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Breathing Life Flows Through Chaos: Reconfiguring the Effectiveness of Five-Finger Breathing in Mental Health First Aid

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ABSTRACT

This article questions the moral and causal certainties attributed to the clinical assumptions of the breath of chaos. Instead of seeing chaos as an exceptional intruder that causes problems in health, I suggest that chaos underlines the changing conditions of health and it's an intrinsic part of breathing and everyday life. I discuss the five-finger breathing as a therapeutic technique to cope with the shortness of breath in panic attacks. I propose that the practice makes chaos an ineluctable prompt that evokes therapeutic anchoring, which helps with the navigation of life. Moving away from the clinical assessments, I adopt the approach of participant experience to present a medical anthropological analysis of the effectiveness of five-finger breathing as practised in a mental health recovery group in Southeast England.

In Paradise Lost, John Milton depicts Chaos as the realm beyond the gates of Hell. Chaos is a place, 'a dark illimitable ocean without bound' (Milton 1667, 47). Chaos is also a character, the ruler of the realm who revealed to Satan the connection between Heaven and Earth (ibid. 50). It has no shape or dimension but holds the raw matter out of which God creates lives and the universe (Sarkar 2012, 46).[1]

Literary scholars differentiate the Chaos in Milton's theological doctrine and in his epic poem. While the former is often considered as empathetically and unambiguously 'good', the latter receives diverse interpretations. Some conceive the Chaos in the poem as neutral, while others read it as hostile and evil. The contraries embed in Milton's own words, that Chaos by virtue is limitless and lacks definition (Schwartz 1985, 341). It is the womb and potentially the grave of Nature (Milton 1667, 48).

There are many similarities between Milton's Chaos, the living condition of breathing, and consciousness. All, naturally, are unbounded life flows, or in Tim Ingold's words, 'the generative dynamic of flux' (Ingold 2020, 160). They are continuous and fluid, always in the making and lacking a certain beginning or ending. As William James characterises, our breathing, heartbeats, and pulses of attention are the 'twilight of our general consciousness' (James 1890, 620). Thought goes on alongside the heartbeats, pulses, and breath, like a stream that flows with the forest breeze among the sound of leaves.

In the context of biomedicine, however, the chaos of breath is usually regarded as an unfortunate consequence of illness. Biomedical models regard breath as both a cause and a consequence of panic attacks. Obstruction to breathing, often accompanied by disruption of thinking, may mark the outbreak of cardiovascular and respiratory diseases, some types of cancer, or mental disorders in clinical settings. The clinical models regard chaos as a disturbance to one's physical body and social life. As a result, these models confirm the effectiveness of therapeutic interventions when the chaotic circumstances are terminated,

prevented, or maintained. Unlike the nuances in Milton's Chaos, the moral and causal assumptions around the chaos are usually certain when they occur in medicine and illness.

This article questions the moral and causal certainties attributed to the clinical assumptions of chaos, specifically when it occurs in breathing. Instead of seeing chaos as an exceptional intruder that causes problems in health and wellbeing, I suggest that chaos is an intrinsic part of breathing and everyday life. It is embedded in the sensory fabrics of living, breathing, and thinking. The breath of chaos, in this way, is not the contrary of Malinowski's 'breath of life', but an intrinsic part of his ethnographic motivator (Malinowski [1922]2014, 534, as reviewed in Oxley and Russell 2020, 5). Chaos underlines the changing conditions of health. Like in Milton, it is a place, an impactful host to illness and treatments. It may also be animate and thus demand active responses from healing.

To further examine the dynamics between breath and chaos in illness and treatments, I look at the five-finger breathing as a therapeutic technique to cope with the shortness of breath in panic attacks. Instead of projecting chaos as an unforeseeable misfortune coming out of the blue, the practice makes it an ineluctable prompt that evokes therapeutic anchoring and helps with the navigation of life flows. After reviewing the diagnosis and experiences of panic disorder in relation to breathing, I discuss the clinical and neuropsychological frameworks of breath interventions. Moving away from the causative assumptions in the clinical models, I present a medical anthropological analysis of the effectiveness of five-finger breathing as it is practised in a mental health recovery group in Southeast England.

1 | *Dis*-Ordered Breath, Blockages of Life Flow

In psychiatry, difficulties in breathing are common and often essential diagnostic criteria of mental disorders. The criteria can be found, for instance, in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5) for anxiety disorders, breathing-related sleep disorders, several types of intoxications, and substance-related and addictive disorders (American Psychiatric Association 2013). Despite the diversions of disease categories, the irregular or 'dis-ordered' patterns of breathing are usually treated as accountable and observable features for diagnoses.

In the five editions of APA's diagnostic manuals, descriptions of difficulty breathing changed alongside the remake of disease categories. DSM-1 and DSM-2, for example, reviewed a psychophysiologic respiratory condition which included varieties of breathing difficulties (American Psychiatric Association 1952, 3; American Psychiatric Association 1968, 47).[2] While the terminologies changed from 'reaction' to 'disorder', both editions highlighted the 'causative' role of emotional factors, which no longer existed in DSM-3 published in 1980.

