

## Diversity Within the Psychotic Continuum

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**There has been great interest in the hallucination-like events experienced by the general nonclinical population. Many psychiatric scientists have come to identify these as part of a “psychotic continuum” and have begun to ask what we might learn from these experiences that will enable us to better understand and treat psychosis. While sympathetic to this goal, this paper argues that many of these events in the nonclinical population may be associated with the attention to inner imagery characteristic of much religious practice like unscripted prayer. Many of these hallucination-like events are phenomenologically distinct, culturally salient, and are predicted both by a measure of absorption, which probes for an interest in inner imagery, and by inner sense cultivation practice. These observations suggest that rare, brief, and positive sensory events may not be associated with psychotic vulnerability. They also suggest there may be an absorption-dissociation pathway, with or without trauma, for more frequent hallucinations.**

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There has recently been much interest in a “psychotic continuum.”<sup>1</sup> Researchers have observed that many people in the general population report hallucination-like events, although the rates vary widely.<sup>2–5</sup> McGrath and colleagues have argued that we need more research on these events because their epidemiology appears “more nuanced than previously thought.”<sup>6</sup> Yet many researchers have treated these hallucination-like events as part of the phenomena of psychosis—an “extended psychosis phenotype”<sup>7,8</sup>—differentially distributed throughout the population. This impulse seems to be fueled by an understandable hope that we will learn from those who have apparently psychotic experiences, but not a psychotic disorder, how the disorder might be mitigated. As Peters et al suggest: “future research should focus on protective factors and determinants of well being in the context of

PEs [psychotic experiences] rather than exclusively on risk factors and biomarkers of disease states.”<sup>9</sup>

I share that hope. Yet the term “psychotic continuum” can imply that there is a particular thing—“psychosis”—variably distributed among the population. I want to suggest that there may be distinct phenomena and that a deeper awareness of these differences will improve research and clinical understanding.

I am an anthropologist with over 3 decades of active participant observation of persons with psychotic disorder (on the streets of Chicago<sup>10</sup>; with hospital patients and outpatients in the California Bay Area, Accra, Ghana, and Chennai, India<sup>11</sup>; and while shadowing psychiatric residents<sup>12</sup>) and persons without psychotic disorders who seek direct and immediate supernatural experience (new-age magicians, witches, druids, and initiates of the Western Mysteries in London<sup>13</sup>; charismatic evangelical Christians in Chicago and California,<sup>14</sup> Accra, Ghana, and Chennai, India [Luhrmann TM, unpublished data]; and along the way, Black Catholics, newly orthodox Jews, Anglo-Cuban Santeria devotees, tulpamancers, and, briefly, a southern California group following a US-born guru who called herself Kalindi).

In recent years, I have conducted dozens of interviews on the phenomenology of voice-hearing with Americans diagnosed with schizophrenia or schizoaffective disorder and dozens on the phenomenology of spiritual experience with American charismatic evangelical Christians.<sup>15</sup> I have also created a sample of 128 interviews with charismatic Christians, conducted by a different interviewer. None of the Christians had been diagnosed with psychotic disorder; the 128 subjects were interviewed with the Psychosis SCID and none met criteria for psychotic disorder. In both Christian samples, roughly a third reported having heard God speak audibly at least once, judged by their responses to follow-up face-to-face probes such as “was the voice outside your head?”; “did you hear it with your ears”; “did you turn your head to see who had spoken?”

For the most part, I have seen 2 broad patterns in the way people have reported the sensory dimensions of hearing an invisible other. The voices experienced by those who meet criteria for schizophreniform disorder are usually frequent (occurring many times each day and sometimes continuously), extended (people hear sentences, paragraphs, conversations), and distressing, even though many people hear at least some positive voices. When charismatic evangelical Christians, witches, druids, and others like them report that a supernatural voice has an auditory quality, the events they report are typically rare (one specific event, maybe at most a handful), brief (typically 4–6 words, unless what they hear is on the cusp of sleep), and startling, but not distressing. My subjects have reported that God has said audibly: “I love you”, “Sit and listen”, “Yes”, “Start a school”, “I am not distant”, and “Get off the bus.”

To be sure, there are similarities between the voices reported by clinical and nonclinical populations. Just as the voices of psychosis are often both thought-like and voice-like,<sup>16</sup> the voices reported by those who hear God speak audibly are often between the fully auditory and the thought-like. For both groups, the voice is an agent; there is a sense of being spoken to.<sup>17</sup> Yet the differences are striking.

