



***Thought Disorder* – Lived Experience, Psychosocial Approaches, and the Limits of Our Understanding**

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What is *Thought Disorder*?

- Disordered (disorganized) speech is a clinically accepted indicator of *Thought Disorder*
- Often **overused, pejorative tropes** drawn **from the extreme ends** are **provided as sufficient substitutes of understanding of *Thought Disorder***. These include:
 - “Some sky create tomorrow headphone”
 - "The next day when I'd be going out you know, I took control, like uh, I put bleach on my hair in California"
 - **From clinicians: “You *just* can’t follow what they’re saying!! They talk rapidly about butterflies, the meaning of life, dogs, what they ate for dinner. They’re aBSoLuteLY incOMpreHensible!!”**

Why this presentation matters

- There is **little importance given to how the experiencer perceives *Thought Disorder*, nor to actually trying to understand it**
- So the **focus of this presentation** will be on **outlining TD's subtle and complex phenomenology and suggesting psychosocial and neglected treatments for it, not detailing more clinical criteria**

Lived experience of *Thought Disorder*

How I experience *Thought Disorder cognitively* (with ‘translations’*)

*I “translate” my originally described phenomena to easier to understand language. I also acknowledge this may compromise *meaning*. I encourage to read and process the raw excerpts if you have time.

I order these based on intuition from *most* prevalent to *least* in the general population (including non clinical samples)

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..”



"I have intrusions while I'm trying to learn statistics featuring random music or details from a lecture I watched about ancient humans. My mind jumps back and forth between these topics. I come to the frustrating realization that my mind isn't designed to handle such a high level of parallel processing across very different contexts."

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"



"Sounds in my environment, along with the songs they trigger as memory cues and the visuals associated with them, can put me into a hyper-associative mode of processing."

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”



"My own facial expression becomes a memory or imaginative trigger that brings up images of other people who have made the same face. Remembering these people can then shift my current experience."

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)."



"I can be quite sensitive to treatments. Just a small amount of CBD or mPFC-ACC TMS, in a short period of time, made me overly attuned to my sensory environment—far from my usual thought-disordered baseline."

How I *feel* as a result of *Thought Disorder* cognitions (with ‘translations’*)

*I “translate” my originally described phenomena to easier to understand language. I also acknowledge this may compromise *meaning*. I encourage to read and process the raw excerpts if you have time.

I feel a separation from others and **perceive others (and myself) as less authentic**

"I abstractly recognize the concept of...embodying a person who recognizes some memes and laughs at them and feels a sort of camaraderie with "la folie du jour" and i...understood to entertain such a goal and walk away whereas in the past i wouldn't have understood that such a goal was part and parcel of well being and a de-escalation of unconscious perseverative cognition"



"It still feels somewhat forced for me to laugh at popular humor, but nowadays, I recognize that we all make social concessions, and I don't dwell on making those concessions as much anymore."

I feel my decision-making is flustered by an inability to see things from a consistent perspective

"there was this feeling of all the systems i've built feel fake and alien.. like there is no point to anything anymore.. this feeling of emptiness.. feeling ungrounded like there's no point to buying anything.. why am i even buying anything.. why shouldn't i be punishing myself like an ascetic.. how do i become something i'm not.. there is this door with these questions behind it my brain feelings like forced to answer if i started to feel guilty about expenses that i didn't before...i don't want to open that door.. i want to keep the illusion of motivation. that's why thoughts about existential annihilation came in to my head, cuz it's the opposite of fighting about financial freedom..petty human concerns"



"I feel that my sense of self, my values, and my actions in the world are ultimately arbitrary and difficult to justify. This leads to a lack of motivation for me. To cope with this, my mind sometimes focuses on problems threatening the existence of humanity, as a way to shift away from my more solipsistic concerns."

We need more nuanced, detailed
non-caricaturized portrayals of
Thought Disorder!

Please see “Addendum” at the
end of these slides for how
Thought Disorder is experienced
by others

Psychosocial approaches* to *Thought Disorder*

*For this section of the presentation, please refer to my outline [How thought disorder treatment can be improved with CBT-p and adjacent methods](#) for more reasoning and references

Try to actually understand *Thought*
Disordered clients' speech

Reframe thought-disordered speech by considering therapeutic bias

It bears repeating that the **often therapist-rated "cacophonous" speech of thought-disordered clients is, in many cases, the most accurate reflection of their reality that they can articulate.** Viewing their speech through this lens may help **reduce** the unconscious **projection** of a **therapist's** own confusion or **frustration** back onto the client.

