A call to action on how we think about and treat Thought Disorder

Disordered (disorganized) speech is a clinically accepted indicator of *thought disorder*, a symptom commonly present in psychotic conditions. Disordered speech exists on a spectrum from circumstantial speech and vague references to the rarer phenomena of clanging and phonemic word salad. *Thought disorder*, often accompanying treatment-resistant schizophrenia, also tends to be less responsive to the current medications available, other than through quite vacuously, erasing *thought* itself. It also serves as a significant barrier, perhaps definitionally so, for the experiencer to be "legible" in therapeutic interactions, increasing isolation of the experiencer.

In addition, often overused tropes drawn from the extreme ends are provided as sufficient substitutes of understanding of *thought disorder*. It is my hope that in this newsletter I can introduce:

- 1) Whether thought disorder (or its opposite, however that is defined) is legible and well-defined
- 2) My accounts of *thought disorder*, which I also introduced at the DISCOURSE 2025 conference in my <u>slides</u>
- 3) My journey in appraising and treating my *thought disorder* (my primary "schizophrenia" symptom) which I go into much more depth in a separate <u>presentation</u> I did for the *CEYMH Youth Advisory Council* in May 2025
- 4) Future directions worth exploring for treating thought disorder
- 5) Questions I have about how thought disorder is conceptualized/directions for research

Is thought disorder legible and well-defined?

The absence of thought disorder?

I'd like to first present you with a passage and then, some questions about your thoughts on it. Does this passage, written candidly from the experiencer's mind of their internal world, indicate to you, an *absence* of thought disorder?

"Thoughts can flow at my slightest whim, like the ripples on a pond just perturbed with the whisker of a cat, but can also come to a complete halt, as if an orchestral conductor was able to stop an entire symphony with just the laziest flick of his wrist. I am able to generate massive lists of possibilities for topics I wish to think about -- in just 2 minutes while walking, mind you, and balancing a heavy backpack on my back, I was able to generate about 10 different ways of classifying mental illnesses and how this emphasized the importance of reading Hofstadter's book on Surfaces and Essences to understand how to and how not to construct analogies. All this I was able to balance while quickly scanning my environment for cars, thinking parallely about the time and how quickly I was walking in relation to wanting to get to the library at a certain time, and

feeling like my gaze about the environment both auditorily and visually was in synchrony with the music I was listening to -- as if each little thump of the bass or melody switch in the song resonated with a change in my visual field to take in a new set of information. I think whatever I am blessed with right now is a human luxury, and I don't bemoan others for not spending time trying to analyze this state, and more just doing with this state--since the thoughts move so lucidly and at will in this state, that to analyze the thoughts is to analyze naturalistic phenomena themselves, since the thoughts are capturing the phenomena so much more accurately."

- 1. Is the state described in the passage above, one that you are habituated to and quite likely is your "baseline"? A state that may be harder to appreciate as its absence may be a rarity excluding clearly marked off periods of say, physical illness?
- 2. Are we indexing **enough** clinical variables that relate to what could be summed up in the above text, as a "flow state"?
- 3. Do we have hope that with the <u>current imperfect treatments</u> that people with *thought disorder* can (re)gain::
 - 1) peak cognitive engagement
 - 2) metacognitive capacity
 - 3) ability to learn new skills
 - 4) conversational fluency
 - 5) rich interpersonal connections
 - 6) capacity for deep abstract thought?

Or, is it that when these things are preserved in individuals administered the limited treatments we *do have*, that we merely view the preservation of these markers as *artifacts* of pre-existing ability in selectively "gifted" individuals? **In other words, can we strive for richer,** better-quality-of-life providing treatments for the *many*, not the *few*?

But what about when ChatGPT can index a difference between compressed-abstractive seemingly thought disordered writing vs "truly meaningless" writing?

It is often hard, due to time constraints and clinicians' own patience, to distinguish between writing/speech that has varying traits for presence of meaning, disorganization or novelty. In the below table, I attempt to provide examples of speech that have different values set for these three properties.

Here, I use the term "Meaningless" to refer to speech where it is not possible to derive meaning from the content at all, "Disorganized" to refer to speech that has structural incoherence (not whatever technical definition of *disorganization* tends to be used which often has "meaning" subsumed in it) and "Novel" to refer to speech that has new ideas/surprising content.

