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My Year Treating My Self-Diagnosed OCD with a Chatbot that Never Was

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Pilot

Last year, I diagnosed myself with Obsessive-Compulsive Disorder, a.k.a OCD. The pandemic had brought the world to a standstill, and here, I was spiraling out of control. Smashing my head felt better than listening to what was brewing inside it. It wasn't even the first time I had felt the chaos inside me. When I figured out that reading books or becoming a freelancer toa afford therapy might be too much of a hassle, resorting to social media felt like THE most accessible solution (Instagram being my platform of choice).

Why didn't I get medically diagnosed, you ask? Half the time I believed I didn't need it and the other half, I got stuck on how expensive it was. It had only been a year when I began to admit to myself that I needed help, but I couldn't afford it on my postgraduate scholarship. So I thought to myself: *"What's the point?"*

I could neither afford therapy nor ask my parents for the money for therapy. That may be because of my ego (it is not wrong, to some extent) or for the simple reason that if I asked for money, I would also have to explain my problems to them. Realizing that I have mental health issues is one thing, but describing them to my parents is another. There were two ways this could go: one would come down to "ye sab ameero ke chochle hai" which translates to "Only rich kids fret about all this." One of the most common comments used to be "Mental health is a disease of the privileged," implying that thinking about mental health is a luxury. Surely, that big a statement and belief has its own cultural lineage and significance rooted in its own forms of bias. However, the belief seems to be grounded in the argument that people who suffer every day won't even have the time to think about all this. Hence the question: "Why are you thinking about this? Don't you have work to do?"

Turning mental health into a "first-world problem" is a trope I've seen and experienced many times. On some odd days (frequently, almost always), there are comparisons between my life and everyone else's to show how small or "made-up" my problems are. "It's all in your head. Once you start working, you wouldn't think about it." Then, we would move into discussions of getting a job because everyone my age is getting one, or thinking about marriage because everyone my age is doing it. From time to time, in our families, the *shadi* vs *padhai* debate (marriage vs [higher] education) is a group activity. The fight for freedom on the inside and outside would have me juggle two sides—to stand my ground and struggle to find a ground. There was no concrete point in discussing mental health with family as long as I'm not going

to therapy. So to understand myself better and to try to heal, I did what everyone does with limited options: scour the internet!

So, I scoured both online and offline initiatives for mental health, hoping something might just work. Spiraling in n-dimensions with a rave party of thoughts inside my head is when I accidentally found myself on an OCD recovery page. At this point, I do not even remember if I found the page, or through my Insta, it found me.

Predictably, I checked all the boxes. I relentlessly read all the posts, even comments, and yelled "Exactly!" Though I'd been called out as obsessive on many occasions by my friends for my cleaning routines, this is the only time that I actually believed it and went much deeper into what it really meant. To be fair, my obsession with symmetry is not the only thing that led me to believe that something might be going on.

During my master's program, I had ample time to self-reflect and overthink who I am. Of course, "overthink" was not the word I used. To console the budding researcher in me, I chose the word "analysis" instead. In some situations, I figured out my answers, and in some, I entangled myself with more questions. Some of them gave me tension headaches, ruining my sleep for days, and some led to me writing subpar poems! But my friends loved them, these poems. They'd motivate me, praise me, shower me with love and questions! To be honest, this would lift me up but more often than not, my inner critic would never be silent. Even at times when I felt as though I wrote well, there was always a voice in me that kept making me feel like a total fraud. But I like to think that this kept me grounded, in its own twisted way. I mean, who doesn't like to make the best out of waste! Of course, it wasn't all a waste but it is comforting to think that all my *good* work has come out of tangled loops— loops that I both wanted to live with and run from.