How do you react when you read this?

"People have changed my relationship with the underbelly already. I get into manic angry states and think I'm the shit. Then I remind myself others have seen actual real shit. This isn't a joke where I feel insane and then go to downtown at night to see what happens. A recent art museum experience too, was impactful, feeling semi religious, like entering a cathedral. Sacrosanct and orchestrated yet allowing freedom of thought within the confines of the medium being seemingly, behavioral control for an unbridled disorganized at times like myself while also encouraging quiet freedom."

Does encouraging more *analytical* speech **always** preserve meaning?

- I recognize that the **clinical and research community would intuitively or quantitatively rate the previous passage as moderately disorganized** or as having a “lower-than-desirable” analytic thinking score
- But see my [outline](#) to consider that **stripping** and restructuring **this passage to improve the analytic score may reduce *meaning***

Provide more types of therapy
to *Thought Disordered* clients

Provide more cognitive therapies

- Train *proactive control* to help reduce interfering information and improve goal maintenance
- Train *auditory processing* to improve verbal working memory as well as aid in relevant capture of auditory information
- **A clinical point:** Make TMS (transcranial magnetic stimulation) accessible to people with *Thought Disorder*

Provide creative arts-based therapies and MERIT

- Provide *narrative therapy* to **increase embodiment and representation of self over time**
- Provide *music therapy* to help clients' sense of time and **aid expression without needing words**
- Provide MERIT (MEtacognitive Reflection and Insight Therapy) to aid in **understanding of self and others**

Don't be afraid to think creatively
about how to appraise *Thought*
Disorder

Please see “Addendum” for more questions I propose being discussed about *Thought Disorder*—but I want to mention **membrane medicine** as a neglected research target and bring focus to **the aim of DISCOURSE**

Consider **phospholipid**, **fatty acid** and **membrane medicine-based** approaches for **hypothesis generation** and **treatment**

- Excellent text that explores the **dual or tri-occurrence of dyslexia, dyspraxia and schizotypy**, as a diagnosable entity **through membrane medicine**, is “**Phospholipid Spectrum Disorders in Psychiatry and Neurology**”
 - Horrobin, D., Bennett, C. N., Peet, M., & Glen, I. (2003). Phospholipid spectrum disorders in psychiatry and neurology.
- **Membrane medicine based approaches** have also being investigated for **chronic fatigue syndrome**
 - Nicolson, G. L., Ferreira de Mattos, G., Ash, M., Settineri, R., & Escribá, P. V. (2021). Fundamentals of membrane lipid replacement: A natural medicine approach to repairing cellular membranes and reducing fatigue, pain, and other symptoms while restoring function in chronic illnesses and aging. *Membranes*, 11(12), 944.
- So I suggest to investigate relationship between **severity of cellular membrane abnormalities** and **severity of FTD and/or fatigue**
- A highly researched hypothesis “[A Polyunsaturated Fatty Acid \(PUFA\) Theory of Schizophrenia](#)” by Dr Ari Rappoport, explains the **etiology** of schizophrenia, **unifies symptom dimensions**, explains **why antipsychotics (D2 blockers) fail to show efficacy long term**, and explains how **chronically released ARA (arachidonic acid) and DHA** implicate the **endocannabinoid system** as ***the*** prominent neurotransmitter system involved in initiation and **sustenance** of **trans-domain** (positive, negative, cognitive) **symptoms**
 - Rappoport, A. (2024). A Polyunsaturated Fatty Acid (PUFA) Theory of Schizophrenia. arXiv preprint arXiv:2408.06794.

The aim of DISCOURSE - What are we capturing with speech samples and why?

