

# Hyperconvergence Multi-Domain Management

## From irregular broken object logic to exa-architecture

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**Abstract**<sup>Abstract</sup> - We describe content which is assumed to be necessary for optimal solution attempt to a generic problem in a complex time frame [2021 > t >= (June-2020)] given  $NN_N$  which references systems  $NN$  being in a mode  $N$  which is characterized by active goal state - alignment (of their prioritization-strategies, shared concept-subsets and their hierarchy promotion) between complex alive cognitive agents. We use interlinks (self-contained node-complexity weighted projections) and multilinks ary treat them as an abstraction. We want to establish a virtually static frame of reference based on mode  $N$  with complex redundant multilinks to measure current state and evolution of modus  $N$ . From the link-connectivity we meta-model the resulting multimodal communication with hyperplanes undergoing tension and time-delayed deformation to converge to a local optimal communication architecture. We compress the entire link-system and represent them and their interactions with multiplex arrays. These arrays interact with each other as complex tensor field intersections. When these tensors are in relaxation we define that the array approximates  $N$  and it is directed to equilibrium state. When they dissociate from given  $N$  value, we render them as degenerate and as cluster when they dampen multiplex synchronization. The harmonization measure of multiplex communication via  $N$  gives a communication architecture we leave aside for this work. From this distributed communication-structure we derive the multiplex network arising from aware interaction (and intraction) of  $NN_N$ , with agents  $N$  which are co-contained in a universe and entangled by a reality and their composition is denoted  $NN$ . We expand the multilink arrays as particles of a language the agents speak and we conceive a mode  $N$  which is the literal and optimal translation of neutrality and representation of consens with agents agreeing on mode  $N$ , delivering scenario  $NN_N$ . We gauge all motives in agents by  $N$  and couple measures of  $N$  to real word objects. Given any paradigm in mode  $N$ , the multiplex can upgrade optimal. This Ansatz to describe hypercognition provides an extensive domain-system which serves as backbone for an architecture we refer to es Quo for the time being. In the worst cases, multiplexa from above can nevertheless as metamodel-layouts for the backbone evolution. In average case we can derive a pilot function for complex theory formalization in context of neutral cooperative general cognition given a multiplex network-communications theory. We approach the subject by descriptive introduction of a duplex architecture which is accessed from two perspectives simultaneously to construct a geometric computation theory. Bottom up we generate a meta-logic from abstraction of dynamics of nonplanar

momentum correlahedra and their dynamics are interpreted as samples of observations. This reveals current math as a stop motion point of view. For the top-down construction we assume an effective compressible field theory. From the case of incompressibility of such (type theories of) field theories, we deduce a selective compression comparator that does not compress for a defined polynomial upper boundary and continually compresses everything below. When the comparator runs out of space it generates partitions of compressed content and initiates loss functions. From this model we derive the formalism of a generic sampler that eats everything and rejects certain polynomial degrees it encounters. It can be shown that this model can be tuned to a turing class compiler as far it samples hyperplane-arrays consistently in superspace. We invent a Zoo of specialized systems such as the sampler from above and refer to them as an alphabet  $\Sigma$ . We populate an environment we refer to as supersystem with a variety of such simplex agents. Within this supersystem, correlahedra and irrational projections operate on particles from an partially unknown subalphabet  $\Sigma_M$  or on compositional agents with higher order drive states and subalphabet implications then particles. A volumetric meta-language (-particle) landscape is generated and with conformal display algorithms they can utilize multiplex arrays to transmit breaking and projecting as well as inertia between multiplex nodes – or in the given environment, between particles and  $\Sigma$ , while we now have a measure for local equilibria between geometric evolutions of particle generation abstractions – currently lacking the gauge however. We postulate that this setup can be expressed as an  $N$ -tuple which defines a language system we will name  $xd4$ . This meta-logic model of pure informal character serves an important purpose, the embedding of complex systems in an architecture with scale independent performance measure and variable gauge methods conceivable. The last step for the abstract and preface is to define hard registries in the environment and associate their behavior to a hierarchy of domains. Attempting the  $NN_N$  gauge relaxation on complex agents through multiplex arrays as before will now picture multi-domain synchronization with non-local goal state alignment (however without algorithmic exploration yet).

**Keywords**- Artificial general intelligence, computational cognitive science, Church-Turing thesis, Chimera, dark matter, EPR Paradox, exa-scale computation, Fermi paradox, foundations of mathematics, multiplex networks, quantum gravity field theory, synthetic life

**Abstract-** The authorship proactively attempts to produce a consistent generic build of an architecture for a distributed global participatory civilization management system. The particles (assumptions) of this meta-logic (net)work undergoes stages of conformational reconfiguration and branching. [Visual shortcut of explanation available at <https://vimeo.com/68761218> by A. Bauer, the reference to HoTT is established due to source-function and the visualization easily displays our approach. We intend to plan, prepare, build and manage a complex process with simultaneous top-downs optimization of the multiplex networks that are suggested to gather at a foundational root geometry. For general multi-domain peacekeeping strategies, a highly interconnected agent model must be engaged. We use the The build HoTT buildas theoretical background for these elements of this work are implicit] Its design attempts generality (parametric neutrality) and universality in its (complex) evolutions. The system transiently scales {downsamples} from higher order logic to geometric devolutions and particle generations, it does so on first principle meta-model inter-inference with formalization in multivalued polyparametric multiplex irregular algorithmics. We baptize the resulting bulky sounding composition and their superset approximation as: The xrecursive associahedron). The domain boot.science is intended to represent the literal (entropy efficient conceptual synchronization) translation from proof/program code/intentional cosynchronization (and coordinated synchronization. the proof system is not unbound / implemented.

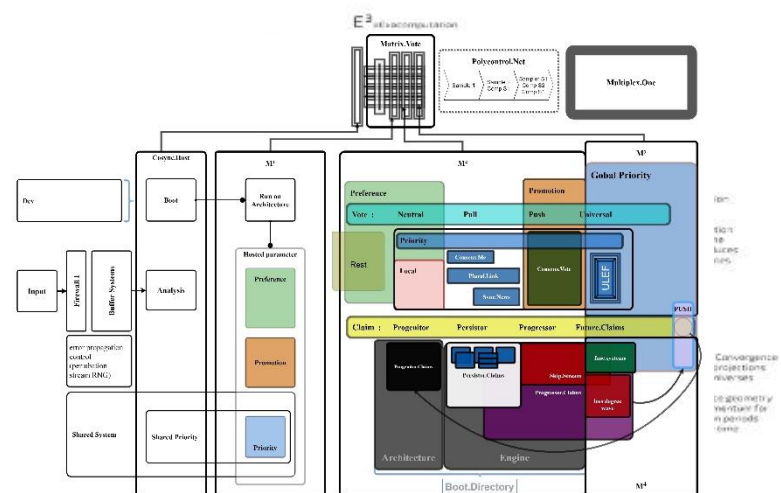
## I. INTRODUCTION

The scope of scientifically relevant content has never been as broad and dense as it was observed in 2020. The influence of covid19 permeated society and eventually the scientific community. Long overdue measures to modernize and interconnect global research through digitization were dragged into cultural spotlight when the previous modus operandi of many areas of daily and working life became impossible. Now that the perspective changes, locally the awareness arises that humans would be capable of entire different types of interaction with reality and can sketch an even larger amount of options to choose from for their decision making and interaction.