I was determined to make my own blog, but I could not get started. No matter what ideas I came up with, I could never finish them, 'cause they never felt good enough, and most definitely, I would always (always!) find somebody way better at it. The *analysis* of such inaction and unproductivity would leave me feeling incompetent, with a dash of excruciating guilt. The guilt, in turn, would spiral me back to incompetence. I felt guilty about everything I could do but didn't. I felt guilty about every little thought I had, especially the made-up scenarios—things I had *not* even done! The next logical and almost involuntary step to counteract obsessing over these thoughts was for my brain to find how they originated in the first place. This was clubbed with a highly rational critique of the stupidity of the loop I had gotten myself into: I *defined* myself with and through this obsessive mix of incompetence and guilt. I was second-guessing myself on even the smallest of decisions. I'd keep going back to Murphy's Law: "If anything can go wrong, it will." That's being prepared, I'd think (Good analysis! :P).
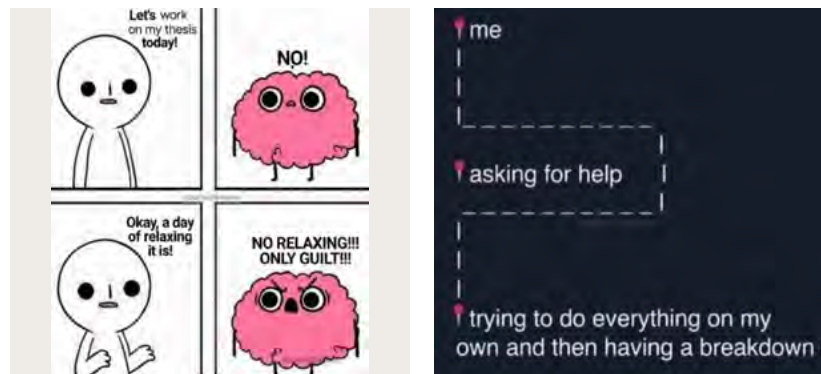
My other resort was (surprise, surprise) social media. It wasn't until I threw myself into hours of scrolling and binging that I realised: everyone was talking about the same thing I was going through. AT LENGTH! In humour and in seriousness! I kept going back to Instagram to scroll through self-deprecating memes or binged shows like *Bojack Horseman* until they breathed life into me. Netflix was kind enough to suggest more shows with its infamous prompt: *"More like this."* Instagram was smart enough to help me find more accounts, leading me into a black hole of wholesome memes. The more I scrolled, the more I shared. I even began to think in terms of memes. This was my new language to think about mental hesalth: part mess, part meme. The more I shared, the more people I found who had gone through the same; and the more I hated myself. *Scroll, Like, Share. Repeat.*

This cycle of realising what I was doing wrong but doing it anyway always turned out well. By "well," I mean that there were always ups and downs to my #doomscrolling escapades. I looked past my dissonance in both those stages since the casualties were only my lil ol' personalities.

So I scrolled. I embodied the More like this prompt. Going through this unlimited material of glorified pain, I would delude myself into feeling nothing. Obsessing over deadlines, overthinking and stagnancy would just pass by, as long as I kept scrolling through. In the midst of all this endless scrolling, I diagnosed myself with OCD and Imposter Syndrome. I would start typing extensive texts to bloggers and *certified* coaches of "safe" spaces to reach out for help but end up deleting them. It was a big relief to think *"Hey, it's not just me!"* but my myriad fears—fear of being judged, of bothering people, of opening up—were on exhibition.

Living in an addictive digital landscape of social media was a solace. I chose to keep myself in that space even when I knew how recommendations could trap me. The predictions were for my convenience, right? So, who was to blame, my compulsiveness or the recommendations? Simultaneously, I would question the reasons for the popularity of some memes, the impact of the predictive systems, etc. Whatever the content may be, unpacking this emerging relationship between me and what I consumed—how the algorithmic recommendation system recommends me

just the right memes or content creators (known infamously as influencers nowadays)—seemed like an oddly satisfying activity. It made me feel like I understood the digital world a little better than the real world. In the language of *tap, likes, & shares* on some reflective meme, I'd converse with the humorous memer. This relationship that people share with influencers is transformed when memes acquire their vibe or identity or discourse. What earlier would've been a connection between people with the same idiosyncrasies was now a custom-designed computationally fastened treadmill in the digital world to consume *meme-ified* experiences.

