­­What Is It Like to Have a Dissolution Experience?

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ABSTRACT

We report on a small exploratory empirical phenomenological study investigating what we call “dissolution experiences” (DEs), i.e., experiential episodes during which the subject experiences a dissolution of her psychological or sensory boundaries, a decrease of the salience of the self, or a feeling of unity or identification with the (elements of the) surrounding environment. Experiences matching this description have been reported in scientific and non-scientific literature under different names, such as *dissolution of the sense of boundaries*, *self-transcendent experiences*, *ego death*, and *oceanic feelings*. The occurrence of these phenomena has been described in relation to a variety of contexts, ranging from meditative practice to the use of psychedelic substances to engagement with nature and artistic creativity. In the study presented in this contribution, we carried out a series of phenomenological interviews investigating seven DEs reported by six co-researchers. The qualitative analysis of the generated phenomenological descriptions elucidated the temporal unfolding of each DE, identified typical experiential elements characterizing (specific phases of) DEs, as well as highlighted differences and similarities of DEs across different contexts. With the presented study serving as a pilot for a broader investigation, our findings provide grounds for making the first step towards the phenomenological and conceptual clarification of DEs, which have recently become an object of growing interest in the scientific community, consequently enabling further research.

KEYWORDS

Empirical phenomenology, Sense of self, Dissolution of the sense of boundaries, Altered states of consciousness, Micro-phenomenology.

1. INTRODUCTION

Various strands of scientific and non-scientific literature report on experiential episodes involving a decrease of the usually perceived division between the self and the world, or experiences marked by a sensation of being unified or identifying with something perceived as “bigger” than oneself. Even though they can sometimes be related to negative experiences [1], these phenomena are typically described as extremely positive and meaningful [2]. Most frequently, they are reported in association with religious and mystical traditions and sentiments [2], especially in Eastern culture (e.g., *Atman-Brahman union* in the Vedanta tradition; the meditative state of *Samadhi* in Buddhism), but not only (e.g., *unio mystica* and *mysterium tremendum* in the Western tradition) [3].

The scientific community has lately shown an increased interest in this kind of experiences. The loss or decrease of the sense of boundaries between the self and the world, brought about in the context of meditative practice, has been recently explored in studies using both third-person [4] and first-person [5] methodologies. Apart from meditation, similar experiential phenomena have long been known to be likely to occur under the influence of psychedelic substances such as LSD and psilocybin [6], and have been, in this context, observed and investigated in several recent studies [7–9]. Changes in the habitual sense of being separate from the world have also been reported in contexts related to engaging with art [10] or nature (see, for instance, the phenomenon of the overview effect [11]). Finally, one can find a myriad of descriptions of similar experiences in prose and poetry, most notably in the literary and philosophical movement of transcendentalism [12], in Walt Whitman’s poetry [13], in the cultural and literary movement of the Beats [14], in the Italian literary movement *sentimento panico della natura* [15], and in the poetic tradition of *haiku* [16]; these sources frequently describe such experiences as arising from the contact with nature.

Despite their apparent abundance, experiences of this kind seem to lack a common phenomenological and conceptual description. With reports frequently cast in vocabulary specific to the particular context in which they occurred or in which they are being reported, it is particularly difficult to compare instances of potentially similar experiences across different traditions, situations, and subjects. Depending on the particular text, these might be described under names, such as *dissolution of the sense of boundaries*, *self-transcendent experiences*, *ego death*, and *oceanic feelings*. In one of the few available overviews of such phenomena, the article titled “The varieties of self-transcendent experiences”, David Bryce Yaden and colleagues such experiences as characterized by “transient mental states marked by decreased self-salience and increased feelings of connectedness” [2:1]. Jussi Saarinen offers a similar overview of the so-called *oceanic feelings* [17]. In their research on the experience of the decrease of the sense of boundaries in the context of meditative practice, Yair Dor-Ziderman and colleagues refer to the decrease of “the fundamental experience of being an “I” (self) separated from the “world” (nonself)” [4:1].

We refer to these and similar kind of phenomena as “dissolution experiences” (DEs). In line with the above-mentioned definitions [2, 17], we define DEs as experiences marked by (a) a feeling of a dissolution of the psychological and/or sensory boundaries or a decrease of the salience of the self, and/or (b) a feeling of unity and/or identification with the surrounding environment, with other people or objects, or with something perceived as “bigger”.