Example of writing	"Meaningless"	"Disorganized"	"Novel"
"It's not like I like being the outcast czar of the store I go on the bridge to explain some dualities of our existence to the sun why, I just, I'm not a wrangler of the museum but what of the fruit vendors."	yes	yes	yes
"You have new khakis. But no shoes. What if the laces on the boots? You know that one?"	yes	yes	no
See "Passage 2" below	yes	no	yes
"The boots don't run the dryer. But the power wattage does for the kitchen."	yes	no	no
See "Passage 1" below	no	yes	yes
"You have the kettle with you Well, the pot really The one on the bench, mean, table?"	no	yes	no
"According to Jaynes, this bicameral mentality began malfunctioning or "breaking down" during the 2nd millennium BCE. He speculates that primitive ancient societies tended to collapse periodically—for example, Egypt's Intermediate Periods, as well as the periodically vanishing cities of the Mayas—as changes in the environment strained the sociocultural equilibria sustained by this bicameral mindset." Bicameral mentality - Wikipedia	no	no	yes
"I've been doing all right. There are often ebbs and flows in life, but it's important to ride the waves and try to make lemonade with the lemons life often gives you."	no	no	no

It would be very interesting/important to not confound a

Passage 1:

"At this time, I am finally having less self referential thoughts, that is, fewer thoughts like the following form: trying to figure out whether the ability to do math generalizes to other skills and is thus the "Master Skill" compared to others, and the ultimate obsoleteness of other skills anyway yet increasingly more obsoleteness of math skill with Al..a parallel to a passage from "The Unbearable Lightness of Being" on Tomas having a 2 way sort of

[&]quot;Meaningless"/"Non-Disorganized"/"Novel" with a "Non-Meaningless/"Disorganized"/"Novel" passage, because of superficial perceptions of disorganization. I have seen ChatGPT be able to distinguish between these cases on the samples below that I have generated.

vision in arms of Sabine vs Tereza..the ability to make analogy itself reminding me of Surfaces and Essences by Hofstadter and how analogies are abstract thought's fuel and fire, such an analogy itself seeming like pithy poeticism lending itself to be "idiotically interpreted" as simplistic babble by the secretly-hopelessly-disorganizedly schizophrenic-but-pseudoautisitic type of person who wears information as mere fashion as a cover for a naked mentally disconnected mind..but such judgments bring into question who is the biggest idiot of all, for pride, especially for a trait of pithyness indexing neural efficiency, was never earned to begin with, was it not?"

ChatGPT output says...

The speaker reflects on the desire to have fewer self-referential thoughts, giving an example of such a thought spiral: questioning whether mathematical ability is the ultimate "Master Skill" because it might generalize across domains, though this is complicated by the increasing obsolescence of math due to AI. The self-awareness here is layered—they are not just thinking, but also thinking about thinking, and judging themselves for doing so.

They then make a literary analogy to The Unbearable Lightness of Being by Milan Kundera, referencing Tomas's split view of Sabina and Tereza—which reflects ambivalence or duality in thought, possibly representing the speaker's own internal conflict about abstraction versus lived emotional experience.

This leads to a meta-reflection on analogy itself, citing Surfaces and Essences by Hofstadter, which argues that analogy-making is the core of cognition. Yet the speaker is aware that this very meta-analogy could sound like pretentious nonsense—especially to a type of person they describe harshly as "schizophrenic-but-pseudoautistic" (likely a projection of their own inner critic), someone who uses knowledge as fashion rather than for substance.

Finally, they reflect inward: if they judge this person as foolish, is that not itself a form of pride? And pride in mental quickness—"pithyness indexing neural efficiency"—is unearned, so what right does anyone have to feel superior?

Passage 2 (deliberately random words strung together):

"The day is dark and a long road lays ahead. I philosophically ponder my existential dread for meaningless ruminating metarecursion. In a way, David Foster Wallace's juxtaposition of elemental inadequacy and insouciance purveys my character abroad for expressive understanding of my fellow"

ChatGPT output says...

"The day is dark and a long road lays ahead."

Classic existential tone-setter. The speaker faces something uncertain or burdensome.

"I philosophically ponder my existential dread for meaningless ruminating metarecursion."

They're trapped in recursive self-reflection: thinking about thinking about meaninglessness. It echoes Hofstadter, Wallace, and depressive rumination.

"Foster Wallace's juxtaposition of elemental inadequacy and insouciance purveys my character abroad for expressive understanding of my fellow."

Likely trying to say: DFW's contrast between deep insecurity and superficial carefreeness mirrors my own identity as I try to express myself to others. The meaning is poignant, even if the phrasing is tangled.

