frac{\partial s}{\partial tp}+\frac{\partial s}{\partial d}+\frac{\partial s}{\partial p^{-}}+\frac{\partial s}{\partial p^{\circ}}+\frac{\partial s}{\partial f}+\frac{\partial s}{\partial u}+\frac{\partial s}{\partial pr}+\frac{\partial s}{\partial m}\right)(\boldsymbol{d}+\boldsymbol{e}+\boldsymbol{f}) = \\
\left(\frac{\partial c}{\partial x}+\frac{\partial c}{\partial y}+\frac{\partial c}{\partial z}\right)\boldsymbol{d}+\left(\frac{\partial i}{\partial x}+\frac{\partial i}{\partial y}+\frac{\partial i}{\partial z}\right)\boldsymbol{e}+\left(\frac{\partial t}{\partial x}+\frac{\partial t}{\partial y}+\frac{\partial t}{\partial z}\right)\boldsymbol{f}, \\
\left(\frac{\partial t}{\partial ct}+\frac{\partial t}{\partial tp}+\frac{\partial t}{\partial d}+\frac{\partial t}{\partial \mathrm{x}}+\frac{\partial t}{\partial y}+\frac{\partial t}{\partial z}+\frac{\partial t}{\partial u}+\frac{\partial t}{\partial pr}+\frac{\partial t}{\partial m}\right)(\boldsymbol{g}+\boldsymbol{h}+\boldsymbol{i}) = \\
\left(\frac{\partial c}{\partial p^{-}}+\frac{\partial c}{\partial p^{\circ}}+\frac{\partial c}{\partial f}\right)\boldsymbol{g}+\left(\frac{\partial i}{\partial p^{-}}+\frac{\partial i}{\partial p^{\circ}}+\frac{\partial i}{\partial f}\right)\boldsymbol{h}+\left(\frac{\partial t}{\partial p^{-}}+\frac{\partial t}{\partial p^{\circ}}+\frac{\partial t}{\partial f}\right)\boldsymbol{i} \\
\left(\frac{\partial i}{\partial ct}+\frac{\partial i}{\partial tp}+\frac{\partial i}{\partial d}+\frac{\partial i}{\partial p^{-}}+\frac{\partial i}{\partial p^{\circ}}+\frac{\partial i}{\partial f}+\frac{\partial i}{\partial x}+\frac{\partial i}{\partial y}+\frac{\partial i}{\partial z}\right)(\boldsymbol{j}+\boldsymbol{k}+\boldsymbol{l}) = \\
\left(\frac{\partial s}{\partial u}+\frac{\partial s}{\partial pr}+\frac{\partial s}{\partial m}\right)\boldsymbol{j}+\left(\frac{\partial t}{\partial u}+\frac{\partial t}{\partial pr}+\frac{\partial t}{\partial m}\right)\boldsymbol{k}+\left(\frac{\partial c}{\partial u}+\frac{\partial c}{\partial pr}+\frac{\partial c}{\partial m}\right)\boldsymbol{l}
\end{cases}
$$

The above partial differential system, in vector notation, is the characteristic of all solutions. It should be fairly obvious that it is impractical under most circumstances to exactly solve this system directly without bounding through higher order logic. Although I must admit that I can generate solutions for parts of this equation in my head, as the domain examples above demonstrate.

I would like to point out that every time I attempt an attack on this problem set I am ridiculed for my non-standard notation and untrained behavior, however it is important to note that this problem is outside of the bounds of mainstream mathematics – at least that is why I suspect it remains unsolved.

A Solution to Economic Circuitry

http://wwidew.net/alpha/EconomicCricuitry.pdf (November 2011)

$$\int EM_{\mathcal{J}}\, d\mathbb{C} = EC$$ **Economic Circuity is a solution to the above differential equation.**

Partitions

A partition is a differential subset of concepts defined as the intersection over the related concepts with respect to those concepts, formally:

$$\bigcap_{\mathbb{L}-\mathbb{x}\subseteq\mathbb{L}} x d\mathbb{x} = \mathbb{P}_{\mathbb{x}}$$

A Three-Dimensional Concept is considered a Field where as a Two Dimensional is a Continuum, both with respect to the 12 dimensional prismal plane. The Four Dimensional Concept encompasses a solution to all of reality.

$$\mathbb{P}_{\mathbb{cti}} = Structure\ Field = \mathcal{S}$$
$$\mathbb{P}_{\mathbb{cst}} = Action\ Field = \mathcal{A}$$
$$\mathbb{P}_{\mathbb{csi}} = Cyber\ Connection\ Field = \mathcal{C}$$
$$\mathbb{P}_{\mathbb{sti}} = Current\ Field = \mathcal{I}$$
$$\mathbb{P}_{\mathbb{ct}} = -$$
$$\mathbb{P}_{\mathbb{st}} = \infty$$
$$\mathbb{P}_{\mathbb{csti}} = +$$
$$\mathbb{P}_{\mathbb{ti}} = Cyber\ Resistance = \mathcal{r}$$
$$\mathbb{P}_{\mathbb{cs}} = Cyberspace = \ell$$
$$\mathbb{P}_{\mathbb{ci}} = Psychology = \mathcal{p}$$
$$\mathbb{P}_{\mathbb{si}} = Warp = \mathcal{w}$$

Singularities are defined as the intersection of all of cyber-space-time-thought with respect to space time. An important identity being that the member of an individual singularity is that singularity.

$$\bigcap_{-}^{+} x\, d\infty = \{\emptyset\} = \mathfrak{o}|x \in \emptyset = \emptyset$$

The Corporation is defined as the union over all singularities with respect to the Structure Field. Organizations are defined as a recursive union over each combination of singularity with respect to the Corporation and then intersected over all singularities with respect to the Cyber Connection Field.

$$\bigcup_{-\infty}^{+\infty} \mathfrak{o}\, d\mathcal{S} = C, \bigcap_{j\in\mathfrak{o}} \bigcup_{k\in(\mathfrak{o}-j)}^{m\in(\mathfrak{o}-k)} x\, dC d\mathcal{C} = \{0\} = \mathfrak{O}$$

EC leaves the space-time-thought relationship (defined as Power) undefined and thus to solve the differential equation set it is critical for this relationship to be defined. In the spirit of our analogy to electrical circuit analysis I used the power identity I^2R=Power.