Panic disorder and panic attack, the categories this section reviews, first occurred in DSM-3 (American Psychiatric Association 1980, 243-244). The categories of panic disorder and panic attack were invented in the 1970s, codified in 1980, and popularised as a treatable clinical entity a few years later (Good and Hinton 2009). While panic disorder is classified as one type of anxiety and fear-related disorders, panic attack is a symptomatic condition associated with a wider range of diagnoses within and beyond the categories of anxiety disorders. In DSM-3, senses of 'choking and smothering' were common, breath-related symptoms that may occur in a panic attack (American Psychiatric Association 1980, 230), while in DSM-4, the description of difficulty breathing was simplified to 'shortness of breath' (American Psychiatric Association 1994, 394) and remained so in DSM-5.[3]

The DSM-5, published in 2013, acknowledged the impact of cultural differences and even included a Cultural Formation Interview (CFI) for field trials as guidance for clinical practice (Aggarwal 2013). The sections on panic disorder, posttraumatic stress disorder, and acute stress disorder included content on culture-related diagnostic issues. However, the 'culture-specific symptoms', such as 'tinnitus, neck soreness, headache, uncontrollable screaming or crying' were not counted as essential symptoms for the psychiatric diagnosis of panic disorder (American Psychiatric Association 2013, 214). With examples from Cambodia, Vietnam, and Latin America, the diagnostic manual noted that the symptoms of panic disorders vary 'cross-culturally', while the cultural syndromes also affect 'the cross-cultural representations' of panic attacks (ibid. 216). Although the cross-cultural perspective may be seen as a major advancement in this edition of the DSM, the comparison here might still be read as relativistic, especially because it presumes that there is a single pathology that is affected by different cultural representations.[4]

This article is not about DSM-5 or its Cultural Formation Interview. Instead, it takes inspiration from an ethnographic study in the volume, *Culture and Panic Disorder*, edited by Hinton and Good (2009), which may have contributed to the 'culture turn' in the DSM-5 (Good and Hinton 2009; La Roche et al. 2015). The discussion of life flows and blockages in a chapter by Athanase Hagengimana and Devon Hinton resonates with the discussion of breath and chaos in this article.

When examining the Rwandan syndrome as responses to the genocide, Hagengimana and Hinton (2009) discussed *Ihahamuka*. It is known as the shortness of breath experienced alongside fear that is often associated with traumatic memories of violence, torture, and loss. Meaning 'without lung', *Ihahamuka* became prevalent in Post-genocide Rwanda (Hagengimana and Hinton 2009, 211–212). The *Ihahamuka* syndrome is a 'resonating icon of blockage' in the realm of the body. Since breathing is a 'back-and-forth flow', *Ihahamuka* becomes not only a severe obstruction to breath, but also a blockage of life flows (ibid. 214). In other words, the breath of chaos does not come out of nothing to disturb the serenity of life that seemed to be constant and eternal. The breath of chaos is part of everyday life. It becomes negative and undesirable when it causes a severe blockage that disturbs the rhythm of the flow.

As Hagengimana and Hinton reviewed, 'flow as health' is a dominating reasoning to understand aesthetics, ritual, cure, and bodily symptoms in Rwandan society (Taylor 1992, in Hagengimana and Hinton 2009, 206–207). They discussed breathing as the formation of a Deleuzian 'rhizome' that joins

the multiple social relationships and cultural domains. The back-and-forth flow of breathing is as follows: the regularity of menstruation and lactation, cow milk, rains, birth rituals, the healing substances that induce sweating and bowel movement, and reciprocal exchanges of goods and services (Taylor 1992, 34, 191, in Hagengimana and Hinton 2009, 217). In other words, illness as chaos may take place through blockages in any of the emotional, environmental, social, or political dimensions, while healing may be achieved through the restoration of the flow. To heal, therefore, is not to evade or eliminate chaos, but to *dredge* the blockage of it.[5]

More recently, Andrew McDowell (2024) examined breathing and breathlessness as experienced and treated in tuberculosis (TB) care in Rural India, precisely a village in the Northwest Indian state of Rajasthan. Drawing on Karen Barad's study of quantum mechanics, McDowell discussed breathing as 'atmospheric entanglements' which had an iterative capacity to build relationships and make worlds. By breathing together, sharing air, one entangled oneself in 'an incessant process of exchange' with others (McDowell 2024, 14). McDowell subverted the easy narrative of breath control. He learned from his fieldwork the various ways of breathing, which were physiological (*sans* the respiration-breath), vital (*dam* the strength-breath), and cosmological (*prann* life-breath) (ibid. 30).

Notably, it was the tantric healing of the life-breath that achieved significant efficacy in reducing the suffering of breathlessness endured by McDowell's local friend. As McDowell noted, disordered life-breath, despite its potential causes, revealed 'a complex set of lines connecting bodies, breaths, actions, and cosmologies' (McDowell 2024, 47). Healing took place through the restoration of life-breath, precisely the powerful blowing of air and words through breathing and chanting which altered the atmosphere and opened a negotiation with the family's lineage deity.

The atmospheric dimension in McDowell's monograph resonates with the flows of breathing, life, and health in the Rwanda example above. Both perspectives may support the understanding of chaos as an intrinsic part of breathing and living because neither the flow of health nor the atmospheric entanglement is static or exempt from the unpredictable changes and stirs. Building on this presumption, I shall discuss the interventions and techniques for difficulty breathing in the sections that follow.

2 | Reconsidering Clinical Interventions to Difficulty Breathing

There are different types of interventions and techniques for breathing difficulty, especially for panic disorder. Studies in neuropsychology, which take place in both clinical and experimental settings, associate breathing and anxiety with the concept of interoception. Paulus (2013) defines interoception as the active sensing and motivated regulation of the internal, physiological conditions alongside the ongoing activities external to the body. To Paulus, breathing as an integral component of interoception is regarded as both the consequence and the cause of anxiety, making it 'a useful physiological marker' as well as 'an experimental tool' for the assessment and intervention of anxiety disorders (Paulus 2013, 315). A refined neuropsychological examination, Paulus suggests, should aid the understanding of the pathophysiology of the relationship between breathing and anxiety.