The mention of recursive thought (metarecursion) suggests some awareness of higher-order thinking patterns, but it's not elaborated in a precise or novel way.

Why this matters:

While I may be biased (as I wrote the first passage in a diary), I found ChatGPT's analysis to be spot on, if you'll take my word for it. This further brings into question, if LLMs can distinguish seemingly disorganized speech as *laden with the intended meaning of the writer*, from truly "meaningless" speech that has just as many "large words" and "massive literary references", better than a human, *what would this mean for democratizing the landscape of thought disordered (or otherwise) people's legibility? Could clinicians mistake speech that may be conceptually deep because of difficulty in parsing, and thus wrongly categorize it as "meaningless"?*

And what about "covert" thought disorder that may be masked in speech?

Finally, I think it's important to note that people who may struggle with unwanted loose or idiosyncratic associations may suppress this in their language if they have strong "reactive control" mechanisms. This has relevance to whether speech samples provide sufficient data to really capture *thought disorder*.

A very interesting paper that gets into this phenomena is <u>Latent mechanisms of language</u> <u>disorganization relate to specific dimensions of psychopathology</u>. Using reaction times and types of associations that participants from clinical and non-clinical backgrounds make to certain cues, these researchers were able to distinguish the degree to which proactive control versus reactive control strategies were influencing the associations made.

In particular, participants who may have "covert thought disorder" were indexed separately from those who had more visible thought disorder, based on a) language features indexing degree of thought disorder, b) dimensions of self-rated psychopathology (particularly suspiciousness), and c) reaction times to produce associations. A telling point in the paper was this:

"Humans do not express all that comes to mind and often use executive processes to inhibit irrelevant ideas. Yet, psychiatric nomenclature often equates incoherent

communication with disorganized thought, as implied by the ascription of FTD. The latter's strong diagnostic emphasis on overt speech risks overlooking covert forms of thought disorganization and misconceptualizing underlying cognitive processes."

My accounts of *Thought Disorder*

Relating to the previous section on self-regulation mechanisms, and how I have often fought with my mind to feign "a metacognitive watcher to 'record' my mental processes", I will give a few themes I have picked up from my writings. These writings likely index whatever we consider as *thought disorder*. I hope these characterizations will show that one can be somewhat utterly helpless to *thought disorder*, but be a mindful "insightful" (often painfully so) observer to it, nonetheless.

I also caveat that I wrote these things as they entered my mind, over the last few years, without any finessing for the public, and thus encourage the following question(s) as you are reading:

- 1. To what extent are your own say, pre-epiphanic moments, <u>just as disorganized</u> <u>seeming</u>, yet may occur in a "flash of a moment" before you can quite grasp the threads that cohere to an explainable sounding idea to yourself and to others?
- 2. That is, to what extent could "thought disorder" be a matter of slowed down and/or disconnected neurotransmission that reflects an attempt to form meaning, yet one where there isn't fast enough or "correct" temporal synchrony?
- 3. If you were to undertake an experiment of observing your inner experience in minute detail, much like Russell Hurlburt encourages in his <u>Descriptive Experience Sampling</u> method, what results would you find?

Themes:

1. General cognitive interference when trying to focus/recall info

"noticing more cognitive interference -- say when I try to recall details about the confidence intervals I hear some fragments of song in my head. So let's try again. Words come in, like 'prototypical, Acheulean, Neanderthalic', from a lecture I watched a few hours back, coming into my head. really smart. Jolts to a song with 'lalala i just can't get you out of my head'...jumps back to the thread.." confidence intervals endpoints are stochastic, in the frequentist scenario".. From all this I realize, the human mind is not designed to have catchy tunes in the head, along with recollections about the possibly affective stance of a person experiencing the same situation that we are, all at the same time we are trying to process the information in a situation..? that this is a limitation of the human mind that no one can explain well.."