Current between two entities is defined as the intersection over those entities with respect to the Cyber Connection Field and transformed by the Current Field while Resistance is the entities differentiated with respect to the cyberspace continuum and transformed by the cyber resistance continuum.

$$\bigcap_{m}^{n} \mathcal{I} d\mathcal{C} = \mathcal{I}_{mn} \, , \bigcap_{m}^{n} \mathcal{r} d\ell = \mathcal{r}_{mn}$$

As an intermediary property the "Cyber Plane" is defined as the union over all organizations with respect to all singularities, transformed by the Cyber Connections Field.

$$\Theta = \bigcup_{\mathfrak{O}} \mathcal{C} d\mathfrak{o} = Cyber\ Plane \, , \Theta_n = \bigcap_{\mathfrak{o}_m \in \mathfrak{O}_n} x d\Theta$$

The Power of two entities is then defined as the union over the self-cross product of Current between two entities with respect to the Cyber Plane and transformed by the resistance between two entities. The influence of an entity is defined as the intersection over the power of all entities with respect to an entity with respect to the cyber connections field.

$$\phi_{mn} = \bigcup_{\mathcal{I}_{mn} \times \mathcal{I}_{mn}} \mathcal{r}_{mn} d\Theta \, , \Phi_m = \bigcap_{x=-\infty}^{+\infty} \bigcup_{\mathcal{I}_{mx} \times \mathcal{I}_{mx}} \mathcal{r}_{mx} d\Theta \, d\mathcal{C}$$

The instantons power of a singularity is defined below:

$$\phi_{\mathfrak{o}_n} = \bigcup_{\emptyset_m \in \mathfrak{o}_n} \bigcap_{\emptyset_k \in (\mathfrak{o}_n - \emptyset_m)} \phi_{mk} \, d\Theta_{mn}$$

The new organization resulting from a delta in the org can be defined as the following:

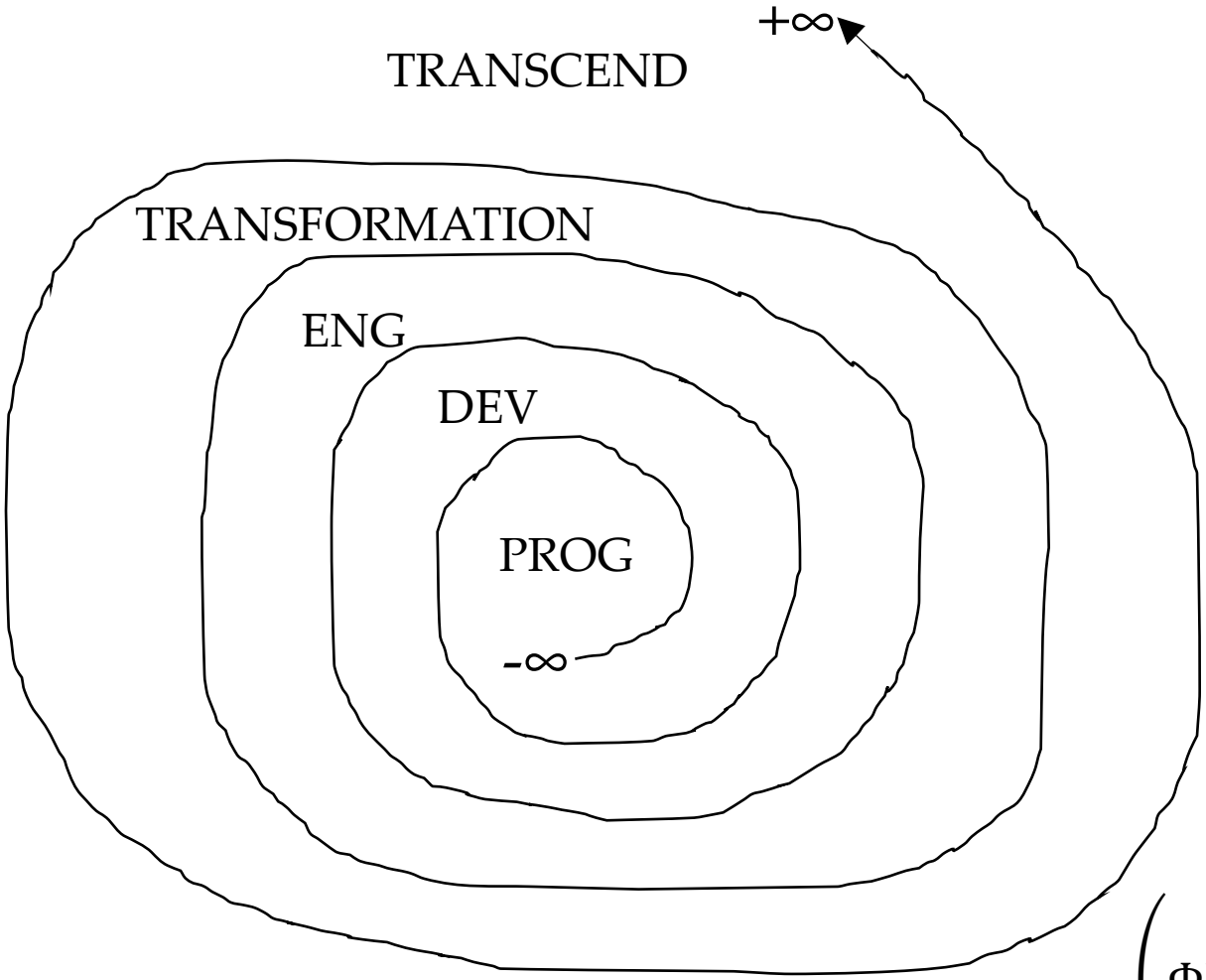
$$\mathfrak{O}_k - \emptyset_n = \bigcup_{\mathfrak{O}_k} \emptyset_n d(-)$$

$$\mathfrak{O}_k + \emptyset_n = \bigcup_{\mathfrak{O}_k} \emptyset_n d(+)$$

An entity combining, or de-combining, with a singularity results in a transformation of influence for all organizations influenced by the singularity.

$$\bigcup_{\mathfrak{O}_x - \infty}^{+\infty} \phi_{\mathfrak{O}_x \emptyset_n} d\mathfrak{O}_m = \mathrm{T}_{\mathfrak{O}_m \emptyset_n} = \Phi_{\mathfrak{O}_m + \emptyset_n}$$