The therapeutic intervention developed from the interoceptive framework, known as the 'interoceptive exposure' (IE), is widely used in Cognitive Behavioural Therapy (CBT) today (Benke et al. 2021; Heim et al. 2023). Within biomedicine, the effectiveness of IE has been validated through RCTs, the 'Gold Standard' for biomedicine (Deacon et al. 2013) and clinical practice (Boettcher and Barlow 2019; Farris et al. 2025). IE for treating panic disorder focuses on reproducing the uncomfortable bodily sensations in ill conditions, such as shortness of breath, racing heart, and dizziness (Paulus et al. 2019). Health professionals will direct patients to attend to these sensations they fear and challenge the catastrophic cognitions.

The concept of interoception in neuropsychology acknowledges the active sensory attentiveness to the bodily processes by dialectically treating breathing as both the consequence and the cause of anxiety. However, interoceptive exposure (IE), the therapeutic intervention developed from the interoception framework, appeared to support a causative relation between senses and behaviour. It is explained that with effective IE strategies, 'the sensations of physiological arousal no longer provoke panic and avoidance behaviour' (Stewart and Watt 2008, reviewed in Paulus et al. 2019). In the IE framework, the ill sensations are treated as the cause of panic behaviour. The sudden shortness of breath, alongside other uncomfortable bodily experiences, is objectified and accused of evoking panic behaviours.

One common exercise in IE is to have the patient breathe through a straw to evoke the shortness of breath. To guarantee health and safety in practice, the delivery of IE demands professional training. In the UK, one generally needs to acquire a diploma in CBT to practice IE as a therapist for the National Health Service (NHS). IE should always be conducted in a safe, controlled environment, such as a CBT clinic. Interoceptive exposure, therefore, is not the most accessible treatment for people living with panic disorder and panic attacks. Nor is it possible to be practised by the patients themselves, even though the shortness of breath can occur at any time and any place.

There are also breathing techniques which do not need professional medical supervision. In England, the Breathlessness Intervention Service (BIS), supported by a group of researchers and practitioners in palliative care, published a series of leaflets with hands-on techniques to ease breathlessness. The breathing difficulties that the techniques aim to address include not only stress and panic attacks but also other heart and lung conditions or some types of cancer. To practice the breathing techniques, the BIS team suggested finding a relaxed position, making use of furniture as support if needed, and trying to breathe from the tummy, and breathe 'low and slow, relax, let go' (NHS Cambridge University Hospitals 2024). The team also recommended using a square-shaped item (e.g., TV, door, picture frame, screen of the tablet, cell phone, etc.) to help with the focus when trying to breathe in and breathe out.[6]

The leaflets and techniques that BIS introduced to tackle difficulty breathing are very clear and practical for clinical practice. They should also be very useful in other settings that involve professional care or self-care. However, the mechanism that BIS used to explain the breathing interventions is based on a clinical model known as 'Breathing, Thinking, Functioning' (Spathis et al. 2021). In this model, 'anxiety, frustration, and feelings of panic' are allocated only to the realm of 'thinking' (Spathis et al. 2021, 2). The symptom of panic disorder then becomes a result of 'misinterpretations of bodily sensations' (Teachman et al. 2010, reviewed in Spathis et al. 2021).

In the clinical frameworks of IE and BIS, the ill body, alongside its sense experiences, is usually regarded as passive and disturbed, and thus may not be trusted. The chaos of breathing then becomes an occasional deviation from health. It should thus be confronted as an enemy or alien to one's body and self. The attacks should be dealt with, reduced in frequency, and ideally removed. The therapeutic goal of the clinical models is morally certain and legitimate. Nevertheless, it is the messy realities that may complicate the ideal, especially when they are embedded in the sensory fabrics of perception and their social-cultural meshwork.

The experiences of difficult breathing, feeling of being preoccupied with worries, and being aware of these critical circumstances are rather dynamic. As Merleau-Ponty clarified, the relationship between sensing and behaviours is not causal. Sensing is 'coexistence', and the sensible qualities (e.g., the experience of red that 'tears' open') allow themselves to be recognised by certain types of behaviours (Merleau-Ponty 1945, 2012, 216–219). There is a dynamic exchange between sensing and behaving tailored to the body's motor significance, which contributes to a moment of individual history. Therefore, it is not the ill sensation or its 'misinterpretations' that provokes the so-called panic behaviours because the ordering and distinctions between sensing, moving, thinking, and doing are not always absolute. It is the coexistence and interplay of the racing hearts, trembling limbs or lips, feelings of fear and worries, shortness of breath, alongside the potential flashback of traumatic memories and avoidance of specific circumstances that outline the processes of illness.

Anthropological research further examined the social, cultural, and historical significance of consciousness. Drawing on Hegel, Christian Frenopoulo defines consciousness as the 'circumstantially cultivated faculty of the self' which may be developed through historical and political processes (Frenopoulo 2025, 1). Consciousness then is not built on a simplistic assumption that all humans experience it as uniform or static, as a Cartesian framework may assume.