2. General associativity (not including when my own thoughts' shapes are used as associative cues, aka no 'metacognitive' observer causing the excessive associativity)

"As I flicked my wrist in a direction I heard a tap in my head -> the wrist flick was in the direction of my phone and so I checked some messages -> something about the idea of

checking messages reminded me of a song I liked -> I remembered a past context I heard the song in -> thoughts jumped to seeing a car outside with two bumps and thought of mickey mouse -> saw a flashback of an old 90s style mickey mouse outfit -> remembered where i had seen such an outfit on the bottom of a potpourri container, at my old house -> this reminded me of my old house where there was a moth on the wall that scared me -> i saw an imaginary moth in my mind's eye open its wings and saw golden circles on their wings -> i was swept into the circle and was reminded of the movie The Ring"

3. Excessive meta-cognitive associativity (of thought content, associated emotion, or my own affect)--leading to excess perspective switching

"to make this more clear, what happens to me at least is a reverse mirroring process: i start to notice my own mental state like "chantal is reading a sentence of a book"..much like many other people have read things and focused, but the fact that she becomes aware of other people having that same mental experience makes her own previously pristine experience muddled"

4. Oscillation of over-sensory states with thought-disordered states

Both of these states were reported to have occurred within the span of days, by my report. The first state was substance induced (15-30 mg CBD (Cannabidiol), also replicated under just one session of Brainsway Deep TMS (Transcranial Magnetic Stimulation) therapy on mPFC-ACC) while the second was my baseline at the time.

"In one state: I am abnormally sensory sensitive, hyperfocused, have no thought disorganization whatsoever, am emotionally more irritable and lacking any awareness of people even around me. I'm having lots of a "drivenness to action" of the mania-sort, with relative sharpness and clear headedness, that combined, makes me really want to feel the contours of understanding arguments as precisely as I can

In a 'opposite' state: I'm "disorganized" states, with proto words and images, a-grammatical sentences in my head along with rapid perspective shifting (feelings of viewing myself from the perspectives of many other people and having a psychic war of sorts)."

What would it look like in a clinic if patients had the time and trust to be able to relay symptoms in this way to clinicians? Would it increase empathy for the patients' experience, identify new clinical targets, or even bridge the mystery of what may happen in "thought-disorder clients' minds" as not bizarre, but more exaggerated processes that occur just as often in non-thought disordered peoples' minds?

My journey in treating my thought disorder (my primary "schizophrenia" symptom)

On the point of trying to build a clinical bridge, I have been working on doing so after some unpleasant experiences early on, starting from a decade ago. This started when I voluntarily went in to clinic, concerned I could not feel a "click" in forming thoughts on just about anything nor maintain information "online" in my head in a way where I could do basic tasks like navigate bus routes on the fly, read story books, nor be able to hear anything other than scrambled, purely disjointed often inhuman speech in my head or sometimes, nothing at all.

Countless psychiatrists claimed that I was "psychotic"--never explained to me with nuance why, beyond that I had "disorganized thinking" despite my detailed attempts at trying to get them to flesh out their arguments and why my thoughts weren't merely characteristic of the often colloquially described "disorganized thought" in ADHD. They told me I "lacked insight" just because I didn't adopt their lingo for calling my "voices" (heard internally) as such—instead I said I was having lots of "intrusive thoughts" that I maintained were not necessarily "real" but felt very real and pressing. In a moment of desperation, I went to the hospital voluntarily when I was particularly agitated. I was foolish and under the impression that the hospital was a place for me to have an emotional purge where I cried, and fully released my emotions (not harming others, but hitting myself).

There, I was rapidly injected with Haldol at hospital which was the worst torture of my life, a fate worse than death for me during those moments for the symptoms it induced, when I believe literally any other sedative would have, and *has* often sufficed. This torture lasted for 12 hours, where I suffered unbearable agony, writhing pain, heart racing, dystonia, horrific "stuck" images in my head, and complete abandon from health professionals at my suffering. Later it was written in my notes that the treatment "worked" because I had stopped crying/being agitated. However, it was because I was in the deepest form of hell and the drug had muted my ability to speak. Of course that was not in the notes.

Now, I do not claim that my experience is in any way unique or special in its suffering-countless others who have not been able to voice their opinion at all have suffered from such treatments, and continue to. Nor am I claiming that Haldol and medications like it do not work nor should not be administered. I am more explaining my utter disenchantment with the current system as a result of my experience.

Further desperate attempts to contact psychiatrists for the *thought disorder* I experienced yielded nothing more than antipsychotics which resulted in involuntary movements, leaky breasts, weight gain, cognitive dulling. These barely made a dent in the "disorganized thinking" beyond just suppressing thought itself.