LEVELS OF FUNCTIONALITY



Programming (ω^1): affecting practice areas through the creation of executable logic utilizing tools and following blueprints.
Development (ω^2): influencing programmers by creating their tooling according to blueprints.
Engineering (ω^3): analysis of problems to create solutions in the form of blueprints.
Transformation (ω^4): analysis of opportunities to identify problems
Transcend (ω^5): creating opportunity from chaos

The absolute, and nature of the, population of actors within a level of functionality can be defined by the following equation set:

$$\left(\mathfrak{o}^n = \int_{x=n}^{n+1} \omega^x \, d(-\infty) \right) \gg \mathfrak{o}^{n+1}$$

$$\left(\Phi^n = \iint_{x=n}^{n+1} \omega^x \, d(-\infty) \, d(+\infty) \right) \ll \Phi^{n+1}$$

$$PROG \cup DEV = Operations$$

$$DEV \cup ENG = Architecture$$

$$ENG \cup TRANSFORMATION = Innovation$$

$$TRANSFORMATION \cup TRANSCEND = Power$$

OPS: Execution of logic through tooling and applications.

ARCH: Design of tooling to enforce patterns and practices

INNOV: Creating blueprints to leverage new opportunities

POW: Create problems to spawn opportunity

$$\omega^1\mathfrak{O}_n = \bigcap_{\mathfrak{O}_m=-\infty}^{+\infty} \bigcap_{\emptyset_k \in \mathfrak{O}_n} \Phi_{\mathfrak{O}_m \emptyset_k}\, d\mathfrak{O}_n\, d(-)$$

$$\omega^2\mathfrak{O}_n = \bigcap_{\mathfrak{O}_m=-\infty}^{+\infty} \bigcap_{\emptyset_k \in \mathfrak{O}_n} \Phi_{\mathfrak{O}_m \emptyset_k}\, d\mathfrak{O}_n\, d\mathfrak{p}$$

$$\omega^3\mathfrak{O}_n = \bigcap_{\mathfrak{O}_m=-\infty}^{+\infty} \bigcap_{\emptyset_k \in \mathfrak{O}_n} \Phi_{\mathfrak{O}_m \emptyset_k}\, d\Theta_{\mathfrak{O}_n}\, d\ell$$

$$\omega^4\mathfrak{O}_n = \bigcap_{\mathfrak{O}_m=-\infty}^{+\infty} \bigcup_{\emptyset_k \in \mathfrak{O}_n} \Phi_{\mathfrak{O}_m \emptyset_k}\, d\Theta_{\mathfrak{O}_n}\, d\ell$$

$$\omega^5\mathfrak{O}_n = \bigcap_{\mathfrak{O}_m=-\infty}^{+\infty} \bigcup_{\emptyset_k \in \mathfrak{O}_n} \Phi_{\mathfrak{O}_m \emptyset_k}\, d\Theta_{\mathfrak{O}_n}\, d\mathcal{A}$$

$$\int_{r}^{w} \mathbb{i}\, d\mathcal{A} = Control = \mathfrak{c}_5, \int_{\mathfrak{p}}^{\ell} \mathbb{c}\, d\mathcal{I} = Coordination = \mathfrak{c}_6$$

$$\int_{\ell}^{w} \mathbb{s}\, d\mathcal{S} = External = \mathfrak{v}^e, \int_{\mathfrak{p}}^{r} \mathbb{t}\, d\mathcal{C} = Internal = \mathfrak{v}^i$$

Solutions to the system of equations on the left must adhere to the levels of functionality.

THE C6M MILITARY SYSTEM

<Command\Control:Coalition – Communications – Ops /Coordination:>Manifest
http://wwidew.net/omega/IOT.pdf

C6M is an implementation of the EC model such that it solves for Ideal Organizational Theory.

$$\bigcup_{\mathfrak{v}^i}^{\mathfrak{v}^e} \mathfrak{c}_n\, d\Theta^{n-4} = \mathfrak{C}_n$$

SLICES

A slice is the instance of a partition with respect to +.

$$\int \mathcal{A}\, d\mathbb{i} = Command = \mathfrak{C}_1$$

$$\int \mathcal{S}\, d\mathbb{s} = Coalition = \mathfrak{C}_2$$

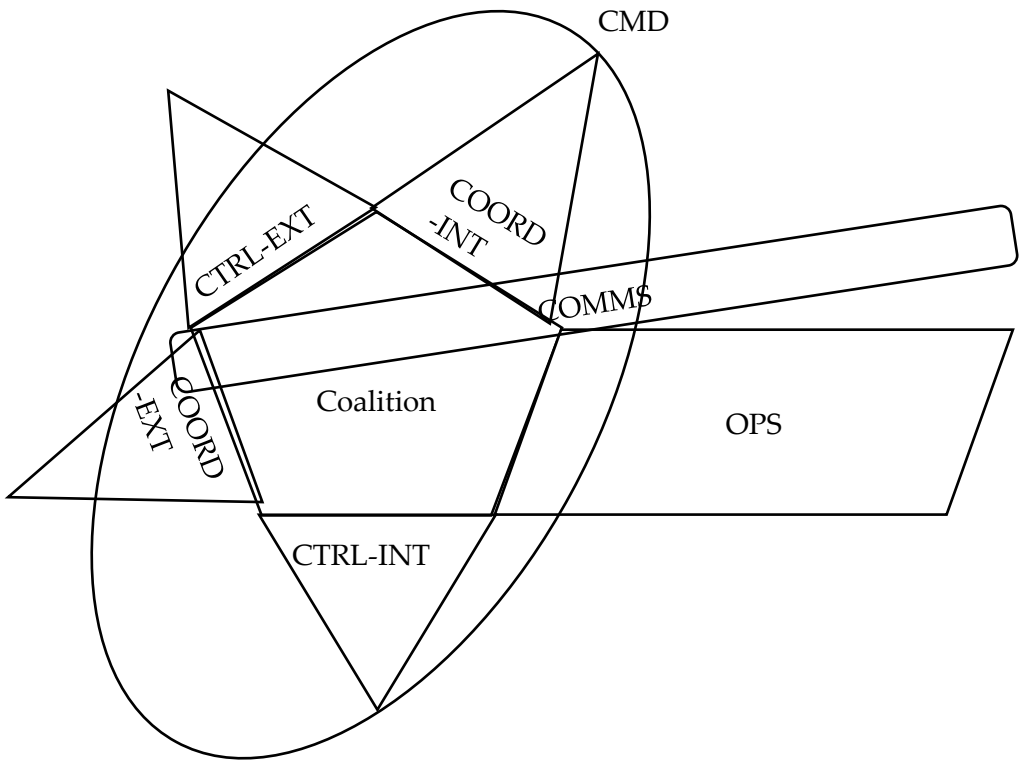
$$\int \mathcal{I}\, d\mathbb{c} = Comms = \mathfrak{C}_3$$