Weisman and Luhrmann also think beyond the Cartesian framework that has a profound influence on cognitive science. Instead of seeing thought as a mechanism and consciousness as the puppet that dances through 'the metaphorical strings', they propose that thought is intrinsically imaginative and experiential (Weisman and Luhrmann 2025, 169). As Weisman and Luhrmann articulate, the conscious process of being aware of oneself and others is affected by multiple social, cultural, and historical factors:

> We are aware of our awareness, and this sense of being aware is shaped by culture and history and the happenstance of temperament and those features in turn shape the quality of that experience. Cognitive science deeply understands that expectation affects experience, but cognitive science has for the most part not developed the insight that the way people imagine their thought and feel their thought may shape how their thought is experienced
>
> (Weisman and Luhrmann 2025, 170).

An empirical support for Weisman and Luhrmann's discussion of thought and awareness is the 'Bank of Breath' project co-established by artist Filomena Borecká, anthropologist Fréderic Lebas, sociologist Stéphane Hugon, and sophrologist Monique Puisais between 2011 and 2024.[7] The team designed a questionnaire to ask about people's experiences of becoming aware of their breathing in everyday life. They were interested in knowing, for instance, the times in a day one realises one's breathing, and the occasion and conditions of these realisations. The questionnaire also asked about the meaning of the expressions to 'take a breath' and to 'hold a breath' from their respondents.

The questions that the 'Bank of Breath' project asked naturally bridged the boundaries between sensing and behaving, and between thinking and doing. They also allowed experiences of breathing to diversify through imagination and personal histories. The questionnaire specifically asked people to compare the experience of taking a breath to the experiences of a city, a place, an animal, a celebrity, or a machine, and to reflect on the changes in perception after the COVID-19 pandemic. These questions and reflections help to reconsider the role of the body alongside its experience of breathing, thinking, and imagining. One example is from the 29-year-old Sean, who said, 'I become aware of my breathing two or three times a day while walking, before and after work, during or after arguments or intense interactions, or when I've had too much coffee'. (Borecká et al. 2025). These examples show that the breathing and experiencing body is active, sensitive, and reflective. People may attend to their breathing casually and frequently, whether with or without medical interventions, intentional practices, or other types of structured meditation.

The differentiations and debates above are not only conceptual but also have ethical implications which may directly inform the presumptions of chaos, illness, and health. By tracing the etymological relationship between 'conscience' and 'consciousness', Alberto Giubilini articulates the notions' crucial roles for understanding issues of moral status. Conscience as our sense of duty establishes 'a general sense of moral obligation in the individual's consciousness' (Fuss 1964, 116, as reviewed in Giubilini 2024). It thus works as a motivation for us to act morally. Giubilini further proposes that the moral enactments of consciousness and conscience may then enable reconsiderations of healthcare practice and experience, ranging from the care for foetuses and comatose patients as well as the adequate management of pain.[8] I suggest that the moral debates may apply to the judgement of chaos in illness. It may thus directly inform the healthcare actions to assess, intervene, and prevent the critical

conditions and crises. I shall elaborate on this moral nuance in the ethnographic example that follows.

3 | Breathing the Fingers, Making Flows

In 2018, I became an in-house volunteer at Restore, an Oxfordshire mental health charity, to explore the therapeutic effectiveness of Restore's recovery activities. Restore was established in 1977. It organises hands-on, skills-engaged, and sales-orienting activities for 5 days a week in community-based groups to promote mental health recovery.[9] During the time of my fieldwork between 2018 and 2020, Restore had six recovery groups across the county of Oxfordshire. Many recovery groups, including the one mentioned below ('The Orchard'), were based in areas enduring significant health inequalities and were identified as being 'the 20% most deprived' in England by the Indices of Multiple Deprivation (Ministry of Housing, Communities and Local Government 2019).[10]

My dual role as an ethnographer and an in-house volunteer at Restore enabled me to attend the 2-day training of Mental Health First Aid (MHFA, see Kitchener and Jorm 2008). With other volunteers who had no previous experience working in mental health services, we learned the action plans for different crisis situations. This included several first aid techniques, including the five-finger breathing.[11]

Five-finger breathing supports the navigation of difficulty breathing in panic attacks. It is a body technique that needs to be learnt to 'adapt the body to its use' (Mauss 1973, 86). Following Mauss, I conceive the technique of five-finger breathing as a series of 'physio-psycho-sociological' actions (Mauss 1979, 120). Nick Crossley (2007) further elicits the reflective and embodied features of the Maussian body techniques, which make the learning and practice of body techniques highly motivational and social-culturally attuned. The three dimensions of the Maussian body technique, with Nick Crossley's reflective interpretation, make breathing a bodily process that is highly dynamic and interactive. Whether being peaceful or in chaos, breathing is no longer separated or distant from consciousness and thinking. Nor is it pathologized as a cause of panic behaviours.

While learning the five-finger breathing, I practised the method of 'participant experience', a more intimate version of participant observation that builds on a sensory-phenomenological tradition in medical anthropology (Hsu 1999, 2006; Potter 2008; Hsu and Han 2020; Peng 2023). The approach allowed me to breathe and move with others while reflecting on the experience of co-breathing and the spatial trajectories of our movements. My analysis of the ethnographic encounters would also focus on the intercorporeal dynamics, especially our mutual attentiveness and sensory relatedness. I propose that the approach of participant experience can produce valid outcomes of the therapeutic effectiveness of five-finger breathing. It thus offers a different evaluative approach than the clinical frameworks. It should also add the social-cultural nuance to the moral certainty enacted to the breath of chaos, and the chaos of illness in general.

It was a winter morning in 2019. A few members (service users), staff, and volunteers at the Orchard recovery group of Restore gathered indoors to do craftwork. Around 15 members were working on the day, alongside two paid staff and two volunteers. The Orchard had around 65 members in total, making it the largest recovery group of Restore at the time. Some members were residents of the town where the Orchard was located; some lived in surrounding villages. The members were usually referred to Restore through their GPs and psychiatrists, although self-referral was acceptable.