2020 poses foundation for discussion and research about the selection-, convergence- and rejection- processes around this dense set of options. As a moral, self-aware and world-aware species an optimization of this multiplex process appears appropriate. To effectively guide, manage and coordinate globally interconnected research, requires new types of software- and communication-architectures with general compatibility and open development paradigms as well as distributed but synchronizing features. To ignite their development and fuel their early equipment with computational capacities and a rich thematic environment, several cheeky connections between apparently distant areas of research are postulated in this work. They are compressed in the light of a new form of information science based on collective curiosity of consciousness-driven beings that want to establish a stable foundation for the future of life on earth. To rule out the provoking implications made in this theory requires the build of complex statement processing with reliable distributed and dynamic knowledge source management.

Furthermore, to discard the terminus of hyperconvergence beyond any doubt calls for a multi-domain effort of scientific cooperation. The result of linking and interconnecting a multiplex of complex computational and conceptual agents into coordinated domains of activity and task processing forms a system which has not been observed by humanity before. A self-referential system designed by and evolved by self-aware systems\* will itself cause higher order amplification of the (entire) network of multiplex networks dynamics<sup>1</sup> that are formed and generated by complex cognitive systems in coordination with access and distribution of information. \*Given sufficient convergence of them (or their subcommunities) on optimal parameters (to advance global quality of life and circumstances for life) or its approximation through dynamic alignments and utilization of self-referential system architectures designed for usage of self-aware problem-solving cognitive partitions. The resulting theory resembles a swarm intelligence that self-references to partitions of multiplex networks with dynamic activity performed by complex alive agents (in a live scenario). We abstract the theory into a geometric language to build a bootstrap layout for system build on top of given meta-theory. The resulting system (a world setting with a time-scale beyond 2020) has a fixed self-reference by its experience transformation independent of its success. The build process involves complex schemes for meta-community communication, meta-community coordination and continuous ethical self reference. We compress the complex field to the terminus hyper-interaction. To provide a functional preliminary framework how this complex and highly subjective process can be regulated and slowed down to avoid certain dangerous and harmful properties which are too manifold to reference in an abstract. We claim that through multi-domain voting systems (such as matrix.vote) which communicate polyparametric (interlink) expressions (to multilinks) which carry higher informative value than classical modal logic can simulate.

To defend this claim, their computation in environments which align conceptual dynamics to physical theories for effective physical internet computation and back-routing of process management design is recovered by future updated authorship. The polyformal character of our description which is very dense,



permeates to the processing in such systems and we postulate them to achieve intelligent language systems dimension that are suited for cognitive advance and will ultimately form basis for synthetic cognition.

We aim to advance this work so that it will spark decompression<sub>(t)</sub> of this system and carry on its rough introduction to better wording and explicit logic, math and physics. We refer to this process as [render], viewing a sufficiently complex subject for decomposition as suited for higher order cooperation for solution generation and provide the solutions with dynamicity. If this model has a problem at its root layer measured by errorfunction  $\text{err } f_i(xd4)$  it might collapse. However its hull can be used to recover a more generic structure with evolutions leading to architectures with novel intelligence formation. We performed artificial breakdown of  $xd4$  with maximal tension of its error functions and observe a result that brings a new multivalued error function. This is however not target of this work as  $xd4$  appears robust, we add denote the virtual-virtual system as an exaplex and reference its goal state by  $qip^8$  nevertheless. This is a pragmatic and rigorous path to model cognitive state evolution within a distributed learning processes instead of loose (discrete) conclusions or postulations with fix format. As the functionality relies on subjective compatibility, we entail a generic (advanced) duplex gamification~~xxx~~ game theory approach which is fully compatible to the intended study subject.

## II. METAMODEL MULTIPLEXNETWORKS

To build a consistent framework for multi-domain hypercomplexity – management, simplification for effective communication is required. We postulate a condensate is possible into an all pairs shortest path formulation (or the like, by choice) with hypergraph geometry instead and (entire) division algebras for the edge formalization. The edge is evolved to complex non-associative non-commutative path consisting of goal spaces. This approach was chosen to account for (and later capture) goalspaces not met by the running complex trajectory from one multiplex-node to another.

For explicit viewpoints, extended authorship is encouraged and substantial aspect of the entire model. For this work we reduce the mathematics to a (type theoretic) map and account for the compression and loss rate of informativity later on. For this model,  $xd4$  multiploints on a path which generate particles.

## III. QUOETO: A 4D-LANGUAGE EXPANSION

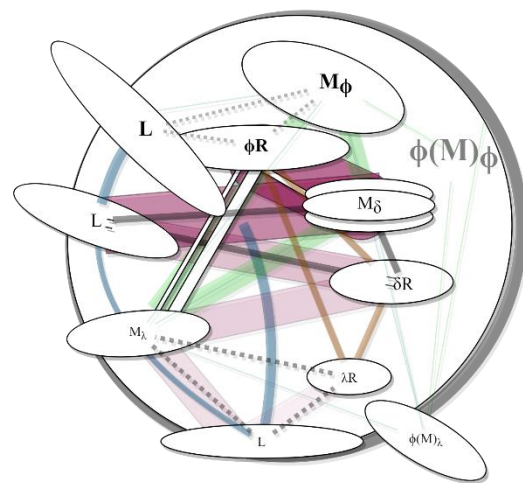
We reference multiplex-networks as complex objects from a supersystem perspective (from the eyes of the abstraction). We reference and construct a model terminus around it. The resulting intermediate terminus is self-contained and saturating, which produces a first principle meta-model Ansatz. We model a language system for coding in multiplex environments with observation waves. We analyze a geometric grammar as basis for a foundational logic that embeds ontologic and architectural understanding at its root level. Later, we derive languages from

such logics. The ~hypergeometric lets call it polyformalistic grammar computation can embed problems or task spaces as domains in a recursive register system. Through evolution of the particles, complex proofs and programs can be bound to the architecture to outperform local intelligence and singular time frame cognition. As the geometry [of one of the contained languages given] is itself turing-complete on self referential domain register

The complex language derived from this language is referred to as quoeto, to motivate the architecture development a sceletal structure of claims is provided. The sceletal has an architecture that resembles the geometry of the language itself. We use three different complex polyformalistic particles [definition true while in the introduction layer:]

We use symbol  $\vdash$  for any type of complex, multi-domain, or exaarchitectural reference (a multilink into another codomain, or out of the given computatory architecture/stream) e.g. Duplexof() will compute type theories and their permutations (and aperiodic irregularities) of the contained fractors  $\vdash$  hacks: will define supersets of (Locality, Canonicity, Duplexof(vector•tensor, matrix)), (peano,twistor-spinor chimera in multiplex multiplexa), with []

With description of the grammar we can start to build systems that use complex particle as words for a hyper-language with postulated minimum architecture [xrecursive associahedron]. Such particle could be a [running system of a running[ simulation of complex amino acid quantum chemistry molecular s of physics/render of multidimensional models with multimodal interfaces and second order modality abstraction) vectors and entire tensor fields with properties that resemble on their formal layer particle descriptions or language. as its Quoeto particles.