In this contribution, we present the methodology and results of a small exploratory empirical phenomenological study in which we investigated seven experiential episodes that, according to the above criteria, qualify as DEs. This investigation was carried out as a pilot: its findings and implications, discussed below, will serve as guidelines to delineate the focus and the methodology to be adoped in a larger study, currently in its beginning stages. The final aim will be to provide a more detailed phenomenological description of DEs, focusing on potential similarities and differences found in DEs occurring across different instances, co-researchers, and situations.

The research questions we attempted to answer to with our preliminary study were: (1) What is it like to experience DEs; what are the typical experiential elements that can be found in DEs? (2) What are the potential similarities and differences between DEs occurring in different contexts?

1. METHOD

Data acquisition was carried out between October 2019 and January 2020 on a sample of six co-researchers, three women and three men, whom we here refer to by fictional names. Five co-researchers, aged from 23 to 29 years, were master or doctoral students of cognitive science, three among them with basic experience in phenomenological reporting and one of them trained in micro-phenomenology. One co-researcher, aged 59, was not familiar with cognitive science or phenomenological inquiry prior to the interview. We conducted nine interviews about seven experiential episodes (two episodes being an object of an interview twice) satisfying the above-specified criteria of DEs. In line with the breadth of our definition of DEs, the investigated episodes varied with regard to their approximate duration (ranging from a few moments to several minutes), the time since their occurrence (ranging from five days to 25 years prior to the interview), as well as the context and activity in which they arose. Specifically, among the investigated DEs, three occurred in the course of meditative practice, three during the use of psychedelic substances, and one in the course of engaging with art.

As mentioned above, DEs have been described in various types of scientific and non-scientific sources; these descriptions, however, often lack phenomenological precision, tending to be expressed in language dependent on the framework in which they have been experienced and/or reported. To allow the interviewee to access more phenomenologically directed descriptions that go beyond the context-bound concepts often used in describing target phenomena, we chose to base our interviewing approach on the micro-phenomenological method [18], which, according to its author, “enables us to bring a person, who may not even have been trained, to become aware of his or her subjective experience, and describe it with great precision” [18:1].

The interviews were conducted in English and Italian; they lasted approximately one hour. Each interview focused on detailing the diachronic dimension of the selected DE, investigating its different phases and transitions between them, as well as on describing the synchronic experiential elements present at selected moments. During each interview, we identified what we called the *peak phase*: the phase during which the defining elements of DE (i.e., the dissolution of the sense of boundaries and/or the sense of union or identification with everything/something perceived as “bigger”) were present to the largest extent; this phase was investigated in most detail.

All interviews were recorded on audio or video and transcribed word for word; excerpts from the transcripts in the present contribution have been edited for clarity. Our process of analysis was informed by the grounded theory approach [19, 20] and by some guidelines of the micro-phenomenological analysis method [21]. Transcripts were chronologically ordered, excluding the so-called “satellite dimensions” [26], and further analysis was conducted only for phenomenological data. Descriptions of experience were divided into different phases (extraction of the diachronic structure), with this process being guided by prior identification of the peak phase. For each phase, we identified and described the different experiential elements present (extraction of the synchronic structure).

1. RESULTS

The study described in this contribution was carried out as a pilot for a more extensive investigation of DEs that is currently in its beginning stages. Accordingly, the findings presented below are not conclusive, but intended to serve as guidelines for the focus and methodological approach to be adopted in our further research into DEs. Due to the preliminary nature of our results and the space limitations of the present contribution, this section sketches selected experiential elements and characteristics that we find typical and/or particularly illustrative of the investigated DEs.