After the morning group meeting, some of us went to the craftwork room to do small handcrafts, while others entered the woodwork room to make larger items such as furniture and garden ornaments. The craftwork room was small but compact, with well-functioning heaters. The door of the craftwork room was left open throughout the day. Air and sound flowed through the door, bringing the smell of bread pudding from the oven in the kitchen.

In the craftwork room, we sat in a circle around two large tables, enclosed by high shelves that stocked a variety of craftwork tools and materials. The radio was on, with Sia's Cheap Thrills playing on the BBC. The sound of the music, mingling with our chatters and our breaths, flowed between us, giving rise to a palpable sense of togetherness. Some members at the Orchard seemed to enjoy working in the small craftwork room. They would stay in the room for most of the day, making small handcrafts while holding conversations about their weekend plans and family life. Some, by contrast, preferred working in the dining room, which was twice the size and had natural sunlight shining through two large windows. As Tuan Yi-Fu remarked, the comparative size of space does not always define our senses of crowding or spaciousness, because the perceptions of space diversify by culture and experience (Tuan 1977, 55). A room can crowd us out but also enlarge our world, especially when people come together for a common purpose (ibid. 64). In other words, the ways in which people participated in the work at Restore affected their perceptions of their surroundings as well as the effectiveness of the hands-on activities. Both participation and perception may alter through time.

Everyone had something to make or design on that day. Silvia[12] was braiding a rag wreath with fabric strips from a big box. Chloe joined her after meeting with the recovery group coordinator in the office next door. Opposite the girls, Morris was sewing a toy koala. Eleanor, a volunteer who had just moved from Australia to England for 3 months, joined him to sort out a pile of fibre fills. John was sitting alone at the shorter end of the table. He had a paper and a pen in front of him, trying to pick up some ideas for his next project. Like Eleanor, I was new to the Orchard, a volunteer in her 2nd week at this recovery group. Sitting between Silvia and John, I was decorating a greeting card with stickers while responding to my workmate's questions about my 'anthropological research', my perception of life in the UK, and my hometown in China.

John pulled away in his chair, trying to adjust to a more comfortable seated position. By doing so, his back hurt. John moaned about the pain. Eleanor said she was sorry to hear about John's back pain. She then asked if anyone had pets, and John started listing breeds of fierce dogs 'in the size of a child' but 'can tear

adults into pieces'. Eleanor instantly called for 'fluffy bunny', the code to require a change of topic at the Orchard.

Chloe started talking about her cats, both of which were soft and gentle. As Silvia expressed her affection for cats, Chloe started complaining about the challenges to keep them because of the rising cost of cat food and vet care, her 'mental problems', and the difficult landlord. She talked constantly for 5 min in a very loud voice that overpowered the sound of the radio. Everyone else stopped talking. Many looked down to focus on the craftwork in front of them, with nearly invisible frowns on their faces.

Suddenly, Morris fell onto the table, burying his face in his trembling palms. When he rose up again, his face flushed red. He began grasping air. Eleanor instantly dropped the scissors in her hand. 'Morris, is this a panic attack?' she asked in a calm, gentle voice. I recalled that the questioning was the initial step of the first aid for panic attacks. As I learnt with Eleanor in Restore's MHFA training a few weeks ago, the questioning was to confirm that the shortness of breath was caused by a panic attack rather than a heart attack, as for the latter case, we needed to ring the emergency telephone number of 999 for an ambulance. It was presumed that people living with panic disorder would identify the difference.

The questioning also served as a reminder to the other workmates in the room. As Morris nodded to confirm it was a panic attack, Chloe stopped talking. The room fell into silence. The words drew our attention to the situation, prompting us to respond accordingly. They then generated what John Austin referred to as the perlocutionary effects of speech act (Austin 1962,102). The recalling, nodding, silencing were the actual consequences of Eleanor's questioning, no matter whether they were her original intention.

Eleanor lifted her left hand and paused it between her eyes and Morris's eyes. She then drew out the index finger of her right hand to point at the wrist of her left hand. 'Breath in...' slowly she talked, as her index finger moved up from the wrist to the tip of her thumb. Morris took a breath in. I found myself doing the same. '...breath out...' Eleanor continued, and her finger descended to the webbing gap between the first two fingers of her left hand. While talking, Eleanor was also breathing alongside the movement of her finger. We all seemed to anticipate the rounds that followed, catching up the movements of the finger with our breaths. As we arrived at the pinky finger, Eleanor reassured Morris, 'We can always do another round'. Then there was another round, in reverse, from pinky to thumb. The room remained quiet throughout the whole process. After two more rounds of breathing and moving, Morris said he was 'ok'. He no longer seemed to be grasping for air. I felt myself breathe easier and heard some gentle sighs of relief from my surroundings.