- If a disclaimer is provided as to which clinical features are being indexed (*insight, disorganization, etc*), might people deliberately structure or omit difficult-to-verbalize anomalous experiences, out of fear they may sound *ill*?
- Which is more clinically relevant—the uninformed individual who is unaware of how they are being analyzed, or the informed individual who is aware of their audience?
- **Does capturing speech samples directly help people who experience *thought disorder* or does it remain theoretical?**

Takeaways

1. *Thought Disorder* seems to be oversimplified in clinics; **We need to focus on nuanced and complex experiences**
2. Cognitive features may involve interference, hyper-associativity, metacognitive disruptions and sensory fluctuations
3. Flustered decision making and existential dilemma may be a natural consequence
4. **I suggest looking into cognitive therapies, music therapy, narrative therapy, and MERIT to help this population**
5. **Clinicians need to comprehend nuanced interpretation of *Thought Disorder* communications without bias**
6. Addendum: **Gather more people's perspectives of *Thought Disorder* and Generate more novel ways of thinking about *Thought Disorder***—e.g. overlap of psychosis prodrome and substance-induced *Thought Disorder*



Thanks for listening!

Please email me at chantalm@uw.edu with any questions!

Addendum

Lived experience of *Thought Disorder*

How *Thought Disorder* is
described by others

Account 1 from Reddit - A more *optimistic* construal?

In response to someone's question "**Whenever I am trying to do anything that requires a certain kind of focus**, like reading a book where each idea builds precisely on top of another, **I hear background faint music, as well as have weird verbal associations...** I may **hear** stuff as nonsensical as **phoneme like non-words involving "guinerajin rabdool"**, in an endless stream."

They received from a Redditor: "**If it's a 'thought disorder', it's one which any musician, composer or poet nurtures and uses as a creative force...**You might just be "musically inclined," or have a natural creative talent which you have not yet explored or cultivated... **Usually when they start softly mumbling repeating nonsense they are chewing on an melody or rhythmic idea in the back of their heads, that can't yet be expressed in words, and you can bet they will soon be showing off some new masterpiece in the studio.**"

Account 2 from Reddit - Thoughts seeming all at once

"...I perceive that my thoughts are mostly convoluted, messy, and fragmented, like a misshapen ball of wire. Because I'm bipolar type it's like **I see thousands of broken sentences and images of things that can potentially happen all at once, the content being alice-in-wonderlandish at times, but before I can latch onto one of those things it's gone before the blink of an eye...**The actual trying to formulate a sentence that makes sense in my brain is like putting a square in a circle-shaped receptacle..."

Account 3 from Reddit - Scattered (non-ADHD?) thoughts

"I've been confused while researching disordered thinking, specifically whether or not some of my own experiences line up with it..**it sometimes feels like my thoughts are like a swarm of butterflies - they keep fluttering around, if I'm lucky sometimes one will land and stay still and I can look at the details...I've been tested for ADHD and was told I don't have it..I've noticed this feeling of my brain being "scrambled" tends to get worse if I spend too long trying to comprehend a lot of words, especially novels or academic literature, and it can last for hours even after I've stopped the activity."**

Account 4 from Reddit - Prefers *Positive Symptoms*

"...I jumble up words and ideas because **my mind is like a rusty machine that jerks constantly...**I am so intelligent and **learn things super quickly**, but what is the use of it if I can't even remember them after a while?...I see people so focused on what they do, actually living, but here I am existing in a void, my mind a chaotic jumble of thoughts and words and ideas, never believing anything, never optimistic, never happy... And then **some people think schizophrenia is all about hallucinations and delusions...**As for hallucinations, I'd honestly take them over this mind of mine..compared to the thought disorders that mar my experiences in life."

Account 5 from Reddit - The reason for *Thought Disorder* varies

“The way I look at it, "disorganized speech" is kind of misinterpreted. It happens to me either when I have a lot to say, and **continually branch off into smaller and smaller paths** (while still having a plan for wrapping it all up in my head), but **people are not patient enough...The other way it happens to me is if I am especially paranoid...**It happens when I feel like I'm taking NOTHING for granted. When **every little detail that is going on needs to be analyzed...**I could **start talking about one aspect**, realize it **isn't** even that **important in the scope of X** that I just started thinking about, and **switch to talking about X instead** for a bit, but still distracted and unsure, and ya. Kind of feels like that.”

Open questions about *Thought Disorder*

Is there more we could do to understand *thought-disordered* communication?