* 1. Variability of investigated DEs

While the diachronic structure of each investigated experiential episode shows a presence of a peak phase, specific DEs were characterized by different patterns of temporal unfolding. Some of the analyzed DEs presented a diachronic structure progressing as a gradual and continuous climax of defining elements of DE; in the phases following the peak phase, these elements would then gradually or abruptly disappear. In line with is Experience 01, during which the co-researcher (let us call her Nadja) was meditating, sitting with her legs crossed and eyes closed on the floor of her room. While she was focusing on her breathing – specifically, visualizing wood while exhaling and imagining to be a part of it while inhaling – she experienced a gradual dissolution of the boundaries of her body, starting from a phase in which she felt that there was nothing to stop the movement of air happening in front of her chest, to feeling a “hole” in that area, to perceiving to not have the frontal part of her torso at all. A similar example can be found in Experience 02, where Claire perceived the gradual lessening of the “lines of her body”: in the initial phase, she was feeling the freshness of the air touching the skin, and a straight line between the skin and the space around it; then, starting from the lower left part of her face and then encompassing all of her body, all the “lines” of her face and body became perceived as “wobbly” at first and then altogether absent from experience. In the last phase of the experience, the “lines” separating her body from the outside world “entered into focus” again.

A different example of temporal unfolding is delineated in Experience 07. This experience occurred while Lev was attending a concert, standing in a crowd of people, with the stage in front of him and the band playing a specific song. The initial phases of the experience, in line with the unfolding of the song, were characterized crescendo of feelings of connectedness and a gradual diminishment of the sense of self, the sense of time, and the sense of space. At a certain point during the song, there was a break in the song during which the band was silent, with only the singer performing and all lights on him: during this phase, Lev regained the type of awareness of himself, the space, his body, etc. similar to the habitual ones. In the next phase, the band suddenly enters again, making Lev “lose all [his] sense of self” and entering the peak phase of DE: “… *it's like the feeling where it feels like it is exploding and it's just big, all the borders are gone […] it’s like a huge euphoria. But - it feels like it's everywhere. It doesn't like feel that it’s in my body or, it just feel everything very euphoric.*”

 Some of the analyzed DEs matched only one of the two above-specified criteria (a) and (b) For example, in Experience 01, Nadja only felt the dissolution of her bodily boundaries, without experiencing identification; in Experience 03, on the contrary, Andrea was experiencing identification, but no boundary dissolution. Andrea had the DE after consuming LSD and having inhaled laughing gas from a balloon. She then recognized the reflection of her own face on the surface of the balloon, and then in all other objects around her that she would look at, feeling that the reflections that she was seeing were “also” her, and that she was extending into what she was seeing and touching; however, she never stopped feeling “in her body”. Additionally, DEs also varied with regard to the mode of experiencing the boundary dissolution: while in some cases, the dissolution was described as an emphatically bodily experience or even had a very specific bodily location (e.g., Experience 01), in other cases (e.g., Experience 07), the co-researcher described the dissolution largely without referring to the bodily feelings.

* 1. The peak phase

We identified different common experiential elements marking the peak phases of the seven analyzed DEs. Here, we include an illustrative excerpt from a peak phase description of Experience 07: “*It feels like everything is one, so like I'm aware that [the other people] are there but like it feels like they are the same as me and we are the same as the music, and […] just everything appears to be one, everything. So before it seems like we’re connected, we’re two different things that are connected, but in the end it doesn't seem like [we] are two different things anymore. […] It's a sense of unity. I would say like this sense of connection changes into a sense of unity. […] [This sense of unity is] very hard to describe […] it feels a little bit like a stronger version of what I described in the beginning [phase of the experience], like this kind of comfort, and warmth, but at the same time it feels... different, because it cannot really tie to my experience, it just seems like a big experience, one big experience. Not like me feeling these things just like […] this kind of feelings [that] float in the room, it’s not like me feeling it in my chest or like in my whatever, but it just seems to be there, everywhere. […] It's not like something that I do or that I perceive […] it's just I’m part of everything else […] It’s my behavior or someone else's, it doesn't really make a difference […] It also feels like everything is happening at the same time. […] I'm out there somewhere. I don’t really know, but I also don’t really care.*”

In what follows, we list some examples of the most representative or interesting characteristics of peak phases.