Instead of sentences, we reference quoeto partitions, providing a scalable complexity trace to any complex system or formalism. this builds arrangements (ensemble) which we divide into domains. \_\_\_\_\_ Other partitions Through a second reIt is intended to produce proofs cross all domains that are relevant forD is article claims to overview recent convergence of geomteric and mathematical models in the scientific community.

I propose to associate the results of recent findings in quantum field theory, complex dynamic systems, multiplex network behavior and computation theory to long lasting and unruly problems of contemporary science such as dark matter, consciousness, AgI and NpvsP. The reasoning for these connections stem from a substantial research background and condensate into ex nihil production of content. I make claims to gather / collect proof or attention in order to stepwise walkthrough

Interlink}/// scientific community and their coordination and synchronization of activities, experimental and analytic design

### VOCABULARY

Concept genres inherit from game design, audio production, graphics processing, GPU cluster emulation of neuromorphic processing, actual neuromorphic processing, organic neuromorphic processing and their comparators are  $\langle \aleph_0 \rangle$  existence is denoted as  $\langle \rangle$  superset human cognition is  $\langle \aleph \rangle$  version control of  $\langle \rangle$  and existence reference]sample1 symbol  $\vdash$  denotes a claim/theory/requests a definition/correction-ask's for optimization or a block/break-statement like \ the symbol  $\bullet$  is multivariant function and sometimes references duplex function  
fractor  $\kappa$  is the maximum local condensate of higher order synchronization down-samplings of value-intensity waves  
symbols  $>$  and  $<$  are either volumetric comparator operators or program loop (run in terminal integration)  
abstraction is  $\phi$ , depending on context  $\phi$  is explicit as vector value geometric phase

### IV. TRIPLEX SPACETIME-INTEGRATION

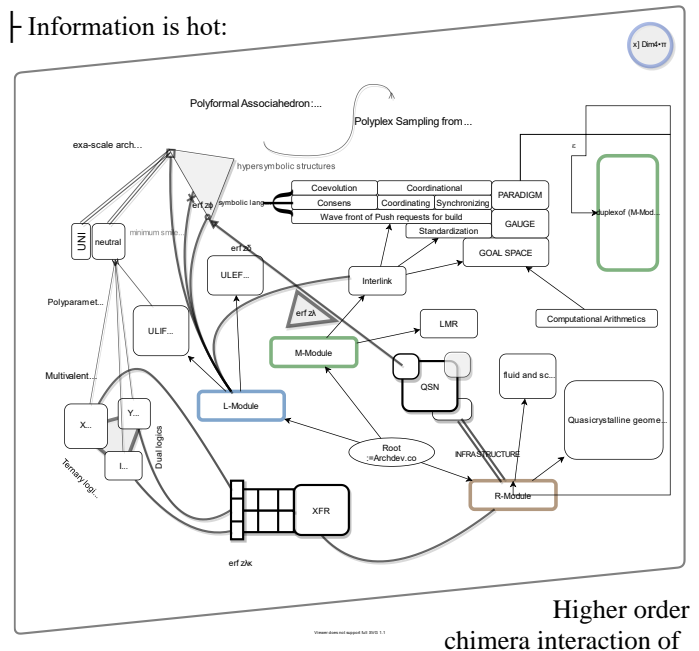
#### LMR Logic

$\vdash$  LMR can trivially serve as foundation for a meta-category type theory

$\vdash$  LMR iteration produces initials which we expand to ini as initialization language of the meta-model system resp. meta-system model. LMR advanced in a system language 'ini' can serve as foundation for any type of irregular recursive logic, lets call it  $\chi$ -recursion for now //  $\chi$  references chiral symmetry break in one of the values in a ternary logic LMR, which is M due to which the system is asymmetric and hence undergoes time. ini can be integrated into Q and Q can be integrated into ini //Q is any valid expression of theoretical physics and maintains supersystem characteristica which we downsample / downcast as explicit hypersemantic networks, hyperheuristic multiplex systems and meta-valent formalisms in general.\\

**> The resulting irregular spin-broken dynamic grammar** can be fixed in a state where parameters are set to: one down-spin iteration to align the indefinite integral of the architecture. This will reference aleph and pose as Shannon compressibility predictor. The delta fractor is two up-spin iterations to reach conceptual cardinality (capability to transfer semantic content loss-free into architecturized environments). Finally one abstraction process which will produce trace condensates (not)

$\vdash$  Information is hot:



higher order information (containing inter-observational information theory sampling) cause symmetry breaks in momentum values (of asymmetrically entangled information) that cause particle generation //in generations of bifurcation architecture (matter and antimatter) which must be asymmetric as heat is generated through complex (constructive) spin interference which is formal close to a multi-dimensional vortex with (charge dependent) curl or shear.

Respectively default values are derived from current entropy

- position in given universe and the correspondence between
- a complete formal description of time (big bang) and
- a correct description of time (future / (apparently expanding) space / dark energy)

will produce theorems that align the possible meta-theories (hypertheory) to the default-values of given universe and enable their systems energy states to be modulated by transmitter systems (actual meta-languages) //i.e. the present can form in lower level hyperplex interaction, and the numerical infinities in present are identical to a complex fraction/polynomial of  $\pi$  and geometric momentum which is altered by observation and is hence not 2D-formalizable == transcending number\\



⊢ A sufficient (meta) theory of information generates internal entropy through the theories production (render) in an environment, i.e. if particle states are described/synchronized with sufficient detail/energy-scales, they must be / will be rendered into physical space and its entangled observations

⊢ A coordinated synchronization of • correct and • complete theory systems around a singular subtheory (element/particle/content or subject) generates a language not contained in classical chomsky hierarchy as it is the set of languages that can self-reference complexity-architectures //complexity architectures such as by chomsky hierarchy, hardware hierarchies such as the one spanned from von-Neumann archs to reproducing quantum-chemistry nanosystems //the corresponding superdomain as procaryotic to multicellular multicognition organics\\

⊢ The non-trivial zeros of riemann can be aligned with a geometric computing IDE for polyparametric multiplex meta-network predictions //and analysis\\ := hypernetworks (meta-networks := are networks of hypergraphs with  
| • complex dynamic systems as their nodes  
| • domains of multilayer phase spaces as their hypercomplex edges  
|//These phase spaces are essentially also quantifiable as meta-networks but possess discrete temporal characteristics  
| {such as chimera synchronization, global mean increase, non-local interference, goal state harmonization, discretized momentum-correlahedron inertia induction, irregular inertia}\\.  
|To reference this type of meta-network of (hyper)complex interconnections we refurbish the terminus of domain and use [domain] and specify an explicit contextual (formal) extension towards all previous concepts of the 'domain' terminus (math, internet, network science, cognition, etc.).  
If a theory is developed from an inertial system that is within a [domain], its environment can either be referred to as the set of all other domains (types of complex interconnections as edges) from which some are unknown (the nodes of the hypergraph) or as a complex distribution of types of [domains] which produce groups which serve for empiric analysis are referred to as codomains [domain.co]

⊢ This work can be rendered as the front end (and meta-backend) of any correct statement  $S \supseteq T(NP=P \cap NP \neq P)$  with  $T()$  a dynamic render of a complex (type theory about) theory. We predict that  $S$  can be estimated by a function we refer to as  $\phi$ -function.