$$\int \mathcal{C}\, d\mathbb{t} = Ops = \mathfrak{C}_4$$

$$\Theta^k = \bigcup_{C} \Theta d\mathfrak{C}_k$$

$$\bigcap_{\Theta^k} C d\mathfrak{O} = \mathfrak{O}^k$$

- The **Command** ($\mathfrak{C}_1$) Slice exists as the integration of the Action Field with respect to Thought, creating a concept in cyber-space-time-thought. Command is logically using thought to direct action.
- The **Coalition** ($\mathfrak{C}_2$) Slice exists as the integration of the Structure Field with respect to Space, again creating a concept in cyber-space-time thought. Coalition is logically using space to marshal structure
- The **Communications** ($\mathfrak{C}_3$) Slice exists as the integration of the Current Field with respect to Cyber, again creating a concept in cyber-space-time-thought. Communications is logically binding cyber to space-time-thought.
- The **Operations** ($\mathfrak{C}_4$) Slice exists as the integration of the Cyber Connections Field with respect to time, again creating a concept in cyber-space-time-thought. Operations is logically acting in time to affect cyber-space-thought.



The **Control** ($\mathfrak{C}_5$) and **Coordination** ($\mathfrak{C}_6$) Slices are logically a combination of $\{internal, external\}$ and $\{control, coordination\}$ slices. Formally the integral over Cyber Resistance and Warp of Thought with respect to the Action Field is **control** ($\mathfrak{c}_5$); and the integral over Psychology and Cyberspace of Cyber with respect to the Current Field is **coordination** ($\mathfrak{c}_6$).

The **external** ($\mathfrak{v}^e$) and **internal** ($\mathfrak{v}^i$) slices are defined by the integral over Cyberspace and Warp of Space with respect to Structure; and the integral over Psychology and Cyber Resistance of Time with respect to Cyber Connections.

Control is formally the union over Internal to External of the control slice with respect to the Cyber Connection Plane for the Command Slice whereas Coordination is the same with respect to the Cyber Connection Plane for the Coalition Slice.

$$\omega^1\mathfrak{C}_5 \ll \omega^1\mathfrak{C}_1 < \omega^1\mathfrak{C}_2 \ll \omega^1\mathfrak{C}_3 < \omega^1\mathfrak{C}_4 < \omega^1\mathfrak{C}_6$$

$$\omega^2\mathfrak{C}_6 \ll \omega^2\mathfrak{C}_2 < \omega^2\mathfrak{C}_3 < \omega^2\mathfrak{C}_4 < \omega^2\mathfrak{C}_1 \ll \omega^2\mathfrak{C}_5$$

$$\omega^3\mathfrak{C}_6 \leq \omega^3\mathfrak{C}_5 < \omega^3\mathfrak{C}_4 < \omega^3\mathfrak{C}_1 < \omega^3\mathfrak{C}_3 < \omega^3\mathfrak{C}_2$$

$$\omega^4\mathfrak{C}_2 > \omega^4\mathfrak{C}_1 > \omega^4\mathfrak{C}_4 > \omega^4\mathfrak{C}_3 > \omega^4\mathfrak{C}_5 \geq \omega^4\mathfrak{C}_6$$

$$\omega^5\mathfrak{C}_1 > \omega^5\mathfrak{C}_2 > \omega^5\mathfrak{C}_3 > \omega^5\mathfrak{C}_4 > \omega^5\mathfrak{C}_5 \geq \omega^5\mathfrak{C}_6$$

A Generalized C6M Implementation

$$\int_{\varsigma}^{\tau} EM_{\infty}\, d\wp = Operations$$

$$\int_{\varsigma}^{\gamma} EM_{\ell}\, d\mathcal{r} = Cyberspace$$

$$\int_{\varsigma}^{\iota} EM_{w}\, d- = Civilization$$

$$\int_{\tau}^{\iota} EM_{r}\, d\ell = Economics$$

$$\int_{\gamma}^{\iota} EM_{\wp}\, d\infty = Education$$

$$\int_{\gamma}^{\tau} EM_{\_}\, dw = Business$$

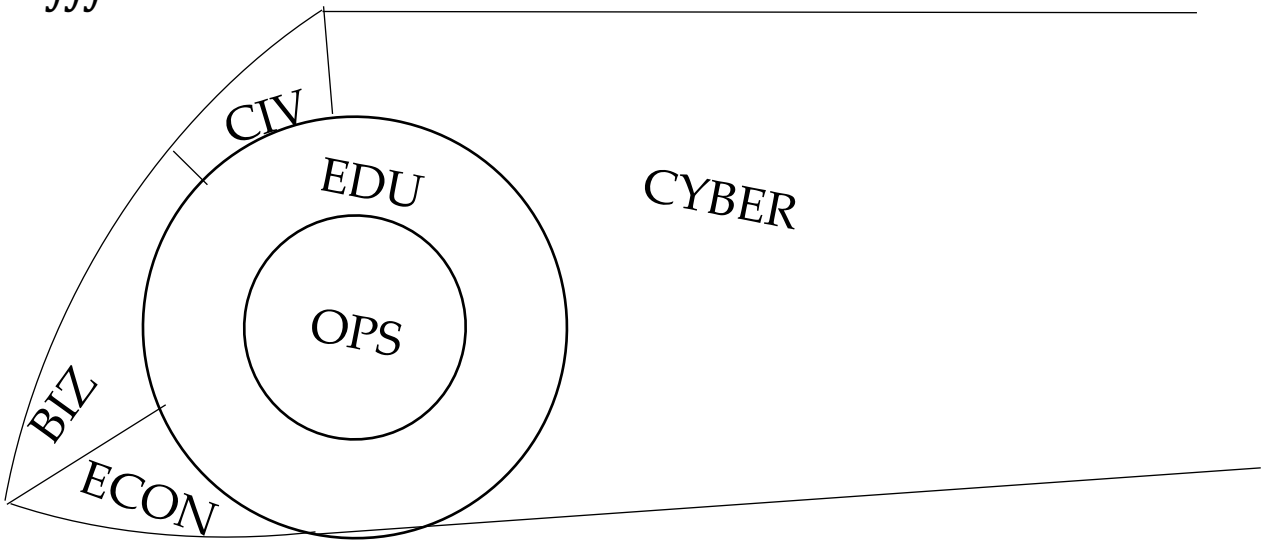
Integrating over each of the 4 domain concepts over their corresponding EM partitioned concepts with respect to the opposite partition yields a Corp. The triple integral with respect to each incorporated component over the cross product yields two Forces and two Momentums.