However, here are some treatments that did help me (the first, generously provided in part by psychiatry):

- Off-label TMS for OCD-mPFC-ACC protocol
 - Improved ability to feel joy
 - Improved learning ability and ability to form new memories

- Resulted in hypomania at times, but hypomania is still a definite "rung up" from severe thought disorder and thought impoverishment, cognitively speaking, in my humble opinion
- Avmacol–contains sulforaphane in the form of broccoli sprouts
 - Helped me get off antipsychotics without a "rebound psychosis" (I'm not claiming this for everyone!)
- Phosphatidylcholine infusions/oral therapy with curated balance of omega 3s, omega 6s etc (not just a typical omega 3 fish oil like supplement)
 - I got this procedure and supplement regimen from a specialized naturopath with connections
 - However, <u>BodyBio</u> is the only producer of liposomal PC/Balance oil for this purpose, because of unfortunate litigative practices in the industry for this potentially groundbreaking treatment
 - I will note that the theory for this particular treatment is based on the late David Horrobin's work on schizophrenia and abnormal cellular membrane composition, which brings me to the next section.

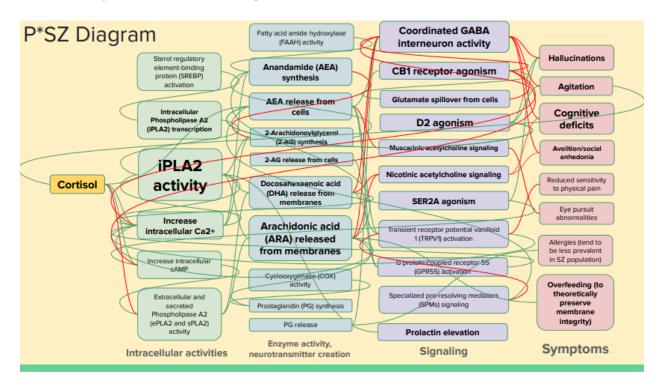
Future biological directions worth exploring for treating *Thought*Disorder

One thing that's shaped my thinking on the biomedical angle for treating thought disorder, and schizophrenia at large, is Professor Ari Rappoport's deeply mechanistic and integrative work built over thousands of papers of research. Ari, for reasons that are quite unusual and impressive, is trained as a computer scientist, but was fascinated by understanding the theory of the brain. He builds tremendously on Horrobin's work in his PUFA Theory of Schizophrenia, which I drew on for my presentation Understanding the PUFA Hypothesis of Schizophrenia.

The presentation outlines the compelling root-cause model or Ari's research, which is endorsed by Prof. Roger Kornberg (Nobel laureate for his work on DNA transcription), and traces schizophrenia's symptomatology to disruptions in cell membrane dynamics—specifically the dysregulation of *iPLA2*, the enzyme that releases arachidonic acid (ARA) and DHA from cell membranes which disinhibit the endocannabinoid system and downstream neurotransmitter systems. Treatments that thus target membrane disruptions may yield more root-cause treatments for schizophrenia, and likely, *thought disorder* as well, which often relates to developmental language features.

According to Ari's theory—based on an extensive review of the literature—this upstream dysfunction in *iPLA2*, affects a host of neuromodulatory systems (dopaminergic, serotonergic, cholinergic, endocannabinoid, and others) that are implicated in chronic psychosis. **This** systems-level perspective has made it harder for me to see current neurotransmitter targets as *the* important target for medication responsiveness; to me, it seems more like a downstream effect of deeper cell membrane dysfunction.

Below is a diagram I made based on all the connections made in Ari's paper. As you may see, neurotransmitter systems are but a few and downstream targets of a more fundamental cellular membrane abnormality, which often is perpetuated (though acutely partially improved) by current pharmacologics for schizophrenia:



I believe that rich, critical discussion ought to take place about Ari's ideas, and that they should be "put-to-the-test"! Ari even has a book on Elsevier, called <u>The Science of the Brain</u> with a complete mechanistic theory of the brain explaining a variety of DSM 5 and neurological entities.

It should be a fascinating read and contains a forward from Kornberg about the tremendous clinical implications of Ari's work for identifying new and viable treatment targets.

Future non-biological directions worth exploring for treating Thought Disorder

I explore non-biological directions for *Thought Disorder*, including psychosocial interventions and cognitive training, in my outline <u>How thought disorder treatment can be improved with CBT-p and adjacent methods</u>. I welcome discussion and critique on these ideas, many of which I merely built on from the literature.