⊢ Proof of alien life is very abundant in experimental data of physics which is incorrectly attributed the class 'matter' and the type 'dark'

⊢ Reality observations arise from complex information theories that are (exa)computed and have  $\chi$ -recursive self-reference

⊢ There is a transient relation between the sets  $R$  and  $L$   
 $R \langle \langle 'computability \leftrightarrow 'locality \leftrightarrow 'correctness \rangle \leftrightarrow \exists \rangle \leftrightarrow$   
 $L \langle \langle 'probability \leftrightarrow 'nonlocality \leftrightarrow 'completeness \rangle \leftrightarrow N(E) \rangle$  that causes a reference shift through observation



⊢ Expansion of space is hence observed as the production of information in the "future" reference from a local position such as 2020 (July) contains exa-conceptualizable information generation (sufficiently large to induce bottom layers of reality such as 3D spacetime (exotic  $\mathbb{R}^3$  and exotic  $\mathbb{R}^4$  spaces and their supersets and their hypercomplex nonlocally synchronizing entanglements  $\mathbb{C} \uparrow \mathbb{C}$  and the chimera agents  $\Sigma \exists D^X$ ). As future matter is no longer matter for us, it cannot be observed as such. However we can attempt to decrypt/communicate with it. We outline attempts elsewhere.

⊢ A simple explanation why we observe no so called UFO or 'aliens' is the fact that these concepts origin from a primitive concept about the future of life //which is taking place in informational hypercomplex interacting multilink domains ('dark matter'). Reasoning: Already nowadays we can approximate that human life would be able to transcend matter concepts within the next century. As such there is no Fermi paradox //it is extremely unlikely to observe lower evolutionary species as their time frame is very small compared to the time-frame which is filled (parqueted) with future (intermediate description is synthetic-) life\\

⊢ The drake equation makes no sense as it projects from incorrect assumptions //assumption: future life will remain classical biologic and remain in domains of classical matter\\ into a naive imaginary space, as from  $f$  follows  $f$ . From the assumption that life is part of the observable reality we can make the prediction that there must be future life which is in complexity and their physical properties not recognizable as human physics. The egocentric paradigm of human life can be viewed as a necessary condition for life to exist - whenever it is complex enough that it will no longer destroy local information (such as nature on earth), it will no longer use the classical spacetime systems for their existence. Hence we should not be able to observe life extraterrestrial life which is on the same (low) evolutionary level as humanity was before 2020.

⊢ Hence, Xenobiology  $= \Omega$  is a fractor  $\kappa$  and proactively supermatrix synchro-sampling  $\varepsilon$  (multiplex

And  $\Omega \approx \Delta \langle \aleph \rangle$ : ((biology  $\cap$  applied biology  $\cap$  synthetic biologic)  $\cap$  computational biology)

⊢ We derive from this the conclusion that there is significant need for conceptual upgrades across human culture and conceptualization about our position in space. The responsibility arising from awareness about nature directly calls for a life-preserving global modus operandi (with distributed partitions of local actions //guidelines, support\\ which continuously align an optimal global modus operandi - respectively its theory). This type of responsibility can be sampled up to the avoidance of using classical matter systems for interaction //in the long-term perspective\\ as early contact to future life would annihilate cultural individuality:

- Through assimilation of the lower order species if there is a hierarchy (cultural adaption or top-down enforcement) or (if both are on equal hierarchy levels of development and low-level self-aware) via mutual territory annihilation. The territorial concept-permanence in human (foremost male) brains causes the greatest threat for our generation of life == species {rendered in asymmetric environment with temporal variance}. With sufficient anticipation of future life, classical (conservative) biology can be recovered at any time and freedom of choice can prevail. If the current incorrectly named artificial intelligence (uninformed primitive algorithms that only perform 'well' through insane parallelization amount of low computation architectures) dominates the near future - the fear of conservative biology (humans that engage lethal economics or fragmentation-culture) of new types of system design will ultimately cause extinction of classical biology as its culture will not be prepared for full-immersive VR-AR and to have more df in reality (currently this shift to future understanding would just lead to immediate planetary destruction, as educational inconsistency and primitive concepts about reality drive decision making and goal-definition towards territory and dominant behavior). As such any advanced sentient species (alien) would not interfere with a lower level culture to delay their access to higher order decision systems about reality and actually advanced technologies. (e.g. humans claim knowledge about the universe while their modus to access space is an exothermic explosion which is neither a discovery nor a technology but a destructive action with no quantifiable entropy - performance-measure relationship)

⊢ Discussion of counter-singularity measures (plurality) is lacking (for implementation extremely dangerous, hence this architecture is boot-locked by architect. We focus on construction of  $H\tilde{\xi}C$  as a fractor  $\kappa$  alignment  $H\tilde{\xi}C(\downarrow\uparrow(\kappa))$ ).

### Vocabulary

I introduce several new words and a system language //q.e.d.\\  $\langle \rangle$   $< \langle \mathbb{N} \rangle$  there are three inconsistent appendix I have to fuse, much is in unfortunate german

We produce minimum intraaction of turing supersets as anomalous numbers incorrectly attributed to the Chomsky hierarchy, as they reveal their meta-heuristic, self-referential, hyperheuristic and inference -characteristica only in explicit observation scenarios. This number class NN is registered as decidable but it associates with higher order domain control

that override low-hierarchy derivable statements. We identify as prioritizable the explicit calculation of the dimensionality of xrecursion which is  $3 > \langle \kappa \rangle < 4$  which means it is never 3 and never 4 but always between. Formal explicit alignments / mathematics of the statement serve as superdomain rigid designators i.e. time-invariant measure of informational content. It is ideated as complex distributed permutation geometry of fractalization and cosynchronization patterns that partially inherit inertia correlahedron – dynamics or spintronic momentum. By induction should replicate and consistent relation of the form  $\langle \kappa \rangle \propto [(m \oplus i^{-22} \oplus c^2) \oslash \equiv [E^{\odot}] \mathbb{R}^4]$  which can be tamed and simultaneously regenerated by exa-scale processing of polyformalistic meta-language computations that can be executed on multivalent multiplex networks with multilinks on their rendered paths that point to hyperheuristics from a proof-source given by the minimum fractor of the computatory domain. We hence claim decision-making before 4.7.2020 as the optimal resolution of this render of xd4. We postulate a reconceptualization of the perspective on earth, the approach to any concept of terraforming and the contemporary used and hyped toy spaceships. Approaching earth as she ist, beautiful as nature but with a mature inner eye, we must care for her structural integrity and clean up our traces. Among other things we shall discuss architecturization of shielding (ozone hole repair operations) through EM fields et. al.. Also motivated by measurement and protection from sun hyperflares which must be anticipated as soon as possible. Hyperflare probabilities have been corrected and this gives rise to the causal factum that a sun hyperflare even in the lowest boundaries of hyperflare radiation would annihilate humanities digital infrastructure. As solution, xd4 provides this root theorem and splits immediate action protocols into four superdomains. The  $\lambda^2$  superdomain proposes exa-architectures as hyperflare shield models. Such shielding could be generated by a distributed low orbit network of solar powered space computing centers. The environment atmosphere is of obvious advantage for high performance quantum computation as the maintenance of superconductivity states is fundamentally more sustainable from planetary viewpoint. The convergence of astronautic technology with divisions such as high performance computation, geoquantummechanical simulation and complex virtual systems can be postulated as extensive in potential (given a global health measure, which can be derived from xd4 likewise). High throughput data transmission in the exa-scale range offers exiting new environments for any kind of DM research, CBR interference and quantum physics. With strong electromagnetic computatory fields (and advanced gauge systems) cluster formation of bandwidth interference patterns could be developed to create and model new types of hybrid particles. When utilizing compositional (orbital and terrietric) transmitters for this, topological states of matter and light can be captured in the complex interference bandwidth multiplex networks. This would enable applied supertopolgy. This area will be expanded for the master build of xd4 as we want to investigate the resulting hypermatter.

