

Hi Bryan.

So—I'm not done on the dependent origination meta analysis—though similarities with some of the methods of this project are clear (which is very cool, thank you).

Dependent origination is an esoteric term which I would never have thought to investigate – I have no doubt that this is also the case for arbitrarily many of the causally implicated phenomena I describe and weave together throughout this project. I have followed my own intuitions on causation, irrespective (and often ignorant) of prior or established notions, later reconciled

On that, noting your personal history, technical perspective and research, and noting that some of your interintellect colleagues are psychologists—I wonder whether any of you are able to point out the established esoteric terms or concepts for the following suggestion of an evolutionary origin for depression (something which you have spoken about, and which I am personally familiar with) (this piece is framed from a time period I speculatively place maybe ~500m ago. Although possibly >538m years ago, for reasons).

And simply, I would very much value any feedback on this treatment of an obviously delicate matter of concern.

I'll front load an essential caveat—I very much understand that the individual circumstances of those who suffer depression are unique and personal, which I cannot speak to holistically, of course—though despite that, there must be something common to all, and I am speaking to that commonality. Further, I am speaking to an intermediate tier of phenomena, between the behaviours and the content of thought, and the implementation of the brain.

I am pointing at the system, not the signal. And at the general case of a dependent origination of depression.

For framing, this suggestion will be in the form of a digest of some exploratory fiction, and follows the earlier diagrams 2-4 (<https://mastodon.online/@causalmechanics/110040131729114979>), after a jump to the 'logical system of mind' (shown in 4/6) – whereby a number of fictional narratives describe the incremental evolution of cognitive function, via a hypothetical ancestor of humans, surviving territory, the environment and others.

As a catch-up, the sequences described in 2-4 (when completed, I suggest):

- Can be shown to intersect with meditation practice, including metta, and cognitive or emotional behavioural therapy (CBT ECT)
- Can be speculatively related to brain implementation: memory reconsolidation, and more
- Describes an intermediate stage of cognitive mechanics, between behaviour, the content of thought, and brain implementation (this simplification is developed and refined over later stages)
- Is directly experienceable cognitive mechanism, and can be tested

In advance of this piece, further notions have been introduced:

- Additional brain implementation is introduced: representational maps – place, grid cells, and what follows
- Also notions like evolutionary segmentation, and repurposing, and more
- The origins of conceptual thought are being discussed, with neuronal functionality adding conditionality to the material employment of 'embodied messaging language', a primitive of biological autonomy (and a precursor to emotion)

- The interplay between one particular aspect of embodied messaging language (pulsed sustainable messaging) and the electro-mechanics of neuronal activity is found to be profoundly impactful to lived experience (and is already implicated in 2-4, metta, and CBT and ECT)
- Embodied go is implemented as material chemical release (candidates are glucose/ atp or similar): pulsed, sustainable messaging (for reasons)
 - Implements movement intensity
 - Articulation control is neuronal: initially fixed pattern; then plural; learned; adaptive, etc
 - Together directly cause muscular movement and locomotion
- Embodied stop interrupts go, attenuates eml release, through to cessation, and can suppresses articulation signals
 - Increases time for additional sensory operation
 - Reduce risk of misadventure
 - Is energy efficient, etc
 - Abrupt stop can help avoid detection
 - For non conceptual autonomy, care, caution, or abrupt stop (inanimation) is implemented by autonomous slowing of pace, through lethargy, to pain (to interrupt present actions however stimulating), to acute embodied mechanics of ffs-just-stop-going-there!
- Pre-conceptual cognition
 - Does not include the mechanism of 2-4
 - Is simpler autonomy –*simpler mechanics*
 - The foundation which is built upon, not replaced
 - As such, is instructive to modern phenomenological experience
- Mechanistically summarised:
 - Stimulus detected
 - If associated with persisted memory, memory recalled
 - If memory has associated emotional flag, invoke
 - If invoked, embodied state primed
 - Embodied messaging language (pulsed, sustainable messaging)

Finally, getting to the point...

Ok.

Consider, that we don't yet have the means to objectively conceptualise: cognition is mechanically evaluated autonomy. Where autonomous response directly follows the intensity of any invoked emotional flag (along with neuronal articulation)

Consider that over time, persistence of significant stimuli has evolved, to compose relational maps of significant things. As stimuli from any location (are detected, interpreted, and) implicate a route, a basic look ahead might be implemented by evaluating degree of separation from present location. Such that, where nearby locations are significant, we might be influenced by that significance sooner, should evolution increase the scope of relational graph under evaluation at each step

Consider threat in adjacent locations: whereby a persistent threat may cause a extended area to be effectively off-limits.

Consider predators, which move independently of an environment, such that fixed environmental flags are unsuitable. Territories become marked as off-limits, sometimes unnecessarily.

Threat and predators may be periodic occurrences, seasonal or rare: such that off-limit areas become seasonally or circumstantially threat free. Corrective cascades evolve, to reset the emotion flag of

associated areas; re-allowing access to previously blocked resources, which improves the circumstances of survival.

Consider this pre-conceptual functionality evolving sufficient potency for fully autonomous biological survival—go like your life depended upon it—stop like your life depended upon it—do not go there, like your life depended upon it

Now consider the next segmentation, to independently track non fixed territory: others, predators, and later intangible aspects of those things; objective concepts; dependent origination.

Consider this segmentation of our environmental context; such that all conceptual thought is composed by the very same maps, and emotional flag mechanism, and the very same autonomous processes, protections, cascades, and responses

Now consider the self, as the default conceptual context. And consider the effect, day-to-day, moment-to-moment, of sufficiently intense or sufficiently many adjacent negatively associated memories, on the default map of all conceptual concerns, crossing thresholds which begin to trigger embodied stop

Now consider the circumstances and the spectrum of burnout, depression, chronic fatigue and chronic pain.

Notes:

Ok, will stop here for now.

Still to cover:

- Describe significance of difference between eml and electro-mechanics, eml bleed over (find better term!) between sequential thoughts
 - The mechanism of metta, therapy, etc
- This also causes problems, when we feel bad, we might imprint that emotional flag on arbitrarily any thoughts
 - Over time, when this passes thresholds of intensity or adjacency, we operationally experience embodied stop on the default context
 - Noting (burnout can occur on alternate context)
- 'How we feel while we're thinking'
- embodied stop
 - the effect of muscular suppression near a cliff, for example
 - later referred to as alarm, with candidate chemical adrenaline (skipped here for brevity)
- embodied action
 - Only locations which invoke particularly intense significance must be avoided at all costs
 - abrupt go, is a last resort