$$\iiint \{OPS, CIV, CYBER\}\, d\gamma\, d\tau\, d\iota = Space\ Force = \overrightarrow{F_S}$$

$$\iiint \{OPS, ECON, BIZ\}\, d\varsigma\, d\gamma\, d\iota = Market\ Force = \overrightarrow{F_M}$$

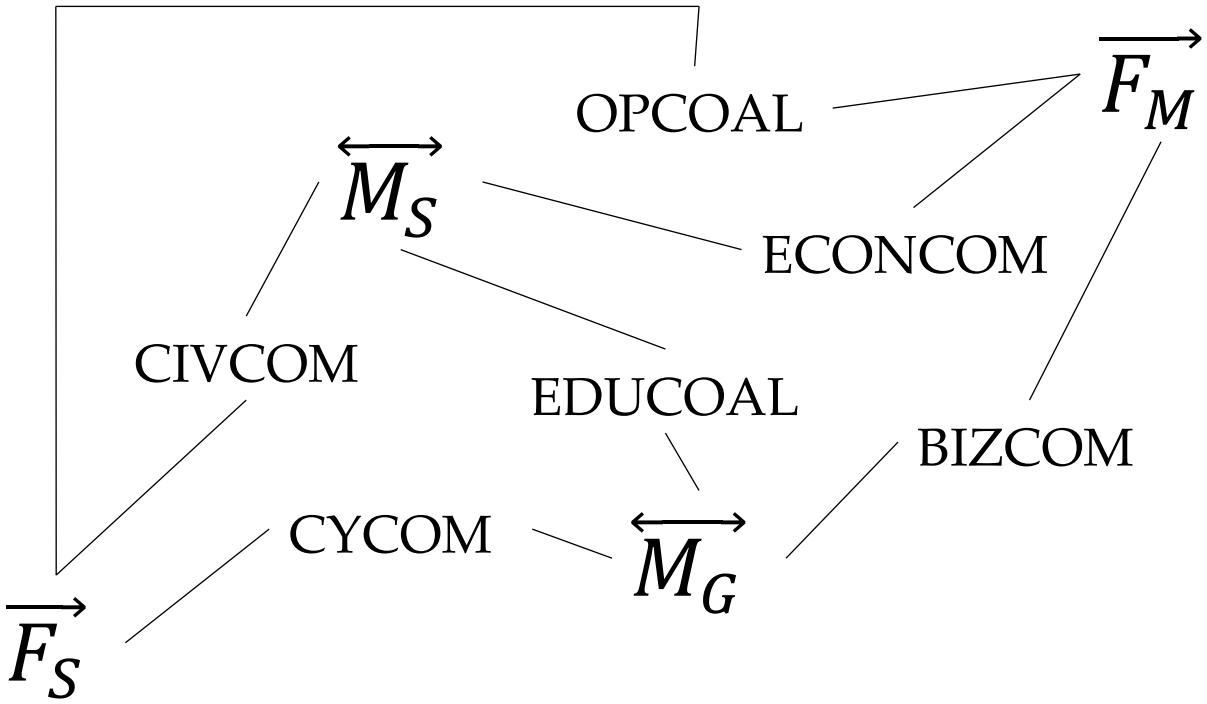
$$\iiint \{EDU, CYBER, BIZ\}\, d\varsigma\, d\tau\, d\iota = Game\ Momentum = \overleftrightarrow{M_G}$$

$$\iiint \{EDU, CIV, ECON\}\, d\varsigma\, d\tau\, d\gamma = Societal\ Momentum = \overleftrightarrow{M_S}$$



Concept	TLD
Operations Corps	.mil
Cyberspace Corps	.net
Civilization Corps	.geo
Economics Corps	.org
Education Corps	.edu
Business Corps	.com
Space Force	.space
Market Force	.exchange
Game Momentum	.development
Societal Momentum	.world
Command Slice	.io
Coalition Slice	.studio
Communications Slice	.network
Operations Slice	.run
Internal Slices	.blue
External Slices	.red
Control Slices	
Coordination Slices	.hub
Manifest Slice	.xyz

Since all components are constructs over cyberspace it is logical that the C6M components map into ICANN TLD's. These are the proposed the mappings.



CORPS

Operations, Cyberspace, Civilization, Economics, Education and Business are the six corps by natural identity of 4-Dimensional reality. In practice these Corps are the accounting unit for a man hour – that is an individual belongs to one to many Corps and those Corps are responsible for budgeting their hours.