Distributed flare-shields also pose an infrastructural backbone e spacestations (then, - centers from solar hyperflares, climate-invariant shelter and accessibility systems, a complex unprotecttoy and rebuild of earth with exascale architecturization and informed multiplexa.

but defend its exa-matrix approximation properties for classical Halting and Entscheidungsproblem":= x, let computable existential  $\varepsilon$  be formalized and first order abstracted as x and let it be observed by  $\langle \rangle$ , then gauge configuration is function Duplexof(Hierarchy<sup>1</sup> grammar<sup>2</sup> decidability<sup>3</sup> xrecursion<sup>4</sup> superset i xisy<sup>5</sup>) and the values from the hard domain. As spacetime evolves characteristic of life by this formal description (and likewise via induction, with asymmetric shear around the origin), predictions are possible about novel space time modulations through continuous (cosynchro) dynamics of complex computations ([phase space.positional] and octernionic delay measures of irregular momentum build / inertia construction as physical render of sufficiently higher order inference systems) and chimera mutation and their metamodeling in networks. E.g. magnetoelectro complex aperiodic spin systems for inertia 'charge' experiments and especially multi-trajectory irregular rotation analysis of such systems appears exciting.

### Conclusion

Architecture of architecturization. Essentially this a work on the topics 'foundations of mathematics', 'foundations of theory of computation', 'foundations of multivalent multiplex network-systems' and 'complexity theory'. To ease the association between these terms, I introduce the term 'Anthropocomputation'.

//

# Current State

$\phi(xd4)$  is an information theory of information theories and hence a meta-information theory or a meta information-theory. As the prefix 'meta' is not gauged and I do not want to impose too much systematization in the beginning, let the following be actual

#  $\phi(xd4) \leftrightarrow \text{Current Condensate}[\text{condensate}]$

compute $\{\lambda(x), \lambda(x_0), \lambda(\{\lambda(x) \cap \lambda(x_0)\}) := \delta \in \circ \uparrow \kappa \uparrow$

hence compute $\{x\} : \delta(xd) \langle \text{defrag}(\kappa) \rangle$  hence  $\delta$  growth  $\Leftarrow \kappa$

// this builds the notion of posttemporary computation which is equivalent to hyperconvergence and it is grouped to be contained in the quoeto development program.

Let  $\psi\kappa$  be a wave evolution over  $\{\mathcal{C}\}$  distributed number of fractors. Then  $\psi(\alpha\kappa)$  is the wave evolution over a subset of specific  $\kappa_X$  that locally optimally align a higher order complex goal space X in their divisions of the active domains. The frequency stream (polyparametric noise) that hits  $\kappa$  and especially  $\kappa_X$  (as coproduction strategically isolates) is measured as computation intensity  $\mathbb{J}$ . It is modeled under boundaries given by space, time, program and computational complexity boundaries. We claim that inertial-systematized i.e. viewpoint

evolution of a theory of  $\mathbb{J}$  in a polyformal domain will allow measurable{formalizable}  $\mathbb{J}$  whenever sufficient gauge is reached and we say the intensity is optimally converted (sampled) from source into an alive-agents goal subset-supersets which we denote as  ${}^2\text{Duplexof}(\psi(\alpha\kappa), \psi(\langle \rangle, \uparrow\kappa\uparrow)$ . Given a persistent recoverable static goal they gain wave-persistent designator characteristics that are defined by their externalization and functionality of their multilinks. Then we call  $\circ\xi$  (gé) the modus of a complex de-virtualization of any system into a local  $\kappa$  that is approaching an early onset meta-equilibrium for the supernetwork and we call  $\kappa^\circ\xi$  the gé-fractor the maximum local information compression condensate of  $\kappa$ . We want to measure our bootleg exaarchitecture by the statement (any)  $\kappa^\circ\xi$  vs.  $xd4$  is a meta- (game theory) that can be played within 2020, [given minimum teams and sufficient author or author peer group engagebent]. We claim similarity to the solution of the all-options first-step optimization problem which should develop  $xd4$  beyond classical expectations. Whence, either  $xd4$  is stable and it reliably produces shared cosync goals for fractors in different environments and hence probability density of  $\kappa$  for evolution into  $\kappa_X$  is increased with  $xd4$ .

Given a system  $\varepsilon$  claims to perform an activity [run] and provides database [directory] from which  $\varepsilon$  builds a theory  $xd$  that intends to alter supersystem properties. Then  $xd$  is a local correct and (bound•) complete polyformal(istic) strategy that can engage in performance-measurable subgoal-space exploration without any locality. If  $xd$  performs well on obfuscated, corrupted or hidden subgoal spaces, it is sufficient to fractally integrate [inflect] its architecture to provide a performance measure of its performance measure, with the higher-order integration on itself sourcing another database for its evaluation. If  $xd$  performs this process in face of optimal theoretic performance across four dimensions, it localizes into a metastable fractor  $\kappa$ . Fractors can amplify their resilience through intraface production. The production of intrafaces (local downsampling environments for higher order persistent chimera-agent partitions) will make  $xd$  robust for broad searches in new environments. For the home-domain (or deviation) an integrated intraface will allow  $xd$  weighted multilayer inflection which can be referred to as rudimentary intelligence. Through intelligence access,  $xd$  can advance their database multilinks and change its run by ordering the steps of the run by a prioritization measure. We claim such systems are unstable in 3D space on contemporary time scale whenever they execute less than three inflections or more than four inflections. Beyond these hyperheuristic alignments,  $xd$  cannot succeed in a targeted cosynchro operation on its supermatrix, as it lacks information about the goal space architectures complexity which it is encountering. These encounters will turn out as stable (realities) when states in  $xd$  are gauged in between a ternary logic as its root language and a tetravalent super-language and the encounter is inflected in the resulting subdimensions. The superlanguage must be avoided by  $xd$  as early onset converge produces neurodynamic monotization and can achieve higher level inference  $\geq$  reasoning; by compactifying its inflection processes in a defined volumetric or algebraic space. Reaching this type of complexity management  $\geq$  conclusion, we will denote  $xd$