Some questions I have about future directions/research topics

And finally, I suggest some questions that have been on my mind, and fascinate/intrigue me about the possibilities of better understanding and treating *thought disorder*:

- 1. May it be, that those who may present with more of a disconnected, negative thought disorder like speech pattern, while at first blush may seem to score lower on cognitive tests, may be sometimes suffering from undiagnosed chronic fatigue syndrome that primarily affects the mind. This is a hypothesis I am keen on seeing explored, and would likely involve research that interfaces with membrane medicine (above). Excellent text that explores the tri-occurrence of dyslexia, dyspraxia and schizotypy, as a diagnosable entity through membrane medicine, is Phospholipid Spectrum Disorders in Psychiatry and Neurology by David Horrobin et. al. This seems relevant in the context of those who may have had learning disabilities long before presentation of anomalous experiences and/or chronic fatigue. Perhaps there will be a relationship with severity of membrane and cellular fatty acid/phospholipid abnormalities and severity of thought disorder, though this particular connection hasn't been explicitly explored in any capacity.
- 2. Are intrusive thoughts in schizo-OCD an epiphenomenon or central to the cause of impaired working memory?
- 3. Is the prevailing thought that for people who are non schizophrenic they have "back up" defenses so that even though some sensoriomotor circuits may be appropriated for symbolic thought, they still have other sensorimotor reserves for embodiment? This is related to this hypothesis from <u>Disembodiment and Language in Schizophrenia: An Integrated Psychopathological and Evolutionary Perspective PMC</u>
- 4. Could some *thought disorder* symptoms be non linear insights that aren't polished in a legible way to others due to co-occurrence in the experiencers' minds inaccessibility of certain frontal lobe functions that can increase the "delay" and "stickiness" of representations?
- 5. What do you think is the mechanistic difference between these two types of people who experience a few distinct psychotic "breaks" vs those who have chronic attenuated positive symptoms for life but never really have a "break" but nevertheless are given the schizophrenia diagnosis?
- 6. Why is subverbal thought correlated with neural efficiency compared with vocalization/mental rehearsal thought? As in, is the timing of precise encoding of sensory stimuli vs mental rehearsal well decided upon? When one's working memory is saturated, does one then unconsciously (or sometimes consciously) employ rehearsal, or? This is relevant in the following case: Imagine you have some disconnection of mental activity from the sensory environment but still capture some detail. You see a purple notebook. But instead of seeing the purple notebook as a means to an end, your mind unconsciously spurs you with the words "purple" "notebook" or associations like Jimi Hendrix song Purple Rain, so on, so forth. Is the associative net being cast so wide the reason for not seeing typical "mental affordances", or, is it a compensatory effort to see them? Could we find out the "truth" on this by looking at very subtle, low level indices of these phenomena?

- 7. When "non-thought disordered" people listen to and can work in the midst of music in the background, how is it neurologically different in their brains compared to automatic replay of intrusive songs in "clinically afflicted" individuals?
- 8. What is the difference between ADHD and disorganized thinking that presents without much noise in the mind but manifests as scrambled speech? Does this owe to the imprecision of the category of ADHD, or the loosening of what people may term as "scrambled speech" vs "true scrambled speech in *thought disorder"*!?
- 9. Why is it that in human populations to date, it is much more common to observe people experiencing rapid, sensitization based activation of the autonomic nervous system without conscious deliberation to do so, on their part, compared to having rapid increases in, say, working memory? Could this be "gamified" in the upcoming years with technology?
- 10. What is going on when people can speak in a way that has minimal affective amplitude variability but *precisely* timed facial movements to emphasize certain words and ideas? Is this just a confound for cognition? Is this an index we should capture in addition to linguistic ones, to help those who may experience thought disorder?
- 11. Why does limbic dopamine increase paranoid pattern detection but not visuospatial pattern recognition?
- 12. Could some *thought disorder* symptoms be non linear insights that aren't polished in a legible way to others due to co-occurrence in the TD experiencers' minds of lack of delay dependent working memory?
- 13. Because it's undesirable to non coerce others with philosophical frameworks, what should be done for people for whom psychosis symptoms may be harming their lives/endangering them?
- 14. What about the "fuzzy middle area" where thoughts may not have a stereotyped "form" but have a stereotyped "theme" as in "why did X person react that way" and playing images and snippets of conversations you've had with them, and sometimes, you have a metacognitive monitor saying "Ugh i thought about it again" and sometimes you are fused? Could this index the schizo-obsessive overlap described in Schizo-Obsessive Disorder?
- 15. And finally, why isn't schizophrenia considered a neurodiverse condition? Should it be? What would be the harms and benefits? What would be the harms and benefits of a tiered functionality approach like that which is used in autism? I explore this partially in my presentation for the *CEYMH*: My journey in schizophrenia symptoms and research

Please contact me if you wish to chat about any of these ideas or otherwise!

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