Me and my unhealthy expectations of productivity: *You should not relax!*

So with this going on in my head in the middle of a pandemic while simultaneously trying to finish an already delayed master's thesis, the easiest solution that came to me was to build my own chatbot. As an (aspiring) data scientist, it gave me hope. The idea of making sense of words using a computer was exciting to me. It piqued my interest in Natural Language Processing (NLP). After watching movies like *Her*, about a non-human companion which could just "talk" like a human, it was exciting to think about companionship and language.

Back in 2018, too, I pitched creating a therapy bot for depression as my master's major project, but it didn't work out. (Oh, regrets, regrets!) As a rather then-beginner on the learning curve of NLP applications/programming, I eventually decided to shift to another topic (Question Answering) that I could collaborate on with my labmates.

But this time in the pandemic, when I thought about the chatbot again, my motivation to pursue the idea was different—it was only for *myself*. It was not time-constrained graded work, and with no academic stakes involved, there was no pressure! I figured it would help me learn more about myself, about OCD, about conversational agents, and also be a great distraction! It seemed exciting—having a bot analyse my thoughts as I was having them and finding patterns. In a way, it would do what I was already doing (by overthinking or writing)—but with mathematical tools to map or uncover some "insights" (as we usually talk about data pattern recognition tasks). *Using it would be like having a journal that talks back to you*. With the code, I could know more—*data-wise* and see *the bigger-picture-wise*—without wearing myself down with frustration. This irony is not lost on me: whether it is *through a journal or through code, it's me who would be talking.*

You get a therapist   You get a therapist   Everybody gets a therapist

I started with the question "How can I make a reflective bot?" Starting from ELIZA, I reached Stanford's Woebot (an AI-powered mental health chatbot) in no time. In a study that noted the limitations of bots, I came across a comment that says such bots are not good "listeners" and give too many "bot-like responses." This critique was common. The more I read, I found that having real-time conversations with chatbots is becoming easier with NLP. "Transformer" models were improving Natural Language Generation, so I explored the options for creating a transformer-based chatbot. The intuition behind the transformer is as "simple" as your mind trying to do the work by itself. *Fun, right?* To explain it further—the bot would go through data points multiple times, in multiple ways—encoding something, then decoding it, then connecting these. Just like we process a scenario or topic by reliving it enough times in order to understand it, transformers do the same. This was the bot I wanted.

On experimenting with transformer-based language models by feeding complex sentences as input to generate new responses, I felt some level of security. The amount of fun I was having while doing this kind of work made me question whether not being able to afford therapy was the only reason I wanted to build it. Even the thought of having such a personal digital solution felt better.

So, I downloaded apps like "Wysa" and "Inner Hour" designed to help people struggling with mental health to see if they helped and how. I had to spend 10 minutes a day on each app monitoring my "growth." I explored a bit and ended up playing with them, acquiring weird responses as a result of my leisure research. While trying to play with apps to see how my words were processed, I forgot to process my feelings. Sure, they offered meditating exercises or links to professionals, but I wasn't really conversing with the bots. I needed to have a conversation as close as possible to a real one with a bot. At this point, I understood what people had said about having *"a bot-like feeling."* I felt bored, rather.

My initial reason to build a chatbot was to be able to talk to someone "trustworthy" without inhibitions. A chatbot that would understand my patterns, one to which I could tell my mood and goal of the conversation, so it could engage with me accordingly. No judgment for any or all my "rants"? Oh yes, I'd take that deal. I knew that it wasn't an ultimate solution to my problems, but it was nevertheless charming to think of creation like this. If you're wondering whether this put me back in the driver's seat to overthink-town: yes, I did realise that. No, it didn't stop me. I loved these questions because I hadn't encountered them elsewhere. The way it led me to visualise how a pattern would be processed by a bot—the flow of it all was refreshing.

I had fun and got more invested in daydreaming about what the bot would say. More fun than I had thinking or learning how to code to achieve my imagined responses. Wondering not just what capabilities the bot would have, but transgressing into the *hows* and the *whys* of it was invigorating.

During my little adventure, I thought about the levels and nature of the usage of the bot. For my emotional well-being, will I actually share everything with it in complete honesty? Or will I end up playing with it as a programmer to make it better, regardless of my emotional state? And when my chatbot fails to acknowledge my need to be heard or misses out on understanding context, what part of me is to blame—the one looking for a solution in a conversational agent or the one that did not program the contextual learning? In any case, eventually, the question left for me to ask was what will I do when all these questions run out of steam, who do I blame?