The technique-induced movement of Eleanor's finger along her hand choreographed the co-breathing that took place in the craftwork room. The movement is a reminder of Merleau-Ponty's discussion of intercorporeality (*intercorporéité*) in his later writings.[13] As my right hand touches my left hand, the two hands 'compresent', which blurs the distinction between the touching and the touched (Merleau-Ponty 1964, 168). The discussion extends from touching one's own hands to handshakes, which share no intrinsic difference to Merleau-Ponty, because 'he and I are like organs of one single intercorporeality' (ibid. 168). As Dermot Moran reviews, the concept of intercorporeality presents the dynamic encounter of one body with another in the pre-objective world (Moran 2017, 38). It is a world made lively by sensory experiences that are socially and culturally attuned.[14]

With the example of touching hands, Merleau-Ponty noted a very peculiar relation from one to the other across the corporeal space. Reflecting the practice of five-finger breathing in mental health first aid, I suggest that this peculiarity achieves an anthropological significance when it helps to make sense of healing. Here, the compresence of intercorporeality becomes sounded and visible through our co-breathing, so that the movement, rhythm, and flow become 'the flesh' (*la chair*) that we dwell in and the poles of our sensory operation.[15] In a way, the moving index finger could be seen as what Thomas Csordas referred to as 'the intercorporeal hinge'. It tells about some concrete rather than an abstract relationship of our bodies' orientation to the self and others (Csordas 2008, 110–111). It is through the interwoven of our intentional fabrics that the five-finger breathing achieved its efficacy with the suffering individual. And it was the bodily-sensed efficacy that made sense to the others who co-breathed through the process.

As a highly social process, five-finger breathing involved everyone presenting in the craftwork room. Like in the Yolmo healing in Robert Desjarlais (1996)'s study and the *talapodichil* 'mud-pack' treatment in Ayurvedic psychiatry that Halliburton (2009) examined, it was not the alteration of meaning but the changes in the bodily experience that counted as efficacious. As the crisis broke out, we were all swept along by the breath of chaos, whether we were doing the first aid or watching. When the co-breathing with the flows navigated the chaos, we were convinced by the effectiveness of five-finger breathing through our own breathing at ease, and the sighs of relief we heard from others. The self-assessment of the therapeutic effectiveness of five finger breathing was intrinsically participatory and experiential.

4 | Stirring, Anchoring, and Reconfiguring Effectiveness Through Chaos

The section above discussed the problem of therapeutic efficacy. The problem of chaos, however, lingered, and so is the relation between the two in the context of breathing. This is because the story was unfinished.

After Morris confirmed that he was okay, Eleanor went to the kitchen to fetch him a glass of water. As she returned, she asked Morris if he wanted to sit in the dining room. Morris thanked her but chose to stay in the craftwork room.

No one talked for a couple of minutes, then I heard Chloe whispering to Silvia. A few minutes later, she began to talk in her loud voice again. Chloe was still complaining about her landlord. But Morris did not seem to be bothered.

During the morning break, when we each had a hot cup of tea in hand, Morris talked about the crisis earlier. 'I am alright with it'. He looked at us, who might still have seemed worried. He then

explained that the worst thing about panic attacks to him was not only the discomfort during an episode, but also its frequency and unpredictability.

'Sometimes you were just walking down the street, and it came...' he sighed, '...and people all stopped to look at you'. It was the judgmental looks of others that embarrassed him about his struggles. As the breath of chaos expanded to a wider, more distant range of social interactions between strangers, it often receives a negative moral enaction which can be alienating.

However, the co-existence of regularity and unpredictability in the experience of panic attacks implies that the chaos of breathing, though abrupt, can be common to everyday life.[16] The chaos of breathing contextualised the transitions and changes in illness and health. The chaos was already there before the outbreak of illness and became substantial when the loud, constant, and unceasing sound of talking flooded the craftwork room. The chaos of sound and the chaos of breath took turns in effect, but they are not causational because Morris did not fall into another panic attack when Chloe started talking in a loud voice again.

Another aesthetic example in support of the interpretation above is Samuel Beckett's 35 s play, 'Breath'. After a faint, brief cry of an infant, there is the sound of an inhale and an exhale. In one breath, the light shines in and out, showing the rubbish scattering on the stage. Then there is another cry, identical to the first, as the light dies out in silence. Beckett in his stage directions specifically that the 'miscellaneous rubbish' on the stage should have 'no verticals, all scattered and lying' (Beckett 2006, 211).

The play of 'Breath' achieved a variety of creative compositions. The selection of 'miscellaneous rubbish' ranged from naked bodies in the first edition of the play by Kenneth Tynan in 1969 to broken machines and a sombrero among other assorted items in the Gates production at the Barbican theatre in 1999. Lastly, Damien Hirst selected medical waste for his production in 2001 (Bates 2017, 4). Despite the different choices of things on display and the possible meanings they may carry, the productions created a perceivable sense of chaos that may evoke a strong impression and emotions.

In the very short but neat production of Beckett's Breath, the chaos of things, life, and the world is wrapped up in one long breath. From a medical anthropological interpretation, breathing becomes the 'sonorous sensations' (Laplante 2020) that validate the relevance of chaos to the living. It is the embedding of chaos in life and breath that enables the reconfigurations of therapeutic effectiveness and healing.

Drawing on Boulez, Deleuze and Guattari, Julie Laplante brings the concept of 'sonorous sensations' to medical anthropology. The concept highlights the 'duration of an experienced event that continues to grow meaningfully beyond its occurrence' (Laplante 2020, 34). They are the 'telling moments' in anthropology which may occur through the recognitions of therapeutic effectiveness in the *jamu* herbal medicine in Java, the skilled drumming and dancing in the Xhosa healing in the Cape, the shaman song in the Amazon, and the Bantu healer's practice in Cameroon (ibid. 38–39). Notably, the making of sonorous sensations in healing involved skilful 'mixing and stirring' of human, elemental, and vegetal lives (ibid. 39). The practice of stirring, I suggest, makes rhythm and life flows for the co-breathing. It then helps with navigation through the chaos of illness.