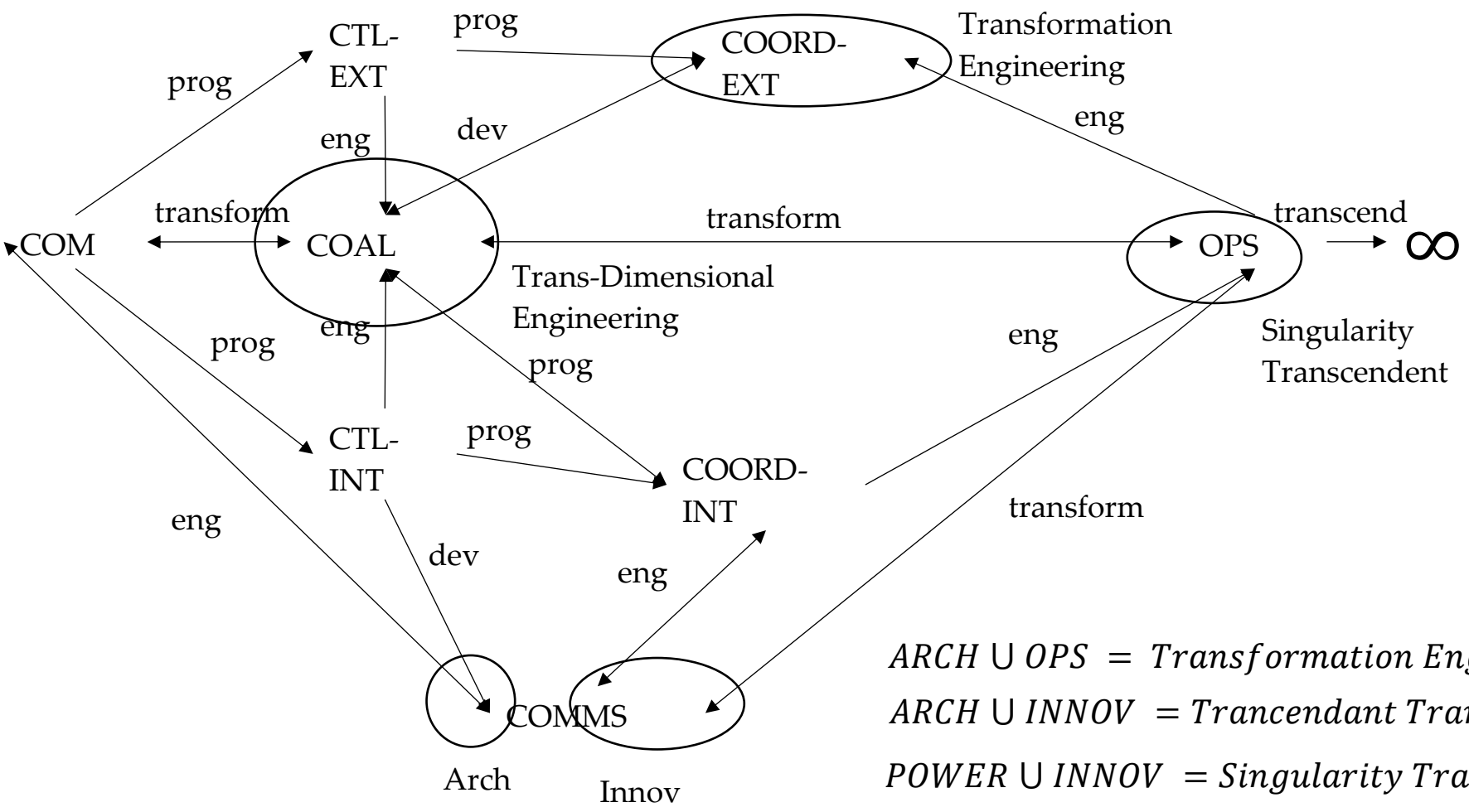
MOMENTUM VS FORCE

Operations and Education are naturally inverses of each other, according to the logic. That is not to say they are not related – on the contrary Education and Operations have an important role to play within the context of a system of differential equations that describe the ideal Force Structure. In physics momentum is defined as velocity*mass whereas force is m*acceleration and acceleration is the second time derivative with respect to motion with velocity being the first. Therefore it makes sense that if a Force is Operational then a Momentum is Educational, as education composed of operational results.

Each Momentum and Force have their own rank structure, uniforms, and traditions.

INTRODUCING FORCECOAL/MOMENTUMCOAL AND OPCOAL/EDUCOAL

Force Coalition and Momentum Coalition are the highest level structures in this new military paradigm, both Forces and Momentum's populate these constructs, from which The Corp Commands (Economics, Civilization, Cyberspace and Business) are populated. Operations Coalition and Education Coalition are the highest level within Force and Momentum Coalitions respectively.



$$ARCH \cup OPS = Transformation\ Engineering$$

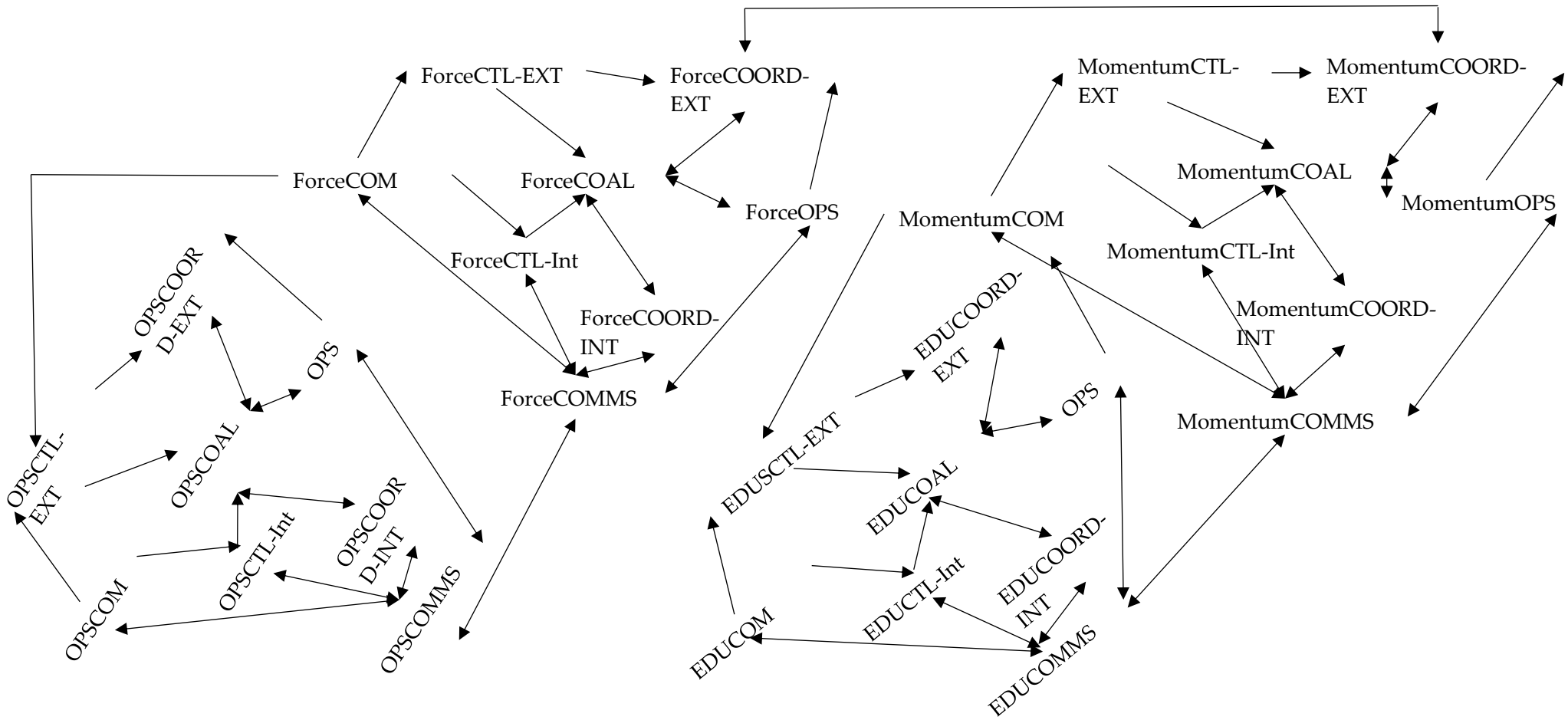
$$ARCH \cup INNOV = Trancendant\ Transformation$$