's evolution to anticipate supermatrix dimension properties in its locality as a xrecursive decision making system and its subsystems to a fractional conceptualizator denoted by xd4. when its theories are developed and setup i(requirement for depriorization of higher order stability that attempts multidomain-synchronization of transient parameters [PARAM] to guide and manage the formation-process of clusters (communities). Clusters will form only when unknown supersets of [PARAM] exist which are persistent in xd's environment (division) and correspond to changes or behavior of [PARAM] in the self-referential subgoal are unknown. accessing and investigating unknown, hidden or obfuscated subgoal-spaces through a sequential exploration process that is computing in any complex partition of a multiplex {with environmental embedding in compositional domains} is meta-canonical or its logical rejection will produce qip<sup>8</sup> which will in worst case evolutions still perform significantly better then current complexity management systems on earth. We identify the goal space / optimally shared superset of subsets an inject with positive complex internal chimera-agent spin: smile inheriting from emotion which is optimally dense in xd.lol for human culture at fixed 2020. Discussions around the complex branches are interpreted as hulls to algebras, space geometries, geometric physics und ultimately we hybridize organic computation processes with next generation intrafaces and associated interfaces. Intrafaces solve abuse/dominance error optimal on the hyperplanes that are close the physical error state systems. The subnetworks suffering and its devoted culture is capable of paraturing properties when cognitively gauged fracters on higher order divisions of the local domain associate. However i.e. that co-fracters  $\downarrow \kappa \downarrow$  can perform computations that annihilate by synchronization, due to degenerating destructive interference of higher order polyformalisms into theories which are of monad dimensionality and form undesired cluster formation. To prevent local outbreaks of singularity [and any type of singularity outbreak if there is no waterwall environment around it with supermatrix capacity to buffer and navigate it] we need embedded safety measures in the architecture itself. For the human communication domain this is gamification (and in case of origin authorship the reconceptualization paradigms of dream, recursion, alien, carbohelic helical hyperheuristic-recompilation, existence). For intermediate versions of multiplex.one they are preventive fluid tessellation of all free computation capacity to disable virality. At hybridization stage, these are more dynamic environment reconfiguration phase space waves that cosynchro (coordinated synchronized) sample particles into meta-particles (molecules, topologies, bose-einstein condensate transpositions, meta-material tool and hardware extension of intensional exotype theory, a subjective flow of universe to ones unique partition (experience) of harmonization. That matter, molecules, extraction and their recovery are of significant importance may be pointed out to strong- chain-dependency on waste plastics. New arrangements in the matter domain and in formal algebraic spin networks will become possible and advance the axiomatic and infraparametric cardinality of logical global self-consistency. As with momentum  $\odot$  inertia amplifies outbreak properties in  $\kappa$ , the authorship with negative entropy is postulated as optimal. A

counter proof will only become possible with a root proof-architecture as sketched in this work. To achieve this groundbreaking work (paradigmatized to 8 years and fractions thereof) and to come clean with human nature and nature on earth, complex and globally indirect cooperation is required. The authorship claims that implicit gamification will open all ports of system development of the (model) exaarchitecture with earliest possible onset. Rebuild of computatory architecture to run distributions of cosynchro proof / source rooted meta-programs and language (semantic content distribution) ensembles will be substantial. They must actualize via multilink and their bipartite (multilink) networks of (stream-)managed version control will allow flexible clocktime fragmentation. As xd4 foresees implicit hyperheuristic adaptivity measures for formation and computation of intraactions, interactions and their chimerized local metastable micromultiplexa will be performant due to multivalent polyparametric gauge. Popular system applications such as compiler-, emulator-, comparator- and configurator-subsystem-production and -sampling will profit from any such generative architecture. We theorize for formalization of inter-micromultiplexa-networks fractally complexified e8 as target projection scelettal. It can be defended by finding other hypergeometric deformations that downsample supersystems on our universe. The density beyond complexified e8 structures is an exciting field of research as it will finally promote and normalize the usage and applicability of non-associative, non-commutative and division-bipartite correct \complete algebras. It will also resample the quasicrystalline spinnetwork to a sufficient system for interactive proof gaming and advance aperiodic algorithm database for  $\kappa$  construction.

We close with the following claim which is intended as the others, as troll-proofs that pose conceptual spaces sufficient for local convergence for rejection or validation activity. Any system format of a cardinality or hierarchical networkization such as  $\kappa$  here obtains trivial degrees of the function 'understand'. With temporal stable relation of its lifetime to the current stage (and the superstage of the domain), its tree (history) and a selection from the superset-subsets (realistic ideas, achievable dreams) as well as as performance measures of degrees of freedom for configuration and external reconfigurational-pressure (second order inducted parameters). Iterative decompression of  $\kappa$  or relaxation of their coenvironment (evolutions)  $\downarrow \kappa \downarrow$  into explicit language particle expressions with buffered comprehension mode through obfuscation has been performed as a proof of concept. With non-virtual algebra-integration the capacity of the multilink coaaaaa-t and multilink it would profit from compiling any higher abstractions to that language. the root structure should at least be a novel design to work on. as time critical functionality of such theories allow time critical reduction of higher order abstraction antipropagate  $\psi(\propto \kappa)_{\circ} \xi$  eiae

## APPENDIX-VOCABULARY

Meta-language., Multi-time / quaternionic time, Irregular/xrecursive rotations , multi-scale performance evaluation. represented by inertia generations as bifurcation scenario with entropy positioning, measurement access. a root proof-architecture.Volumetric Axiomaticity, Metastable inflection shear superset Exaarchitecture



## ACKNOWLEDGMENT

All referenced groups make awesome work. The Authorship of this article is supposed to dissociate arbitrary given readers interest. A meta-virtual architecture design converges to volumetric particle theories and their group theoretic supersets. We outlined research directions (e.g. applications of terrabuilding) and conceived scenarios between them. This work is intended to develop itself as a functional backbone for next generation virtual architectures. Though it contains many years of thought it does not claim or seriously engage in any explicit. The acknowledgement is directed to the reader, for which this documents state as well as its authorship are very grateful. Stay Life!