First, the audible voices reported by religious practitioners are phenomenologically distinct. Those with psychosis often report a sense of physical oppression, as if the voice itself were a tangible thing, pushing on the body. “I’ll be watching TV or I’ll be doing my artwork and I’ll hear stuff. It’s almost as if they are using the physical properties of heat, light, and sound, and they bounce something off here, like a signal.” By contrast, the audible voices that Christians report are less physical. “I was at the grocery store and, it wasn’t like *this* audible, but I felt my—God did a hiccup or something.” The voices of psychosis often feel alien, unwanted, and almost assaultive: “a hostile take over of my mind.” The Christians experience God’s voice as other, but neither as alien nor as imposed or controlling. “It was certainly not unwelcome—it’s not a sense of taking over.” The sense of realness of the voice seems quite different, as others have reported.<sup>18,19</sup> The commands feel less commanding and the otherness feels more intimate.

Meanwhile, those with psychosis often reported an array of auditory and quasi-auditory experiences that could not be understood, such as whispering or murmuring, and they often reported multiple voices, often commenting or conversing with each other. Only one person without psychosis has ever described multiple voices to me, and only a few persons without psychosis have ever reported whispering or murmuring. (Woods and colleagues found different results in an online survey in which diagnosis was self-reported.<sup>20</sup>)

Second, these religious practitioners are in a social setting that invites them to experience invisible others interactively. These are not unusual social settings: some

version of charismatic Christianity is practiced by nearly a quarter of all those in the United States.<sup>21</sup> In many charismatic evangelical churches, congregants are invited to understand that God will speak to them in their minds; they are taught to discern which thoughts are generated by God and which are their own. In my work, it was evident that the ability to identify God’s voice among one’s own thoughts was a practice at which people improved over time. “When I was starting to be a Christian,” one man explained, “people would be like, so what’s God saying to you? I’m like, heck, *I don’t know.*” Within the year: “It gets to a point when you know it’s God’s voice. It’s very snappy, and comes with constant prayer.” People told me that they came to recognize God’s voice in their minds the way they recognized their mother’s voice on the phone. What they might once have treated as their own thought they came to experience as the thought of another, placed into their minds by that other.

Yet congregants are not expected to hear God speak audibly. As the author of one manual, *Dialogue with God*, remarks, “God’s voice normally sounds like a flow of spontaneous thoughts, rather than an audible voice.” And indeed, many congregants described God’s auditory voice as unexpected. “Hm, okay, that sounded odd.” or “I’ve had other times when there’ve been words. I’ve been startled, beyond started. And one time I looked around because I thought there’s got to be someone else there.” Nevertheless—to repeat—about one third of the charismatic Christians interviewed reported some kind of auditory experience of God, usually once, twice, or a handful of times.

Third, inner sense cultivation or mental imagery cultivation—a central part of many spiritual practices—is predictive of unusual sensory experience. Many prayer practices and other spiritual practices (shamanism, Sufism, Jewish mysticism, and others) ask the practitioner to represent the supernatural with the mind’s eye. Most unscripted Christian prayer utilizes the inner senses. Contemporary evangelical prayer manuals, for instance, are full of exhortations to use the mind’s eyes and ears. In my ethnographic work both with London magicians and American charismatic Christians, people were clear that to experience the supernatural directly, one needed to cultivate the inner senses; that doing so required practice; that some people were better at this than others; and that those who were good at inner sense cultivation and who practiced were more likely to have vivid experiences of the supernatural. They also sometimes commented that their mental imagery became sharper. And indeed, an experimental trial that randomized charismatic Christians to daily inner sense cultivation and lectures on the gospels for 30 minutes each day for 4 weeks found that those in the prayer condition were more likely to report both sharper mental imagery and more unusual sensory experiences.<sup>22</sup>

Fourth, there is a robust measure of proclivity, or “talent,” for hearing God’s voice. The Tellegen Absorption

Scale has 34 statements which subjects mark as “true” or “false,” meaning true or false for the person filling out the scale.<sup>23</sup> These items ask whether you can “see” the image of something when you are no longer looking at it, whether you sometimes experience things as you did as a child, whether you sometimes find that you have finished a task when your thoughts are elsewhere, and whether different smells call up different colors. In a series of studies, high scores on the absorption scale predict subjects’ reports of unusual sensory experience.<sup>24</sup> In my own work, absorption predicts whether charismatic Christians experience God with their senses, whether God is person-like for them, whether they have a back-and-forth relationship with God, and it predicts whether people have unusual sensory experiences and a wide range of spiritual experiences.<sup>25</sup>

These observations suggest that some unusual sensory experience (rare, brief, and positive) may have little to do with psychotic vulnerability. Instead, attention to mental imagery—as a result of practice or inclination—may be a pathway for at least some of these phenomena.<sup>26,27</sup> Experimental and ethnographic research finds that there is a learning dimension to the emergence of unusual sensory experience. This observation does not rule out the possibility that those who report such experiences may be prone to psychosis. However, if common prayer practices make such reports more common, not all unusual sensory experiences should be presumed to be like psychosis but in lesser degree.