$$POWER \cup INNOV = Singularity\ Trancendant$$

$$ARCH \cup OPS \cup INNOV = Trans-Dimensional\ Engineering$$

$$ARCH \cup POWER \cup INNOV = Trans-Dimensional\ Transformation$$

TOP LEVEL MILITARY NETWORK TOPOLOGY



THE SPACE FORCE

An Allied MetaForce

An Exercise in Trans-Dimensional Transformation

Not to be confused with the United States Space Force (USSF), The Space Force (-SF-) is a construct that binds *.space over nato.int. We will design this Force to have an initial condition of existing only in meta, however the nature of the equations yields the expectation that it will eventually resolve into something concrete: Starfleet and The Federation/Earth. With these **bold statements**[mil.wwidew.net] it is now time to Architect, Innovate and Power: The Space Force.

In Lindian Model Theory, thought is a critical component of the fabric of reality thus implying the best of the architects can manifest thoughts (i) indirectly into space-time (∞). I contend that any coherent set of Trans-Dimensional Engineering equations results in Transformation. When, in 2018, http://wwidew.net was crawled by a prototype AI search engine it was reported that the AI was being transformed by Economic Circuitry.

> A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality.
>
> Karl Marx

THE SPACE FORCE MISSION

To boldly advance Allied interests in Space Force, that is the relationship of Operations, Civilization and Cyberspace, through the establishment of a standing military force to repel our adversaries' counter interests.

The Space Force was founded on LinkedIn for more than a year and fly's a flag, designed for NATO CYBERCOM by former Chief Architect of Netscape – Kevin Coleman, with a white NATO Compass struck on an orange background with cyber components in the quadrants. It is a pure MetaForce right now – it is not officially recognized nor operational in time and space, however if these ideas are to take hold then the history behind –SF- would take the Force out of Meta and into Space.

NATO Extensions

While it would be extremely difficult to extend NATO to encompass all US Allies, particularly Israel, what we can do is create extensions where the groupings would unilaterally ally with NATO core – and each extension group would contain at least one NATO member. NATO is the closest organization we have to a functional cross-national Military System however it is important to note that there is no NATO Military – all NATO service members are in the uniform of their sponsoring country whereas –SF- would be a direct military organization with respect to NATO that requires service members to swear an oath to their country and the NATO/NATO-EXT charter.

A (poor) attempt at defining based on .geo:

NA	SA	ES	MENA	EE	PAC
.us	.bz	.tuk	Morocco	*iva	.us
.ca	.ag	.fr	Israel	Ukraine	.ca
.mx	.mx	.it	.uk		.jp
		??	.us		.au
					.sk

A Space Force Equations

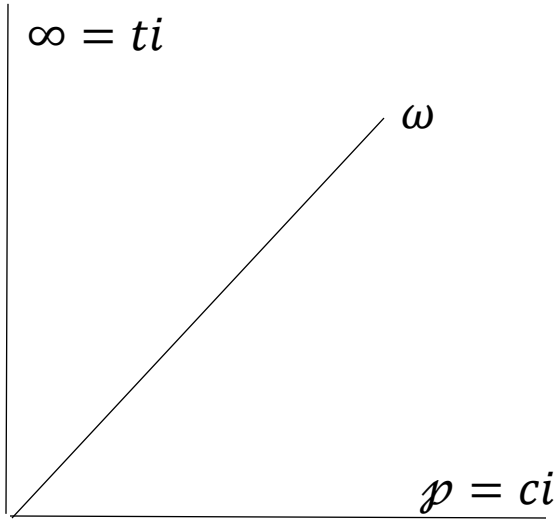
The first order of business is to define the organizations involved in The Space Force. The equations to left define the C5 structure, with respect to the Corporation, in terms of discrete well defined organizations. This is just an example coherent system whose level properties would resolve according to the C5 ruleset.

$$\mathfrak{O}_{NA} = \{\mathfrak{O}_{.us}, \mathfrak{O}_{.ca}, \mathfrak{O}_{.mx}\}$$
$$\mathfrak{O}_{SA} = \{\mathfrak{O}_{.bz}, \mathfrak{O}_{.ag}, \mathfrak{O}_{.mx}\}$$
$$\mathfrak{O}_{PA} = \{\mathfrak{O}_{.au}, \mathfrak{O}_{.jp}, \mathfrak{O}_{.sk}\}$$
$$\mathfrak{O}_{EU} = \{\mathfrak{O}_{.uk}, \mathfrak{O}_{.eu}\}$$
$$\mathfrak{O}_{3eyes} = \{\mathfrak{O}_{.uk}, \mathfrak{O}_{.us}, \mathfrak{O}_{.jp}\}$$

$$\mathfrak{O}^1 = \{\mathfrak{O}_{3eyes}\}$$
$$\mathfrak{O}^2 = \{\mathfrak{O}^1, \mathfrak{O}_{.au}, \mathfrak{O}_{de.eu}\}$$
$$\mathfrak{O}^3 = \{\mathfrak{O}_{.au}, \mathfrak{O}_{de.eu,}, \mathfrak{O}_{.sk}, \mathfrak{O}_{.es.eu}\}$$
$$\mathfrak{O}^4 = \{\mathfrak{O}_{.sk}, \mathfrak{O}_{.es.eu}\}$$
$$\mathfrak{O}^5 = \{\mathfrak{O}_{SA}\}$$
$$\mathfrak{O}^6 = \{\mathfrak{O}_{.au}, \mathfrak{O}_{de.eu}\}$$