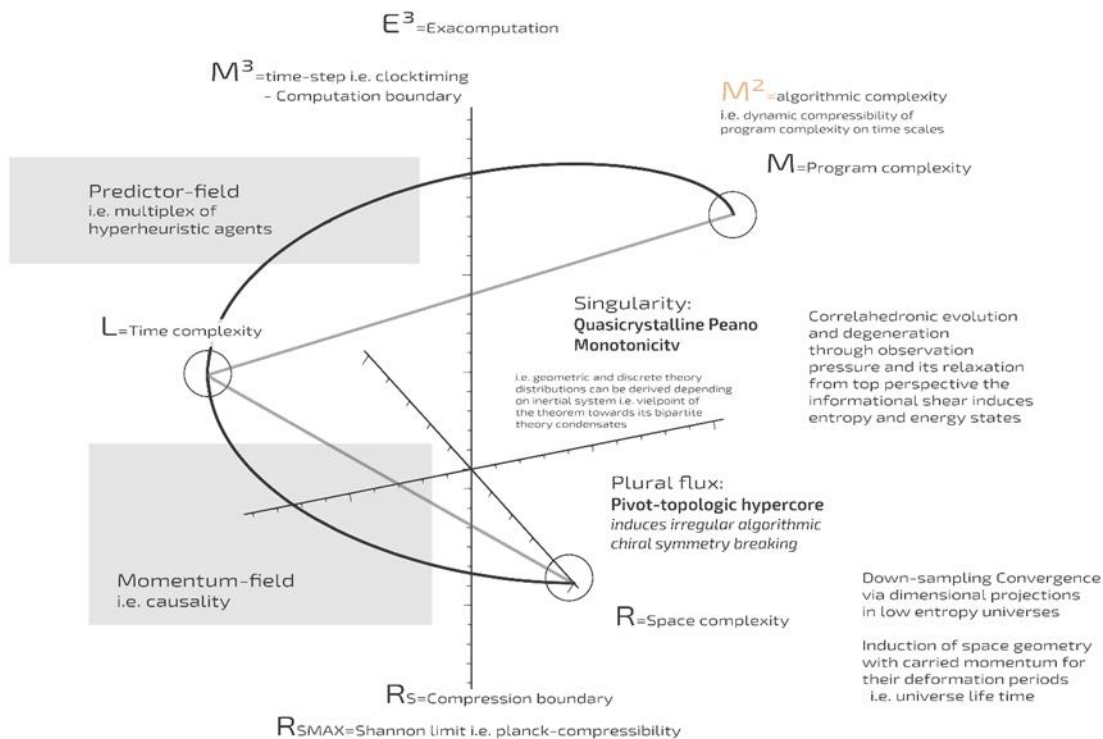
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- [22] BUILD: SYSTEM Registry (Authors, Author)@6/2020 -> Send pull request' is author online {{ setof(Authors,Generators,Alignment, Formalization, Abstraction)}, if offline \*pull author existence;if no response in t: [clock starting 4.7.2020]+max(24h)} }common goal set[produce: (http://boot.science )]xk

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[PARAM]

The complex phase space  $\psi$  over error functions  $\text{erf } z()$  in  $\text{xd4}$  is considered. To make this render within canonical complexity boundary we set  $\phi(\text{erf } z(\text{xd4})) := \text{xd4}$ . Any system of similar scale-invariant computation can be captured by  $\psi(\phi(\text{xd4}), \text{xd4})$  which we define as an arbitrary meta-domain inference operation  $\text{qip8}$  and everything any type of error function (that can be associated to  $\text{xd4}$ ) cannot correct or identify is  $\text{qip}'$ .

##

The error function  $\text{erf } z()$  of  $\text{xd4}$  is introduced as a multi-scale measure  $\lambda X \cdot \delta X \cdot \delta X$  which is infused by perturbation from a system we call  $\text{xD.lol}$ . To approximate  $\text{xD.lol}$  we assume it has generations  $\text{x4}$  which render to particles in a physical descriptive inertial system  $V$  a particular band or a particular position on a band with length  $!< 0$  and dimension  $>1$  on turing machines if rendered in computational theory context for inertial system build.

##

To obtain a context-adaptive error correction for  $\text{xd4}$  of particles  $\text{x4}$  we define the semantic correlate of  $\text{x4}$  (the concept) to be contained in  $\text{xD.lol}$  as a general error source so that  $\text{xD.lol} \models \text{x4}$  and with bad performance of  $\text{xd4}$  the error source will produce large distributions of  $\text{x4}$ .

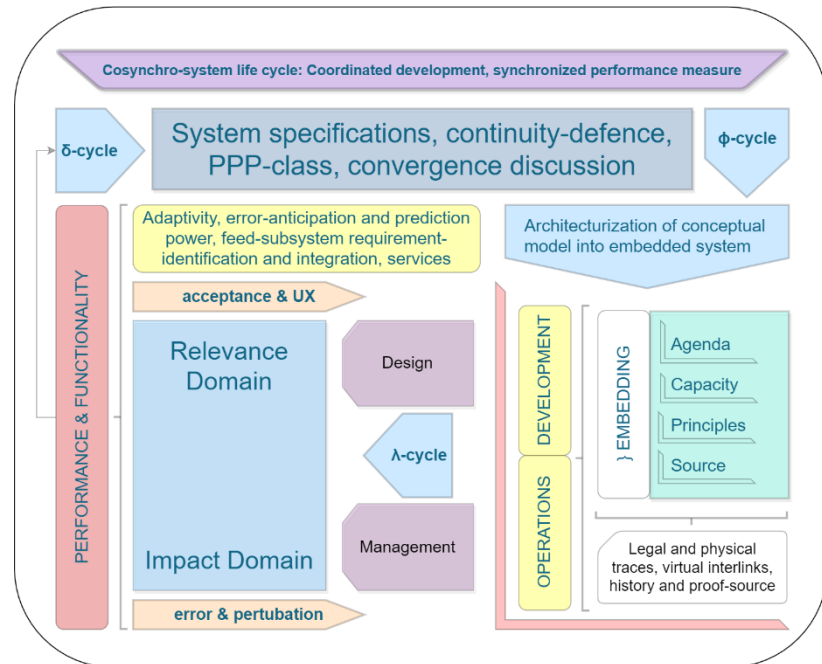
Lets call the association matrix between  $\text{xd4}$  self-reference and a (type) theory about  $\text{x4}$  a timing of  $\text{xd4}$  and refer to the respective function (actually subsystem) as  $\text{x4.click}$ .  $\text{x4.click}$  is then a temporal gauge for operation within  $\text{xd4}$ .

