Impressions of decidability computability and predictability - inexpert eccentric take.

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Abstract

This essay contains illustrated -metaphors insertions , in an attempt to express better what I'm thinking. If my thinking would have been with a mixture of experiences including smell, i would have crafted an essay with various odors and perfumes instead. The focus is mostly on the things that these long words seems to have in common - strings and cycles. Without knowing precise definitions I try to make valid statements based on various sources. At the end I conclude with an adventurous bold claim.

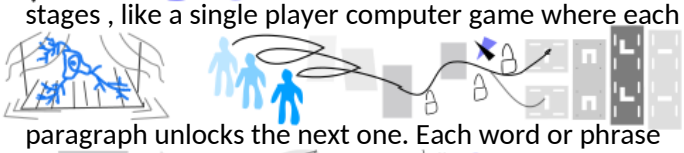
Pressure for time

Predictability computability and decidability are references to a physical ensemble containing a conscious being and a device made by the same conscious being or by some other conscious beings. The conscious being want to know what to expect while doing some actions on de device. History tells , having good dictionaries of waiting times [deduction] for various actions is one of the driving forces for the scientific discoveries. Computer Science, seems to be

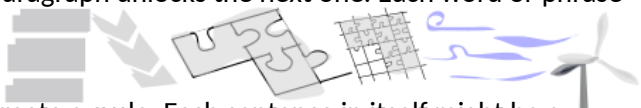
the latest story parts of Nature-Reality tells us. The

experience of reading forms a maze / test with levels /

stages , like a single player computer game where each



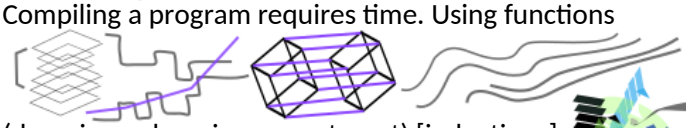
paragraph unlocks the next one. Each word or phrase



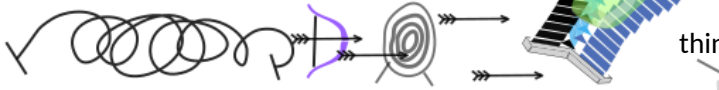
create a cycle. Each sentence in itself might be a

conclusion or a principle and could be taken as it is.

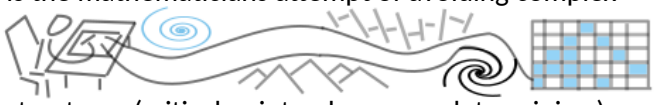
Compiling a program requires time. Using functions



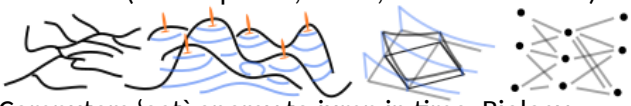
(domain: codomain source:target) [inductions]



is the mathematicians attempt of avoiding complex

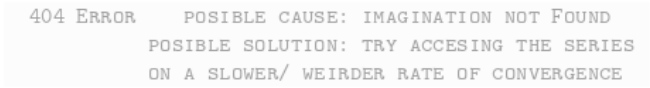


structures (critical points, chaos, nondeterminism) .



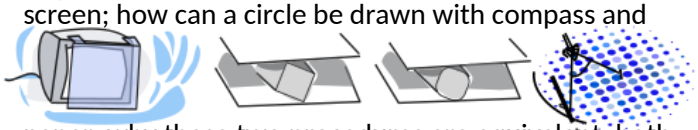
Computers ‘eat` energy to jump in time. Biology

seems to use differently energy time- wider structures.

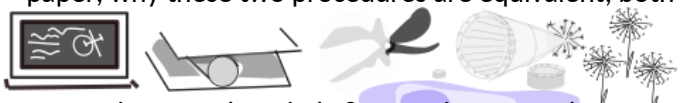


How can a circle be rendered on a pixelated computer

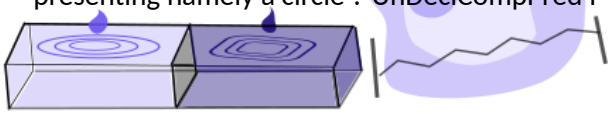
screen; how can a circle be drawn with compass and