Dreaming about this project gave me a little stability. It felt good. Of course, the potential of such a project was another thing to look forward to: *"If I could plan this out, this could be a wonderful PhD project. With ample time to pursue such an idea, I would be doing something I actually like."* In such a passion project, I thought that if I could dive into this untapped reservoir—then tangibly speaking, it wouldn't be an *"all for nothing"* scenario. Committing to a PhD for just the right project had been weighing on me for years then, and a project such as this made it all seem worth it. Months later, I found myself pitching this project of mine in all of my doctoral program interviews. I kept problematising/raising the question: *"How do I customise this bot for myself?"* (Oops. Sorry! For users, not just myself!) There were other queries also, like: How can such a bot be accustomed to dealing with Indian audiences? What would be my dataset? Without humans in the loop, how can the chatbot not be biased? It didn't play out well in the interviews. There were a lot of missing pieces and more questions than answers.

In conversations with colleagues, their first concern was: "What will this be—a regression or a classification task?" "This" being: What aspects would I be operationalising into the model (and how), so that it would positively influence a user's behaviour? To be fair, it is a valid question, but it always left me perplexed. It made me introspect the reasons why I wasn't asking some computationally relevant questions, but I was stuck on a larger conversation that arose out of my **subjective** takes. I received responses like: *"It is all statistical!", "Just bayesian!", "Just patterns!", "This doesn't need your overthinking. Just follow the data.", "It's the data. Data is a reflection of society."* They didn't quite understand how chatbots have the potential to evoke an emotional roller-coaster.

My debates over this were endless and repetitive. Along that timeline, I started reading about the ethics of NLP, too. Then, for the hundredth time, I would tell them to google "Biases in Chatbots." I would quote the tweets by *Tay* and direct them toward the controversies around OpenGPT-2—just to get them to be open to the idea of giving weight to subjective experiences in coding—to get them to go beyond numbers.

"Let me interrupt your expertise with my confidence."

When questioning my friends' line of thought, I got stuck with the question: Is this really all it takes to program a social bot? Or any socio-technical solution, for that matter? I wondered, why does awareness take a backseat with coders? What is social awareness for them? Am I scared of quantifying factors because of my social awareness? Is it only me who isn't able to operationalise the right objective factors? Am I evolving when I ask these questions? Or am I just not "techie" enough to codify mental health into questions of pattern recognition in data? Do people not care much or am I caring too much? Were these questions only a part of my process? We all had almost the same academic training, so why are my questions different? What even is this academic training that makes us want to reduce pain into a minimal set of data attributes? How is an algorithm supposed to take care of my needs ... by learning the pattern of my escapades? Can emotions really be reduced to an equation? And why am I complaining about such equations when I'm looking to do the same myself? What is the personal worth of such academic knowledge that, if it does not mould me, then facilitates a flawed way of taking care of myself?

All that was left for me to do was to complete my master's degree and get a PhD admission, or a job, soon—neither of which I was mentally prepared for. When both work and life at home would be overwhelming, I'd question my intention of working at all. Rather than actually working on a decent proposal, I would spend hours questioning why I couldn't understand the technicalities—I'd either doubt the project being a distraction, or my own academic intellect, or question what I was doing. Believing I was *"not smart enough for AI coding,"* I'd curse myself for my behavior being completely lost in the field. I thought that learning to make a chatbot could be my *#Dalgona* of the pandemic, but I clearly underestimated my ability to overthink and change every thought to a full-blown project. In my own time, I did not build the bot; I did not follow through. In iteratively rationalizing my own sense of self, I was left with the inevitable question: Could it have gone any other way with all of my digital explorations? The reality in which I lived and studied couldn't possibly be replicated through an app or a chatbot, and would I even want it to? No thanks!