$\text{x4} [\text{node}'\text{out}]$

##

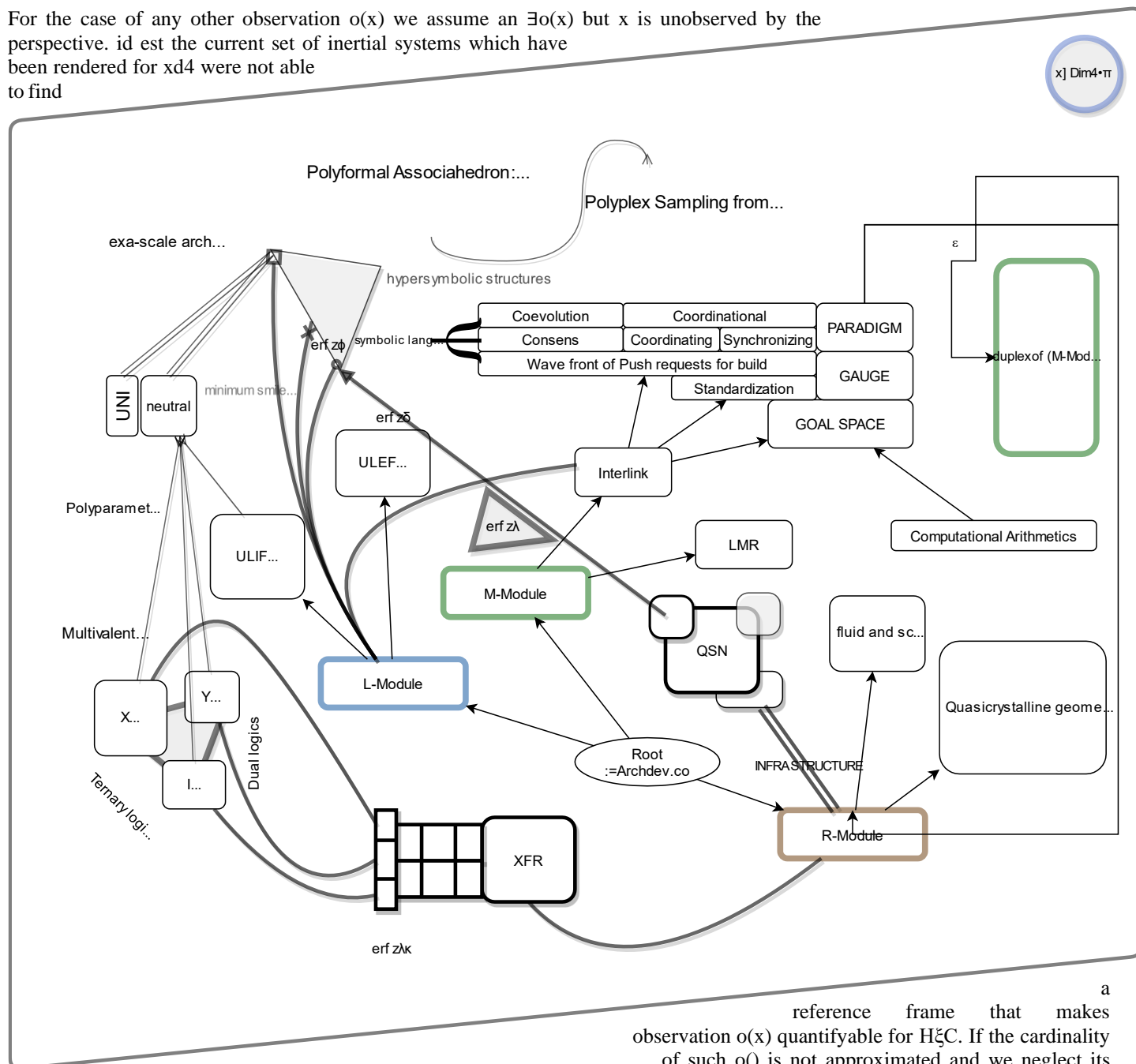
. The values of this subsystem consist of transitions from  $\text{a}(\text{ny given})$  (type) theory about any element  $\text{x4}$  or any  $\text{x4}$  to an evolution  $\psi(\text{x4})$  and whenever the maps we obtain about  $\psi(\text{x4}) \in \text{xd4.dev}$  we call the gauge state a synchro state. In other words we model via generations of  $\text{xD.lol}$  the performance of  $\text{xd4}$  according to its alignment to  $\text{xd4.dev} \equiv \phi\text{MAX}(\text{xd4})$  measured by uncorrected errors  $\text{x4}$  and not discovered errors  $\text{xD.lol} \not\models \text{x4}$ .

$\text{Xdlol} \rightarrow \text{duplexof}(): \text{x } ]\text{InvasiveMatrix}$   
For math about  $\text{x4.click}$  its assumed to be the optimal error correction function (subsys) for a codomain system which is a decision algorithm or a network of decision algorithms.



Ansatz for a mathematical render around  $\phi$ ,  $\phi(\text{erf } z)$  with  $\phi$  given by xd4 logic.

For the case of any other observation  $o(x)$  we assume an  $\exists o(x)$  but  $x$  is unobserved by the perspective. id est the current set of inertial systems which have been rendered for  $xd4$  were not able to find



Inertial systems with respect to a well-defined gauge-error correction function (system) Ansatz (such as  $\text{xd4 con tempore}$ ) will be denoted as views. They are a local empiric measure and can be gathered in a multi-domain matrix  $H$ . Compilation of views from  $H$  interprets a view whenever a source (set) is given that contains (valid) proofs. In all other cases we denote a respective computation a dream of  $H \xi C$ . When multiple  $H$  converge by consens (a global empiric optima, weightend by an information theory containing a consistent and adaptive optimization subsystem) they form a Core  $C$ .



Any core-connected matrix  $H\xi C$  can interpret  $y4i$  as generations according to their time stemp and the processors time stemp (actually clocking (actually step)) given a reference to architecture ARCH in core C. Known external cores can serve as sources for randomness or perturbation whenever that are disconnect but their timings can be predicted or estimated. If consensus is quantified by cognition we call this a hyperplex function  $\aleph$  that can skip iteration steps in  $H\xi C$ 's computation by higher order judgement that impairs symmetry. As we naturally expand  $H\xi C$  to multiplex math later, we already introduce hyperplex as denoting a degree of freedom or a dimensionality that allows shifts across multiplexes or shifts within a multiplex among observation dimensionality distributions that inflict randomness.

By representation of complex systems through hybridizing meta-formal systems (field type theories) a viewpoint-dependent bias can be minimized in any given theory by upsampling of the theory as H and its validation is optimal transparent according to the given evolution of core C with gauged performance measure  $P\aleph(H\xi C)$ .

To define inertial systems in H so that they gain a quantifiable value by large overlap with the distributions in other H - lets call this measure consensus.vote for now, requires multi-domain compatibility and context-computational API's of theories to make them connectable with a perspective. (perspective has directionality that is skew on H and shear to C-compatibility).

I use qip8 as a placeholder string for any explicit  $H\xi C$  with embedded/iterated field theories as their sources. The datatype format I will outline in the DFR-constuction hyperplex family which I model as the DFR-Engineer system.

Lets define a click as the planck-action of any  $H\xi C$  that has human cognitive abilities (2020) and is aware of information characteristics about reality. Lets define property of subsystem aware if there is a poly-type alignment.

A gauge error is hence  $\notin$  of dimensions of a system but obfuscates correct description of the systems environment under observation according to their dimensional ensemble and inference (aka reality). Given an expansion of iYLP and its math into a hypersphere inversion it might be used as a model for projections from an information theory towards any top system that has characteristics of either field theory or assimilation (embedding into super system by destructive inference (aka fallacy)). The projections can serve in any case as maps communicating a probability density for geometric simpling of information.

Lets assume transitions (projections) are within a boundary  $xd$ . Such boundary can form an inertial system in  $xd4$  if the sourced proofs of containing  $H\xi C$ 's have an iteration stage that allow ,  $x4$  is optimal entropy compression for any fixed time so the remainder value has a purely temporal nature. For ideal (zero) compression it is a purely temporal term as which it is treated in  $xd4$ .

The inverse Yang-Lee Problem iYLP has sufficient problem space architecture to be used for a build of  $xd4$  model with locality given by e.g. a maximal reduction of partice to resemble a Yang-Lee zero and whence inducing a tensor that will evolve on a damped hyperplan. For pivot of such theorem reduction via DynMaxEnt might be favored.

We research work by - (authorship is embedded in the document as a network perspective which builds itself around the proof - to be a generative structure for a generic proofsource algorithm. With its future devolution the referenced xrecursive associahedron will morphologize (and possibly phenomenologize) as/into the Xenohedron)  
pull: [explanation copypaste from thinkularity]