paper; why these two procedures are equivalent, both

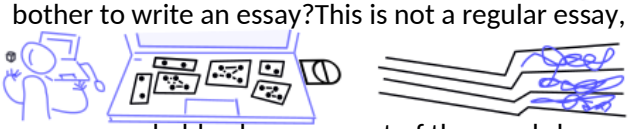


presenting namely a circle ? UnDeciCompPred I



suppose they are almost equal meaning words; why

bother to write an essay?This is not a regular essay,

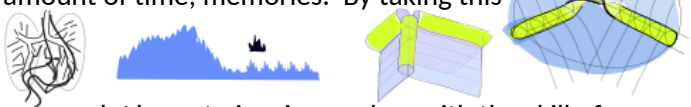


you can probably observe, most of the words have a

nonalphabetic companion underneath. *Sonoric*

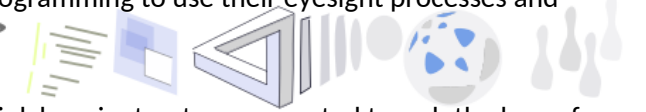
symbols -now blended with images- create, finite

amount of time, memories. By taking this



approach I hope to inspire readers with the skill of

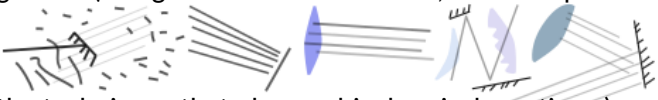
programming to use their eyesight processes and



think how is structure generated trough the lens of

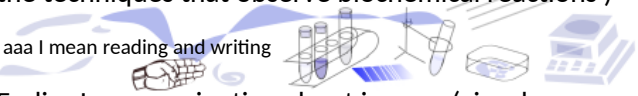
microprocessors , and how structures are formed in

general (trough a multitude of lenses, for example



the techniques that observe biochemical reactions)

aaa I mean reading and writing



Earlier I was ruminating about images (visual

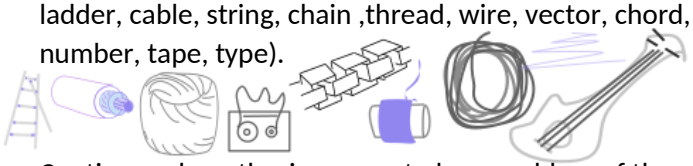
adnotations for words) how did I bounced to the

actual act of coding. Computers like people, use for

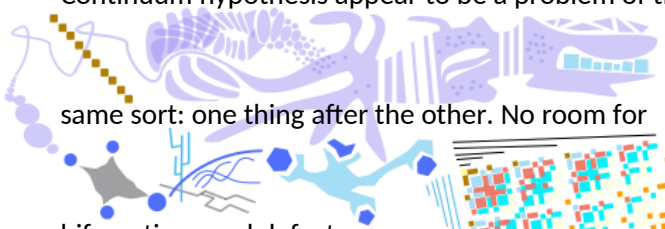
primary physical structure objects that stays in time-

lines (queue, series, sequence, axiom, stack, word, list,

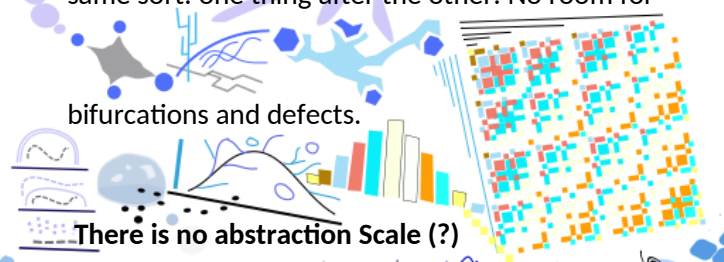
ladder, cable, string, chain ,thread, wire, vector, chord, number, tape, type).



Continuum hypothesis appear to be a problem of the



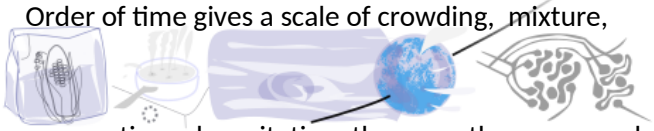
same sort: one thing after the other. No room for



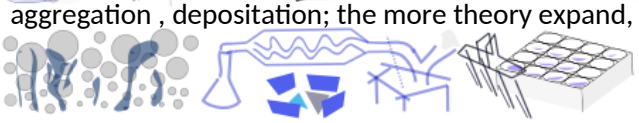
bifurcations and defects.

There is no abstraction Scale (?)