*3.2.1* *Identification of the “action” of feeling and the object felt*.Peak phases of four out of seven analyzed DEs (in particular, three from the context of using psychedelic substances, and one from engaging with art) were characterized by instances where the co-researcher could not distinguish between the “action” and the object of feeling, or was experiencing an identification of the two. For example, Andrea, who experienced a DE under LSD and laughing gas while she was sitting on her best friend’s couch, reports: “There was a […] certain awe. With the insight of everything being me […] Everything I looked at … that was everything, it could not be everything more than what I looked at. […] It was not like there was a world *out there*... There’s just my perceptions of the world which are part of me because they are my perceptions, and this extended to tactile feelings as well, but it wasn't as strong as the visual part. So... When I was feeling the couch, that, just the feeling of the couch was part of me. […] It's difficult to distinguish my perceptions of things from the actual things. […] I could feel the softness of the couch, that softness was part of me, or just the pressure against me was part of me. So it was a bit like I extended a little bit outwards, as a body […], into what I was touching.” Lev, describing his above-mentioned DEs at the concert, similarly reports: “*I cannot really tell what’s the difference between me feeling something and me seeing something, or like... what the rest of the world does, it’s like it's the same for me […] what is going on on the stage and what is going on in my head, I cannot really tell the difference*”.

*3.2.2 Transmodality*. Two out of seven DE descriptions (one from the context of using psychedelics, and one from engaging with art) report on the unification of different sensory modalities. For example, Marco had the described DE under the influence of mescaline in the woods. At a certain moment, he experienced a fast pulling back experientially related to a black image and a radical shift of perspective, and a dissolution, or broadening, of the boundaries of his self. While describing how it was, he said: “*I might say that for this moment it might be hard to separate different aspects of the visual and the feeling and the thinking because it might have all been into one. Like the visual part was also the feeling, like my sense of self was encompassed by this visual aspect, like this broad universal view, and then the feeling, like it might have all been wrapped into one*”. Lev, on the other hand, describing phases previous to the peak one, reports: “*[T]he sound and visuals, they are not that clear, you know, it feels a little bit like synesthesia, like the sound has a color and the colors have a sound […]. It's a feeling in my chest that [it] makes sense that sounds have colors and colors have sounds*”, and then, with regard to the peak phase: “*But then, when everything else comes in again, it just loses the separation between the sound and colors and different sensory perceptions*”.

*3.2.3 Letting go of control*. In two DEs that occurred in the context of using psychedelics and in engaging with art, Marco and Lev describe the peak phase as being characterized, in the case of Experience 06, by the passive nature of the experience (“*Passive but not like out of control passive. Because when I wanted to turn it off I did. So it’s kind of like... Letting it happen, seeing were it went.*”), and in the case of Experience 07, by the “letting go” of control (“*there's no sense of control, so you completely let go. It’s just very nice feeling*”).

* 1. Before the peak phase

*3.3.1 “Feeling” that passes through the bodily boundaries.* In four out of seven DEs (two from the meditation context, one from the psychedelics context, and one from engaging with art), co-researchers report a “feeling” which they perceived as passing through their bodily boundaries, usually without encountering obstacles in doing so (or encountering them less and less), moving from the outside inwards or from the inside outwards; this feeling was sometimes experientially related to the loosening of the perception of having those boundaries. For example, one of the fundamental parts of Experience 01 was for Nadja to perceive her breathing as an exchange of air happening in front of her torso, without anything to stop it: from here, she started feeling having a “hole” in her body, and then having no frontal part of her torso at all. In her words, “*So I focus on this area and the fresh clear movement of air, and at the beginning I simply focus on the feeling like the air, the clearness that is related to it, and then after a certain time [...], it's like this exchange of air is really happening here [points to her solar plexus]. And I don't perceive it like coming from my nose, but I really feel it happening here in this kind of movement and it's like there's nothing here, like there's a hole where my solar plexus is. Yeah, because I don't feel like there's something which stops this movement from happening. It's really directly happening there.* *[...]* *So the feeling of having this hole is just for this movement of air not to have anything to stop it.*”

Claire, on the other hand, describes a DEs that she had while she was lying on her bed following a guided meditation. Throughout the described experience, she felt a pulsating sensation spreading from her chest that was loosening the “lines of her body”: “*there was this... Sensation going from the chest area spreading around the torso like sort of pulsating out. And... as this pulsates, I don't feel any... block in a way. I don't know how to describe it, but nothing slows the feeling down in this area [pointing to the lower left part of her face]. And here [pointing to the right part of her face] [the lines are] like really set […]the feeling, the pulsation slows down or is stopped in a way […] here [pointing to the lower left part of her face] it's more permeable, like it goes through but not - also not completely. [...] It […] goes everywhere, sort of just spreads over the body and then goes out into space. ... Makes my, like this separation of my body, it makes it sort of thinner and lessens it. […]. All over here there is nothing, there is no feeling of stopping […] it just goes through, like no feeling of it being held back a bit by anything, like over here, there is still stopping but less strong less intense than before.*”