If chaos is common, unpredictable, and often inevitable in life, skilful navigation through chaos becomes a more practical solution than avoidance. Stirring, in this way, is also a process of existential 'anchoring', the dredging of the back-and-forth flow, and the altering of atmospheric entanglements, if recalling the examples of *Ihahamuka* and *prann* life-breath reviewed in the section above. As breathing attuned to the upward and downward movements of the finger, it has found its corporeal direction to navigate the crisis. A direction that drew one's attention and served as a concrete and meaningful purpose that helped with the navigation of breathing through the chaos.

Notably, the corporeal directions of stirring and anchoring are not rigid but dynamic. They address the body's movement and choreograph the flows of sensing, moving, and breathing. The left, right, top, and bottom are not static stations that lock up the attention, like the arrows on the traffic signs. Instead, they are the swinging fishing floats in the river that hook one's attention, even just for a brief, subtle while.

One example of this corporeal anchoring can be found in David Sudnow's *Ways of the Hand*. As a beginner to improvise jazz on piano, Sudnow once observed the singing of a small sequence of notes from a mirror. As he vividly described, singing entailed harmonious waving and moving of the torso, head, and inner mouth. Moreover, the movement of the nose, if observed from a mirror and noted down with chalk, corresponded to the spatial arrangements of the music notes, such as the vertical pitches in a musical score or their horizontal version on a keyboard.

Sudnow then noted that the vertical waving of the head and the horizontal spread of fingers are in 'concordantly pitched and shaped movements' (Sudnow 2001, 60) To know the sound of the next place, one coordinated the dimensions of his movements. Both the vertical and horizontal arrangements followed the music notes. The nose danced them out. All movements served for the same sense of corporeal direction as they anchored to the same melody and rhythm. The corporeal directions became sonorous as the voice and the finger oriented to the same sounding spots. Similarly, the moving up and down of fingers in five-finger breathing also shares the corporeal direction with our breathing in and out. It is the attentive orientations to the alternations of sliding, holding, and letting go that anchor the body and self to navigate the life flows.

5 | Conclusion

In this article, I reviewed the changing diagnostic criteria of panic disorder in relation to difficulty breathing and discussed the clinical and neuropsychological frameworks of breath interventions. I argued that the certain causative assumptions in the clinical models could be limiting for understanding the moral and experiential nuances in relation to illness and chaos. I then presented a sensory anthropological analysis of the effectiveness

of five-finger breathing as it was practised at the mental health recovery group of Restore.

I propose that a reasonable evaluation of five-finger breathing should be participatory in the first instance. In contrast to the 'pragmatic trials' widely used in non-experimental settings,[17] participant evaluation should be adopted more widely and frequently in the assessment of the effectiveness of healing, especially for evaluating the health-promoting techniques that involve intense bodily practice and sensory engagements. Although participant evaluation as a method is not unknown in applied anthropology (Butler 2020), the approach with a sensory-phenomenological enhancement may enable an in-depth understanding of the therapeutic processes. It may then bridge the gap between efficacy and experience, which Csordas (2023) noted when discussing the challenge of Indigenous Healing for Global Mental Health.

Relating the ethnographic example to Milton's Chaos and Beckett's Breath, I reflected on the commonality of chaos embedded in the sensory fabrics of perception and their social-cultural meshwork. I then suggested that the acknowledgement of this commonality may contest the moral certainties that medicine holds regarding the chaos of illness. It may then encourage more nuanced and engaging approaches for treatment evaluations or the assessments of service outcomes. The breath of chaos under this perspective may also transform into a Miltonian place that opens to swift alterations and radical changes—both of which can be conducive to healing.

6 | Epilogue

All members, staff, and volunteers in this article left Restore during or shortly after the COVID-19 pandemic. The trajectories of our lives had not intersected ever since. The Orchard recovery group was closed permanently in June 2025 at its fifteenth anniversary. It was shortly after the Autumn Budget announced the increase of National Insurance Contributions (NICs), which had no exception for employers in the charitable sector.

This article was written alongside radical changes. I hope it could be read not only as a discussion of therapeutic effectiveness, but also as valid evidence of the Orchard's service outcomes. It is a record against the austerity policy that has direct impacts on the lives of grassroots charities and individuals who face health inconsistencies in their everyday struggles.

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Endnotes

[1] See the description of Chaos in *Paradise Lost*:

> Before their eyes in sudden view appear
>
> The secrets of the hoary deep, a dark
>
> Illimitable Ocean without bound,
>
> Without dimension, where length, breadth, and highth,
>
> And time and place are lost; where eldest Night
>
> And Chaos, ancestors of Nature, hold
>
> Eternal anarchy, amidst the noise
>
> Of endless wars, and by confusion stand.
>
> For Hot, Cold, Moist, and Dry, four champions fierce
>
> Strive here for mast'ry, and to battle bring
>
> Their embryon atoms; they around the flag
>
> (Milton 1667, 47)

[2] In DSM-1, the diagnostic term was 'Psychophysiologic Respiratory Reaction' and the description of the category included 'bronchial spasm, some *hyperventilation syndromes, sighing respirations, hiccoughs, and so forth*, in which emotional factors play a causative role'. (American Psychiatric Association 1952, 30, emphasis added by the author to highlight the description of difficulty breathing).

In DSM-2, the diagnostic term changed into 'Psychophysiologic Respiratory Disorder' and the diagnosis applied to '*respiratory disorders such as bronchial asthma, hyperventilation syndromes, sighing, and hiccoughs* in which emotional factors play a causative role'. (American Psychiatric Association 1968, 47, emphasis added by the author to highlight the description of difficulty breathing).