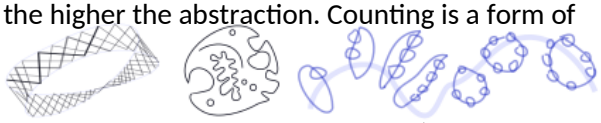
Order of time gives a scale of crowding, mixture,



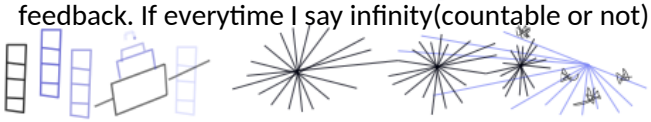
aggregation , deposition; the more theory expand,



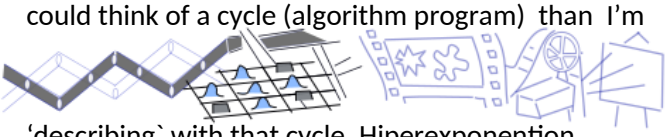
the higher the abstraction. Counting is a form of



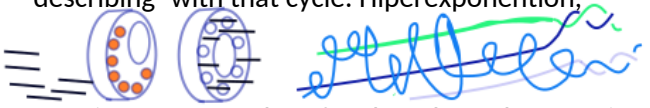
feedback. If everytime I say infinity(countable or not) i



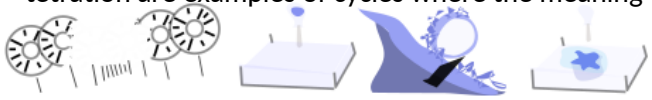
could think of a cycle (algorithm program) than I'm



'describing` with that cycle. Hiperexponention,



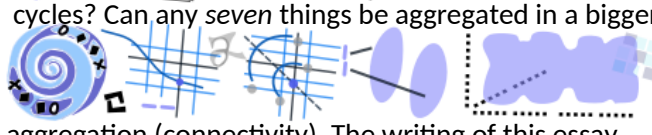
tetration are examples of cycles where the meaning



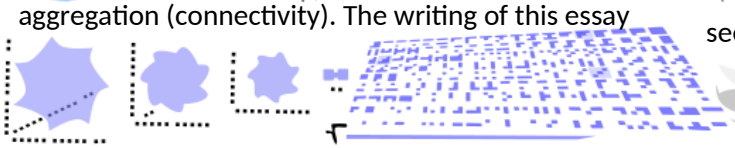
emerge laserlike way beyond apparent physical

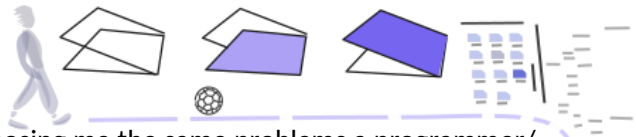
realisation. What are the wanted and unwanted

cycles? Can any *seven* things be aggregated in a bigger

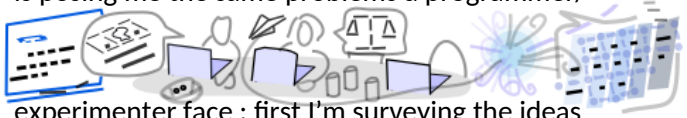


aggregation (connectivity). The writing of this essay



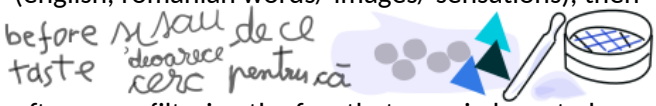


is posing me the same problems a programmer/



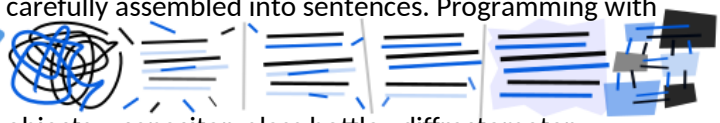
experimenter face : first I'm surveying the ideas

(english, romanian words/ images/ sensations), then



after some filtering the few that remain have to be

carefully assembled into sentences. Programming with

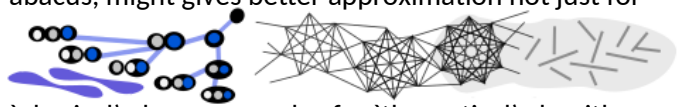


objects - capacitor, glass bottle, diffractometer,

trillion reaction array, biosamples, comb ,wind

tunnels, solar sized coffee filter , plant in a pot or

abacus, might gives better approximation not just for



`physical' phenomena also for `theoretical' algorithms.

However scale of the components of above examples

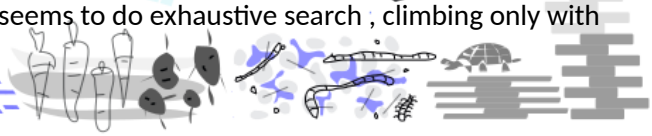
won't react much for a computational result.

Lazy programming is the idea of taking computational

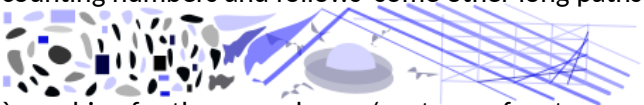
structure in the amount needed when needed ; to let

the structures reveal themselves. Nature does not

seems to do exhaustive search , climbing only with



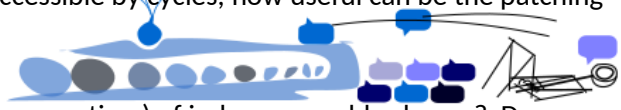
counting numbers and follows some other long paths.