* 1. After the peak phase

*3.4.1 Need to go back to the habitual way of experiencing.* In two of the analyzed DEs (one from the meditation context and the other from the psychedelics context), the co-researchers during the peak phase felt a need, or wish, to go back to their habitual way of perceiving. Claire describes it as: “… *there is a wish like this nag or a need to come back […] to not really stay in this because it's really pleasant. But just something that urges to come back and then that colors the entire space then it's almost like this starts almost like sucking in stuff.*” Marco felt the need to “go back” because what he was experiencing (i.e., losing of sense of time and space, and visual hallucinations of “weird creatures”) was “too scary”: “*And then there's a sense that I don't wanna, I don’t want that, it's too scary. (…) Well, I don't know if I can control or not, but when I get scared […] then I pull out of it*”.

*3.4.2 Returning to the body/location/moment.* In several analyzed DEs we noted variations, throughout the experience, of the sense of body (5/7), sense of time (4/7), space/location (4/7), or of what the co-researcher was doing (2/7). Usually, the awareness of these aspects was at its lowest during the peak phase, and returned at the end of the DE. For example, Lev described how, when the song is over, “*It feels like I’m coming back into being me, like in this moment of being at the concert*”, and he becomes aware of his body again. Claire reports: “*There is a sense of coming back to the body. […] The body comes into focus again and the room […] the sense of the room, where I am positioned, that there is a bed underneath my legs and my body and then there is a drawer next to me and stuff like that, all that sort of comes back, like it’s sort of […] pulled to this space here and by being pulled, it brings to focus the body and where I am and what I’m doing. […] So it’s like making the room and the world in a way*.”

1. DISCUSSION

The data collected in our study pointed to the difficulty often experienced in describing DEs in words. Co-researchers sometimes expressed concern that the words they were using could sound esoteric or strange and could be perceived as naïve, new-age descriptions. For example, Jan, describing a DEs he had while meditating on a hill with some friends meditators, under the starry sky, says: “*But what can I say, “ah what a good vibration”, I mean not as those “ah I’ve been to India – I mean you were really feeling it, you were feeling that there was… That something was vibrating no?”*. Lev similarly describes: “*Everything is just really like on the same, I don’t know – that sounds esoteric – but like everything is on the same frequency, everything is like coherent, everything shakes together”.* Co-researchers also often used metaphors to better describe (aspects of) DEs (e.g., Marco, when describing Experience 06, reporting “*I feel like I’m the universe. I feel like I’m the void.”*; or Lev using the metaphor “*hug from my mother*” to describe the feeling of comfort and familiarity in Experience 07.) In describing Experience 06, Marco emphasizes that a part of his experience is better describable as an *absence* of some feelings rather than a *presence*: “*[I]t’s just like boundaries in the sense of you don’t realize what they are until they’re gone, it’s like things you take for granted, and then when it diminishes, it’s like… Yeah that’s why it’s hard to describe if’it's an absence or more a presence as it might just be...’It's like feeling that absence, feeling the absence of what you thought was always there*.”

An important limitation of the pilot study is that despite most co-researchers being familiar with the basic guidelines for phenomenological reporting, the generated descriptions of experience have often failed to reach the desired phenomenological depth and precision, instead frequently staying at the level of general remarks and conceptualizations. It might well be that at least some aspects of DEs are particularly difficult – or perhaps impossible – to be put into words. However, we believe that the quality of phenomenological reports could be substantially improved by (a) increasing the number of interviews dedicated to the exploration of a particular DE; (b) training co-researchers in phenomenological reporting in the context of everyday lives.

The results found in the pilot study gave us a clearer insight into the research interest and methodology of the larger study to be based on it. In the larger study, we are planning to collect a sample of approximately thirty DEs from different context; however, before describing their DE, co-researchers will undergo a short period of training in a technique similar to *descriptive experience sampling* [22]. This will enable co-researchers to better observe and describe their experience, as well as provide descriptions of their aspects of their everyday experience that can later on be compared to characteristic experiential aspects of DEs.

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