Aftermath: Self and the reflections of the Past, Present, and Future

Cut to a year later. Here I am, wondering how the digital solace I shared with my screen and my social media space had made me introspect. I recall my angst when I found super-relatable "content" on bad days, which I Just. Could. Not. Absorb! Some days, I would curse, *"How can this be recommended again? I watched ONE video like this!"* A post saying something along the lines of, *"It's okay to reach for help!"* would come. But then, a meme addressing all my concerns, fears, and insecurities would appear. One social-media-certified coach or guru would quote stoicism. Another one would ask for paid therapy online. One *memer* would make a post of ten memes streaked with dark humour. Immersing myself in it, I would feel seen—to suddenly find my *defensive self* relieved to find an opportunity to detach from the world—thereby defining a smokescreen of fun, humor, sarcasm, and wit as a purgatory of relatable content. Even when the content would instigate a feeling of guilt or shame or embarrassment, the cycle of procrastination would keep going—sometimes, maybe even faster because nothing fuels doomscrolling more than uncomfortable feelings.

The coping mechanisms kept me sane! After all, it helped me live through a pandemic in a pseudo-modern, pseudo-liberal, pseudo-conservative but (relatively privileged and) supportive place. The absurdity of my instinct to build a tool and *choose* the addictiveness is something that I wasn't brave enough to admit until recently. Seeing people make meaning off their trauma and thoughts over the years has made me feel at peace with the idea of using my stories as "data." The more people I saw doing it—the more I dissected my own thoughts and feelings and experiences through social media. It became a matter of unconsciously consuming and consciously producing. It made me feel like I'm not alone and there is something that can be done about what I was going through—personally and professionally. Not that I didn't realise I was walking a slippery slope—from "sharing content" to "creating content" and "feelings" being commodified to create content in its own way, made me revisit my concerns around the tangible worth of my thoughts.

On that note, the concern to see *why* people rely on digital solutions became important. In a space where even awareness is laboriously achieved—at least the effort to get help could be made easier. To unpack the responsibility of a chatbot, I had to understand more about the social process than the digitalization of the same. Definitely, easy access to decent professional help and resources could help. If the

problem is social, psychological, or philosophical—then, the solution couldn't just be mathematical.

It's not that easy; it shouldn't be. When and how do we decide what a solution looks like and what to code? I am aware that self-diagnosing is not the right thing to do. I read, resonated and internalised to culminate the nature and reasons of my state—only to question the legitimacy of what I have imbibed from everything I consumed. Anything that could've led to such a result or "diagnosis" felt worth zooming into. So, did I reach that end because of how I process things and who I am? Or did I finally pay attention to years of consumption of media resources? Were all these feelings actually mine? Or did I (unknowingly yet again) internalise them through my everyday experiences? This curtain that I have peeked through, one that separates the real world and the digital—seems to keep peeking back at me?

My questions were necessary for me as a programmer, even if I judged their effect as a user. The reflexivity that induced all the confusion, pain, and anger eventually led to clarity and serenity. It helped me unwrap many aspects that are part of my identity—learn more about which aspects I interact with in the institutional structures in my social and professional life. *What makes me, me.* The introspection was out of desperation to understand who is at fault other than myself. It is not that I don't realise how mundane or trivial such issues can be for some people, or how unusual and consequential for others. It is just that it has led to a level of acceptance of the exploration I had set in motion.