- Just too-honest communication?
 - **Some people with *Thought Disorder* may just have more honest communication. Partial results/intermediary results may be relayed out loud** whereas the neurotypical can't "see" or "hear" the background computations of their final speech
- *Stilted speech* as a social strategy?
 - **Some people with *Thought Disorder* who exhibit stilted speech may be trying to connect the best way they know how.** It may appear like they are exhibiting a form of "cronyism" of pragmatist beliefs*. Understand that **this could just be a social strategy to appear 'smart'**, and that their speech could simply use grounding in real world, testable predictions.

*See [Crony Beliefs | Melting Asphalt](#) for the definition of "cronyism" and "pragmatism" in the context of beliefs. In a nutshell, *crony beliefs* attempt to reap social rewards while *pragmatic* beliefs serve to be accurate

Is there/what is the **overlap** in phenomenon **between** the **psychosis prodrome** and **attenuated substance-induced psychosis**?

- There is a baffling **phenomena of involuntary thought** that tends to be **present in *both* psychosis prodrome *and* as chronic attenuated symptoms that take long to subside after ceasing substance use (particularly cannabis)**
- Here is an example from my diary:
 - “Sometimes thoughts come in trying to marginalize/shame me and remind me of upsetting experiences in the past... just seeing the library rent out a DVD of some person’s biography made me start thinking of all the pain ive felt in the past adjusting to those kind of people in society.. and how they were all more “adult” than me and how maybe i was just a ...brute like all the leading scientists keep implying and weakly i would try to fight back against the dialogue like “what about that i’m a good person?” and the **dialogue and images would win back** more showing me humiliating experiences in the past and reminding me i’m not just a pure truth seeker but a battered horrible non child...”
- **This phenomena has resemblance in the literature to the construct of *Mental automatisms* a concept introduced by the French psychopathologist de Clérambault)**

Do Clérambault's *mental automatisms* index the **confound** between *psychosis prodrome* with *attenuated substance-induced psychosis*?

- *Mental automatisms* refer to **states of mind where one's thought process and motor behavior feel foreign and intrusive**
- *Mental automatisms* index phenomena distinct from delusions and hallucinations, **much more akin to aspects of *Thought Disorder***
- *Mental automatisms* are baffling—they tend to be **present in *both* psychosis prodrome and as chronic residual symptoms that take long to subside after ceasing substance use (particularly cannabis)**

Ricci, V., Maina, G., & Martinotti, G. (2024). Rethinking Mental Automatism: De Clérambault's Theory in the Age of Novel Psychoactive Drugs: Psychotropic Effects and Synthetic Psychosis. *Healthcare (Basel, Switzerland)*, 12(12), 1172. <https://doi.org/10.3390/healthcare12121172>

Why it matters to understand ***mental automatisms***—Differentiate converters to more “severe” persistent psychosis from attenuated substance-induced psychosis

- We don't want to overtreat people as ***First Episode Psychosis*** when they may remain as attenuated substance-induced psychosis
 - “Neither the ICD-10 nor the DSM-5 allow for the coding of “persistent states” of SIP, despite mounting evidence suggesting that in some chronic users, psychotic symptoms can persist well beyond the specified timeframes...the question remains unresolved regarding whether chronic substance use induces a long-lasting, clinically distinct psychotic syndrome, or if it precipitates a primary psychotic disorder such as schizophrenia.”
 - “Synthetic psychosis in new psychoactive substances and high-potency substance users is characterized by hallucinatory symptoms induced by a delusional interpretation. These patients are often misdiagnosed by mainstream psychiatry as having any mental disorder...As these individuals are introduced to ongoing psychiatric treatment, they might end up in a cycle of chronic psychiatric care...The use of neuroleptics can mask their symptoms to resemble those of traditional psychotics, hiding their underlying capabilities or strengths due to the side effects that mimic physical restraint. However, these patients have a more favorable outlook since their core sense of self remains intact, not eroded by the disintegration seen in other conditions.”
- A high level of disability may still remain in people with attenuated substance-induced psychosis. Few treatments are available to help.

Ricci, V., Maina, G., & Martinotti, G. (2024). Rethinking Mental Automatism: De Clérambault's Theory in the Age of Novel Psychoactive Drugs: Psychotropic Effects and Synthetic Psychosis. *Healthcare (Basel, Switzerland)*, 12(12), 1172. <https://doi.org/10.3390/healthcare12121172>