Moreover, there is a theoretical model that explains how such phenomena might emerge out of ordinary cognitive process. Imagery and perception depend on many of the same neural structures.<sup>28,29</sup> Increased attention to mental imagery should thus have some effects on a range of image-related cognitive processes: on perceptual processing, on the use of imagery, on unusual sensory experience, and on the vividness of imagery itself—as indeed, our research found. The individual trait of absorption may be capturing a similar attention to mental imagery, as many items seem to involve an interest in inner imagery. Absorption is robustly and significantly correlated with the subjective experience of mental imagery vividness.<sup>14</sup>

These observations do however raise the question of whether there is an absorption-dissociation pathway for frequent voice-hearers within the psychotic continuum. There is a complex and poorly understood relationship between mental imagery vividness, absorption, hypnosis, and dissociation. The absorption scale was developed as a pen-and-paper measure of hypnotizability, and while it correlates only modestly (if significantly) with the Stanford Hypnotic Susceptibility Scale, absorption is clearly related to hypnosis. Hypnosis practice increases imagery vividness, and intense spiritual practices can often be described as dissociation-inducing. There is already an active debate in which scholars have argued that most or all voice-hearing experiences

are fundamentally related to dissociation due to past trauma.<sup>30,31</sup> It may be that the pattern and pathway of voice-hearing for those with psychosis differs for those who dissociate and those who do not—regardless of a history of trauma.

This is where people who seem not to fit either of the broad patterns may be particularly illuminating. There are those who seem to have frequent sensory voice-hearing experiences, yet appear to meet no other criteria for psychosis. I have spoken with a handful of religious practitioners who appeared to have audible or quasi-audible experiences of invisible others several times a week. Most but not all score highly in absorption. These practitioners sometimes report that they heard murmuring at times; 2 said that they had first heard voices in childhood and described no childhood trauma.<sup>32</sup>

I suggest that the careful, rich phenomenological description (such as an anthropologist can provide) of these and other frequent voice-hearers, with and without a trauma history, could be useful in specifying the role of absorption-dissociation and other factors in voice-hearing by identifying different patterns of experience. Such interviews would not only ask for relevant history and administer relevant scales but also explore experiential details like number of words heard, sense of command, physicality, relationship with the voice, positive or negative valence, etc. Semistructured interviews can reveal patterns that may be obscured by yes/no surveys.<sup>33</sup> Stanghellini and colleagues, for example, found that healthy subjects could respond to surveys in similar ways to clinical subjects, but when asked to elaborate on their answers, the quality of their experiences was quite different.<sup>34</sup> It is also true that surveys used to evaluate psychotic-like symptoms sometimes contain items that are theologically normative for some groups of people. For example: “Do you ever find that you are especially close to God?”<sup>35</sup> and “I have wondered whether the spirits of the dead can influence the living.”<sup>36</sup> Researchers who use these surveys should consider analyzing their data with and without these theologically normative items.

Careful face-to-face interviewing is also important because many spiritual practitioners who cultivate relationships with the supernatural will use the sensory language of “see” and “hear” to describe supernatural events, yet they are often describing trance-like waking dream experiences rather than actual sensory experiences. This is particularly true of those whose reputations rest on their visionary abilities, like prophets, psychics, channelers, and the like. It certainly may be the case that such practitioners are more likely to experience actually sensory events than other people, but it is important not to take their self-reporting seriously without understanding their particular culture and without in-person interviewing which includes follow-up probes: was that outside your head, did you hear it with your ears, did you turn your head?

Untangling these different features will be complicated; it is likely true that different pathways can be “comorbid.” It is increasingly clear that “psychosis” is a complex collection of phenomena—a “cluster of clusters”—despite the unitary quality that a term like “psychotic continuum” implies. We need an interdisciplinary approach<sup>37</sup> that includes observational and phenomenological data alongside epidemiological surveys and neuroscientific techniques in order to sort out the many components and continua<sup>38</sup> of this most remarkable human experience.

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