As I was iteratively trying to rationalize my sense of self, there was the inevitable question: the reality in which I lived and studied couldn't possibly be replicated through an app, and even for "help," would I even want it to? *(No thanks! I'll keep such destructive thoughts and actions to myself! :D)* As the programmed and the programmer, going beyond the consuming experiences produced a line of questioning for me that explored the intersections of subjective social experiences and design thinking. How I design an experience for users to feel better and how I expect the replicability of their patterns being picked up and fed to them—needed a step-by-step interrogation and indulgence into my own social experiences. What makes an experience better, for whom and why? What needs to be replicated and why? How do I consume content when I know the technology behind it? How do I do so when I don't? What makes me explore, what makes it stagnant?
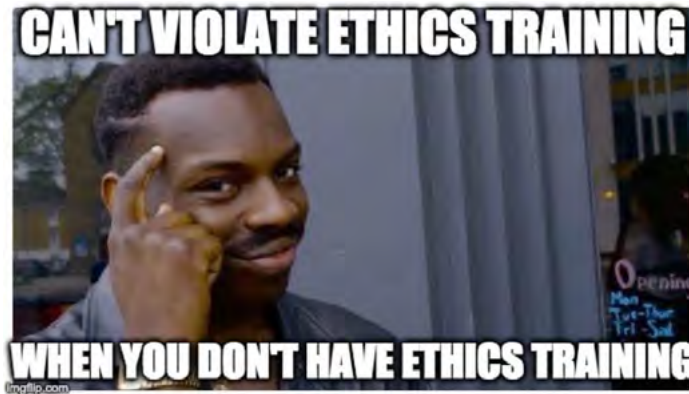
We always hear that we should ask the right questions but we don't have the slightest idea what "right" means, and to whom do we ask these questions? Not coding the bot on my own but imagining it to be designed in a better way has changed me to be mindful of my usage and technical practice. From *"someone is coding out there"* to asking *"who and how are they coding"* is my journey in this tech-solutionized, social-networked world. Placing myself into societal structures deliberately has negated my anger into patience. Patience with the places I belong to, and myself too. But it is a long journey that I may always need to be on. The onus of blaming and questioning myself, unpacking its causes, my own faults and shortcomings or societal conditioning or academic training or social constraints, had been draining me. To dissociate myself from unknowingly becoming the mediator of such infrastructures, the questioning had to be there to do justice to myself and my experience: experience of not wanting to work, to not being able to work; from complaining about uncertainty to deconstructing the known; from yearning for a meaning to deriving it myself. From running away from ourselves and people to avoid emotions and then resorting to bots to address the same emotions that we've grown wary of we keep circling around, chasing the same feeling. We let this feeling be mediated by algorithms which push us to introspection through either social media (whether by influencers or their memes and content) or chatbots. Maybe, we feel safer in our filter bubble of content—until it gets tedious and overwhelming. When we desperately seek reliable sources of respite for humane interaction free of algorithmic or social biases—only then we acknowledge and attempt to understand human subjectivity.

I am writing this story down not to feel good about myself or to make up for my shortcomings (which I accept, I sincerely do!) and definitely not to glorify the trajectories I got lost on—but to share my journey of coming to terms with them. It

has turned out to be an exercise of realizing why I felt the way I did. My personal and emotional involvement with work and social media pushed me to make sense of myself and my positionality.

Even though the digital worlds kept me occupied, the inhibitions couldn't leave my mind. The solidarity that I, indirectly, received and felt was valid in its own way. However, it also felt incomplete. I am still not sure if it was me: cowardly pulling back from reaching out for help; sanely deciding for the long term; just questioning the truthfulness of digital identities; or just being scared of sharing my identity and being vulnerable. Where would I have been, had I not observed strangers converse under the veil of bombastic online solidarity?

"I do think it would speed things up if you followed my social media."

Aware or not, conscious or not, I feel that by 2030, everybody will become famous as content creators—"content" being our digital identities, memes, or even algorithms. Any social process we would want to escape will be mindlessly digitalised, which will safeguard us from pain, into an elusive bubble. With no "natural" intelligence, the selves will be confused about the reason for the origin of thoughts. The illusion of productivity and consistent creativity that has trapped us in a *limbo* between the

algorithmically induced vs. mentally produced creativity will finally be apparent and comprehensible by all. With acceptable monetization, we will sell these *fractured identities* for solidarity.

And maybe, with that money, we will finally get off our beds, switch off our phones—and go to our actual therapists—who are accessible without institutional hoops and social hurdles. Or perhaps, therapy bots will not have become tired of seeing our *patterns*—the one thing they are designed for—and will suggest something to counter such self-destructiveness and rescue us out of our spirals … Who knows? As a prosumer looking for easy mental health solutions, such conundrums still have me daydreaming.

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write our stories. His constant feedback on my story inspired me in moments similar to the story.

Special thanks to these wonderfully perceptive women in my life: Lavanya, Vandita, Urvashi, Radhika, and Aanya. Their willingness and confidence to explore the story with me helped me formulate a great deal. Lavanya and Aanya, thank you for making me believe I could and should talk about this … and Vandita and Radhika for being my confidantes and editors.