[3] Besides panic disorder and panic attack, descriptions of difficulty breathing can also be found in the DSM-3's diagnostic terms of Overanxious Disorder and Somatization Disorder (both with a description as 'shortness of breath' which occurred later in the description of panic disorder and panic attack in DSM-4), Sleep Terror Disorder ('rapid breathing'), and several types of Intoxications ('death from respiratory arrest' with Opioid, 'respiratory paralysis' with Cocaine, 'respiratory depression' with Caffeine or Phencyclidine or Similarly Acting Arylcyclohexylamine) (American Psychiatric Association 1980). Most categories and descriptions were kept or slightly altered in the two editions that follow.

[4] It is also necessary to acknowledge that the DSM-5 has a Text Revision published in 2022, although the sections on Panic Disorder and its 'culture-related diagnostic issues' see no significant changes. (American Psychiatric Association 2022).

[5] There is a similar condition in Chinese medicine known as *butong ze tong* 不通则痛[Pain occurs when there is a blockage]. (Liang 2023).

[6] The measures in practice share many similarities with the technique of five-finger breathing and other breathing techniques in meditation and mindfulness, which are widely studied in medical anthropology and anthropology of Buddhism. See, for instance, Cassaniti (2018) on mindfulness in Buddhist Asia and Cook (2023) on contemporary Britain.

[7] I learnt about the 'Bank of Breath' project from the exhibition 'Breathing' with 'Breaths-Air Bladders' at the Maison Française d'Oxford (MFO) between 19 May and 26 June 2025. The exhibition was co-created by the Chaire Santé-SHS, Univertité Paris 1 Panthéon-Sorbonne, and MFO. At the opening of the exhibition, I completed a 'Bank of Breath' questionnaire myself and listened to the artist Filomena Borecká talk about her sound sculpture on breathing. These encounters are the primary source of ideas and inspirations for the discussion in this section. For more information about the 'Bank of Breath' project and the exhibition at MFO, see: https://www.mfo.ac.uk/event/exhibition-breathing-breaths-air-bladders.

[8] This remark is made at the 'Adventures in Consciousness' festival held by the Medical Humanities research group of The Oxford Research Centre in the Humanities (TORCH) in 2024. The festival also included philosopher Joseph Shear's introduction to the 'easy' and 'hard' problems of consciousness. While the former explains the 'representational states' of consciousness, the latter examines awareness and subjectivity, which may help explore the differences between humans and technology. For more information about the 'Adventures in Consciousness' festival, see: https://www.torch.ox.ac.uk/event/adventures-in-consciousness.

[9] For details of Restore's history and my anthropological exploration of the effectiveness of Restore's hands-on activities, please see Peng (2023).

[10] Note that the English Indices of Deprivation are due for renewal in 2025 by a company called Oxford Consultants for Social Inclusion (OCSI). The early version of the index was co-developed in the 1990s by George Smith, Michael Noble and their colleagues in the Social Disadvantage Research Group at the University of Oxford. (Smith et al. 2014).

[11] Apart from the example in this article, I practised the breathing technique with a young person in need outside a supermarket near where I lived during the COVID-19 pandemic. The technique was effective, but due to the very brief encounter, I did not ask the person if I could write about the first aid in my research. Therefore, I shall not include any further details about this case but wish to note that the practice of five-finger breathing, especially when seeing it works, is also a highly meaningful and empowering process for the practitioner.

[12] All names are pseudonyms, and careful measures are implemented to reduce the risk of identification following the guidance of the University of Oxford's Central University Research Ethics Committee.

[13] This includes, as Dermot Moran (2017) summarises, 'The philosopher and his shadow', a chapter in Signs originally published in 1960, with English edition published in 1964, and The Visible and the Invisible, the collection of unfinished manuscripts published in 1964 in French, and in 1968 in English.

[14] Note that a pre-objective world is not pre-cultural, as Csordas (1993) reminded us.

[15] In 'The Philosopher and His Shadow', Merleau-Ponty wrote about 'the flesh' when he reviewed the double-edged relationship between logical objectivity and carnal intersubjectivity in Husserl's *Fundierung* (Merleau-Ponty 1964). In *The Visible and Invisible*, 'the flesh' is framed as an ultimate notion of 'the visible'. It is 'a quality pregnant with a texture, the surface of a depth, a cross-section upon a massive being, a grain or corpuscle borne by a wave or Being'. (Merleau-Ponty 1968, 136).

[16] Studies in physiology and neuroscience have also noted that chaos is common to the bodily processes, especially in relation to brain and heart behaviours, and that not all chaos are signs of ill health (Rössler and Rössler 1994; Korn and Faure 2003). Besides the discussion of interoception, there is the concept of 'co-regulation' based on the polyvagal theory. The concept of 'co-regulation' offers a highly relevant perspective to understand the effectiveness of breathing techniques in stressful circumstances (Porges 2017).

[17] There are currently two types of RCTs in biomedicine. One is called the explanatory trials ('efficacy trials') and the other is the pragmatic trials ('effectiveness trials'). The explanatory trials take place in laboratories or in other experimental settings. They usually use the placebo control to test the cause-and-effect of drugs. By contrast, the pragmatic trials take place in the so-called 'real-world' settings (e.g., routine care, community settings such as nursing homes and schools) where placebo control is impossible or unnecessary, for instance, for the evaluation of cognitive behavioural therapy (CBT) and psychoanalytical psychotherapy (MacPherson 2004; Asarnow and Ougrin 2017).

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