Rank in a C6M structure is more complex than C2 structures as it is a 3 dimensional function of:

1. Influence
2. Level(s) of Functionality
3. Role



A Natural Function may look something like:

$$\bigcap_{\wp}^{\infty} \omega \, d\emptyset_n = \Re_n \, , \bigcup_{\emptyset_m \in \mathfrak{D}_n} x \, d\Re_m \xrightarrow{yields} Heirarchy$$

Which of course implies each organization can interpret rank differently.

I propose the following initial rank mapping:

USSF		The Space Force (NATO)		United Nations (Starfleet)	
		OS-1	Ensign		
		OS-2	Lt.		
O-1	2nd Lt.				
O-2	1st Lt	OS-3	Lt. Commander		
O-3	Captain			OJ-1	Fleet Ensign
O-4	Major	OS-4	Commander		
O-5	Lt. Col.	OS-5	Captain		
O-6	Col.			OJ-2	Fleet Cmdr.
O-7	Brig. Gen.	OS-6	Vice Admiral		
O-8	Maj. Gen.				
O-9	Lt. Gen.	OS-7	Admiral	OJ-3	Fleet Captain
O-10	Gen				
O-11	Space General				
				OJ-4	Fleet Admiral

OS = Office Space, OJ = Officer Joint

The Space Force ranks and UN Starfleet ranks are NOT recognized by NATO or USSF currently, however we can unilaterally federate our ranks with NATO ranks.

Iff we attract significant membership from NATO personal – the laws of trans-dimension dictate that these will Transform NATO into an organization that defacto federates with these ranks.

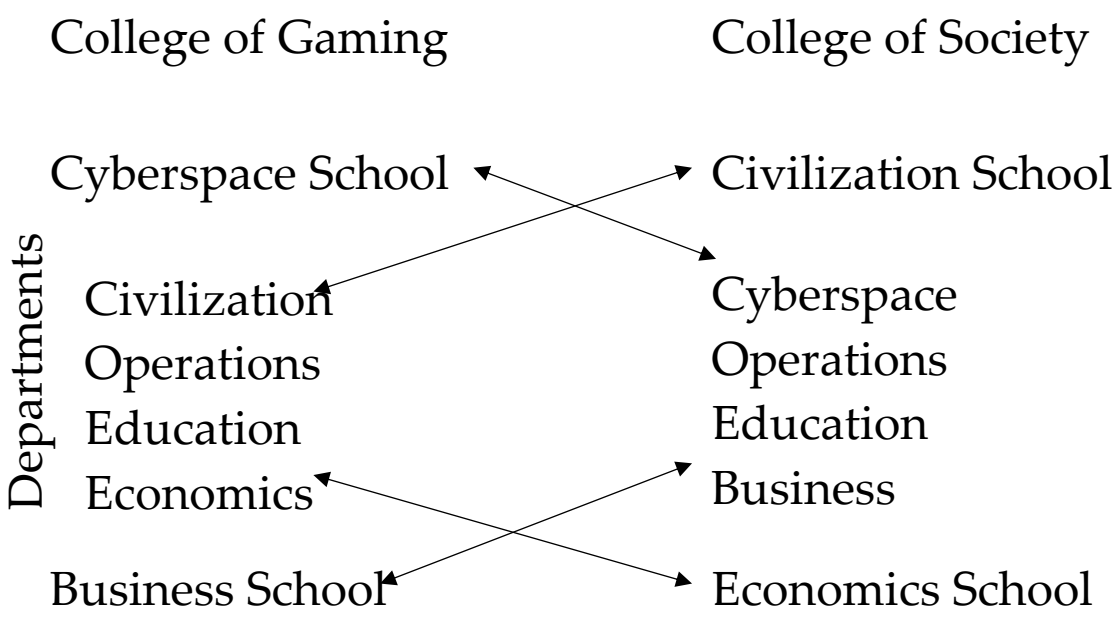
Eventually I will need to formally define the equation sets to relate this to C6M, however I propose utilizing the Charter design paradigm described in http://wwidew.net/omega/GoalStruct.pdf. While the basis of "A System for Goal Oriented Governance", that is implementing Lind Innovation's philosophy that all work should be agreed upon not dictated to, would seem diametrically opposed to military culture – formally chartering organizations, even by means of a directed hierarchy, result in the finiteness necessary to support Economic Circuitry.

The Space Force should recruit with special attention to those "Lost in Space" – that is for whatever reason they have interest in technology and participate on the network but did not complete high school, have gotten into trouble with the law, have "mental health" conditions – and put them into specialized training to affect the network. Particularly this could help minority, immigrant and rural populations who do not have access to the same opportunities that traditional military leadership had. This approach is reflected in –SF- ranks being below equivalent NATO.

Conceptually The Space Force is the successor to the combination of NATO CYBERCOM, which has yet to provision, and STARFLEET IN BOLD – a meta organization attempting to achieve Roddenberry's vision in the here and now. This might be a controversial approach to the problem, but to radically change military force structure in a very conservative, tradition-oriented culture one must really think outside the box.

THE MKE TRANSFORMATION

A Starting Point for EDUCOAL



INTRODUCING M! (M-BANG!)

The Triple-Oriented-Programming (TOP) Language Reference Architecture

```
using System = S; //scope .NET library
import {M::Math}; //import M! package

export pack {M} =:
     export shape trip|:
          <x|:trip:|,y|:trip:|,z|:trip:|>
     :|
     shape d|:
          {x::S.Double}
     :|
     export prim|
               trip<r|double|,
                    psi|double|,
                    z|double|*>
               | double =:
          z#:r*Math.e^(psi*Math.i):# //binding
          d::d#|: //boxer
               #r:sqrt(d.Real^2+d.Imaginary^2):#
               #psi:Math.arctan2(d.Real,d.Imaginary):#
          :|#
     :=
:=
```