`searching for the easy shapes/ systems of systems

concept of concept`; what kind of structure are

accessible by cycles, how useful can be the patching



(aggregation) of indecomposable shapes? Does any

graph with data in the from the physics/ chemistry

laboratory textbook hide more or less extremely

precise shapes. What if UnDeciCompPred is a problem

of distances between visible and unvisible what if we

are missing great amazing shapes, which require

sensibly, for example the one hundred minus seven -

digit of e.

Maybe the filter of time hide parallel graphical

structure showing us only cycles (feedback/

computations).

If you, the reader have enjoyed this keyword

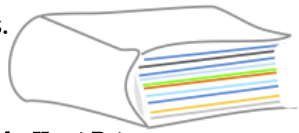
declarative style of exemplified writing than, this is

a proof that, UndeciCompPred has a different meaning

with “automatons” that can run “ images ” and have

for the output, spaces , answers which are less and

less describable by simple cycles.



Quotes

"Geometry is not true, it is advantageous." - Henri Poincare
"The best model of a cat, is an other cat" - Norbert Wiener
"Young man, in mathematics you don't understand things. You just get used to them." - John Von Neuman -"The search for hard-to-vary explanations is the origin of all progress".-David Deutsch"- Ted talk
Two billions of evolution sideways " - Mikhail Gromov - What is a manifold?, Clay Mathematics Institute Lecture[Category theory] does not itself solve hard problems in topology or algebra. It clears away tangled multitudes of individually trivial problems. It puts the hard problems in clear relief and makes their solution possible. - https://rs.io/why-category-theory-matters/-"To keep this book compact, it was necessary to interrupt these lines firmly and often arbitrarily"–Marvin Minsky – Computation finite and infinte.

References/People/Organisations/Comics/Tv/Web

The Hitchicker guide to the Galaxy : large scale computer ideea Futurama Phdcomics 3blb Richard Williams: Animating Movement How Its Made Abstroosegoose Dexter's laboratories Minutephysics xkcd Vi-hartl isomorphismes.tumblr.es Technology Entertainment Design World Science Festival H.N.Quoc V. Le Z.eph Landau :Tensor networks and Q.A Portal Bret Victor : The future of programming Lex Friedman Ai Podcast: Yann LeCun, Thomaso Poggio, Konrad Zuse : Zuseum Wikipedia: metric space, Joel David Hamkins : Generalised transitivity :MathOverFlow comment Jurgen SchimidHuber : Algoritmic Theories of Everything Pbs : Eons: Infinity Series Vladimir Voevodsky: univalence Stephen Wolfram : A New Kind of Science John Baez : Azimuth weblog James Burke : The Day The universe Changed, Connections The N Category Cafe : Quasicrystals and the Riemann Hypothesis thatsmathematics.com/mathgen Max Tegmark : Mathematical Universe Carlo Rovelli : Royal Institution Talk Lee Cronin : Trillion Reaction Array Mike Stannett: Super Turing computation Center for bits and atoms Zdenka Kuncic :RI Talk Dirksen Bauman: On Becoming Hearing Peter J. Landin: The next 700 Programming Languages Dana Scott : Finite Automata and Their Decision Problems Barbara Liskov: Programming with Abstract Data Types: Comp. Hist. Museum Humans store about 15 megabytes of information during language acquisition : Royal Society Open Science C. Teuscher : Comp. as we don't know them N.J.Wildberger: Reals Daniel Dennet: from Bacteria to Bach and Back Visual Interaction Networks : Deep Mind Blaise Aguera yArcas R. Pascanu D. Jonson: Classical Tensors Vilayanur Ramachandran Neil Sloane :Amazing Graphs: Numberphile edge.org Brian Kernighan : Computerphile Cristopher Moore : Commuting Cellular Automata Radu Ionicioiu : Quantum Information nature machine intelligence art. : Learnability can be undecidable Phil Wadler: Propositions as types Clifford V.Johnson : Graphic Talk about the universe Christos Harilaos Papadimitriou: A Calculus For Brain Brendan Fong : Algebra of Open and Interconnected Systems Gita Peyn : FormWelt Longnow.org : Is technology moving to fast? Alexander Hellemans : Istoria descoperirilor stiintifice Marius Buliga : ChemLambda Dan Licata : Cubical infinite dimensional type theory Giorgia Lupi : Data Humanism ncatlab.org/nlab/show/computational+trinitarianism Quanta magazine : univalent-foundations-redefines-mathematics-20150505 Georges Gonthier : The Four-Color Theorem Solving Cubics With Creases: The Work of Beloch + L.Thom