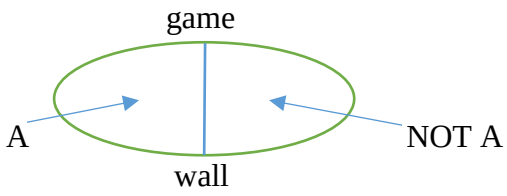
Conceptors

I would like to mention a new type of apparatus I call a *conceptor*, and introduce its mathematical basis. This implements ideas rather than the syntax approach of computers, and has a mathematical basis some of which is already present in the maths part of the website in Number, space and logic (NSL), in particular.

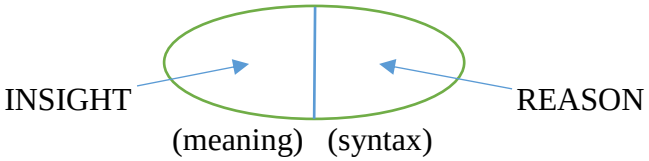
The sections in NSL are 5.2 Making breakfast – ethical game theory and 7.9 Second example. An additive and multiplicative ring game. There will be more to go in what is currently 5.10 Hyperintuition.

The mathematics of conceptors deals with games



The wall can vary from height 0 to height 1.

Here is a game



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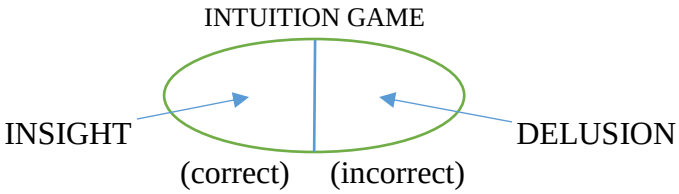
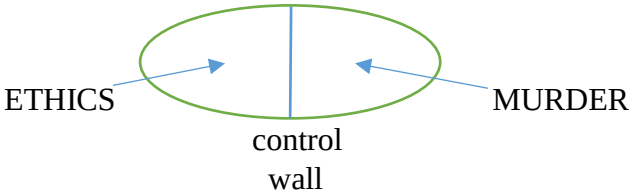


Here is a political system

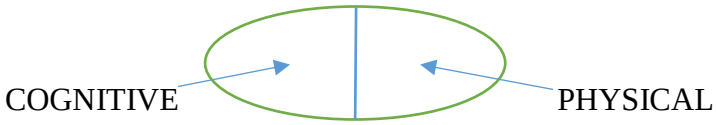


(a) Ethics uses collective reason and has a currency of need.
(b) Control uses choice and has a currency of power or money (or ballot counts).
(c) Murder uses unreason and has a currency which distributes death.

These games are partitioned further and *evolve*. An innovator murders ideas and ends up nearer the truth if ethically inclined. It is then possible to 'Jesus convert' from the murder side of the game to the ethical one, and be 'forgiven' each time the player reverts to being an 'ethical Satanist' – someone who murders because it is right.

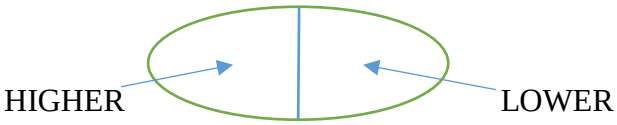
There are *absolute states* and *relative transformations* – currencies which are distributed by the players.

The ethics system can have an ethical player looking at positive and negative scenarios (the latter I call paranoias), likewise murder players with an ethical core of reason. There is a lot of mathematics to this theory and it maps to the game



The physical will be on the website (part is already there) developed from the theory of zargonions in volume I chapter 4 and volume V, currently in NSL. Part is the 'novanionic theory of everything' which includes general relativity for zargon propagators interacting with themselves and interaction theory for different zargon propagators.

Conceptors are based on games. An implementation is as follows. Consider physical states organised by a



Relation game, so there is a ranking between high physical states and lower ones

(1) Cosmos
(2) Solar System
(3) Life
(4) Atomic physics

Now consider more mathematical relations

relation (1) Inclusion or embedding (we have already given this for physical states)
(2) Equivalence or sameness
(3) Representative or typical example (we see in the category theory of NSL volume I, 3.17 this is called a *universal*)
(4) Dissimilarity, evolution, transformation, mapping.

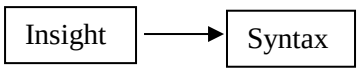
Binary means mutually exclusive. Here are some.

true/false
love/hate
life/death
reality/inconsistent physics (corresponding to infinite/finite coordinate physics).

In NSL volume I, 4.14 reality is infinite.
Inconsistent physics is represented in NSL by the tharlonions of 4.18. This nonassociative structure links to nonabelian groups (Heisenberg's uncertainty principle) and to its abelian analogue (the Schrödinger equation).

Addition is repetitive. Multiplication (rather the inverse, division) does not always fit into this structure, as for the tharlonions. This binary inconsistent physics is finite. Reality is interaction physics – say multiplication of zargon propagators in the special case of self-interaction as a photon or graviton propagator in general relativity.

The mapping between cognitors and computers is as follows



Insight with meaning maps to syntax with axioms/valid reasoning in truth/ and theorems.

We say any valid syntax system has an insight, and any insight back-propagates to syntax.

So we are using insight as an algebraic variable with meaning for syntax axioms, deduction and restrictions to theorems.