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# Meditation Trips: A Thematic Analysis of the Combined Naturalistic Use of Psychedelics With Meditation Practices

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Similarities between meditative and psychedelic states have long been recognized. Recently, parallels in the psychological mechanisms mediating the beneficial effects of mindfulness and psychedelic treatments—as well as their potential therapeutic complementarity—have been noted. However, empirical research in this area remains limited. Here, we explore the naturalistic use of meditation practices among psychedelic users recruited outside of treatment/retreat or research settings. Participants with  $\geq 1$  psychedelic drug experience(s) were included in an online survey. The majority ( $n = 875$ ; 66.5%) indicated that they engaged in meditation, 39.4% ( $n = 345$ ) of whom had combined psychedelic use with meditation practices on  $\geq 1$  occasion. The majority (74.2%;  $n = 256$ ) provided written accounts describing their experiences of “psychedelic–meditation,” which were the basis for the present thematic analytic study. Six overarching themes were identified: (1) *Compatibility Between Psychedelic and Meditative States*; (2) *Enhancement of the Meditative and Psychedelic Experience*; (3) *Beneficial Changes in Relating to the Internal and External World* (encompassing acceptance, connection, peacefulness, and transformation); (4) *Negative Effects of Combined Use*; (5) *Meditation as a Preparatory and Navigational Tool*; and (6) *Contextual Considerations* (including reflections upon, and practical advice about, combining meditation and psychedelics). Participants’ experiences appear to support recent empirical and theoretical work on the parallels and complementarity between psychedelic drug effects and meditation. The findings identify facilitating conditions for combining psychedelics with meditation, which may have implications for their combined therapeutic use. For example, the use of meditation techniques might represent a “psychedelic-sparing” strategy, potentially enabling therapeutically important psychedelic effects to emerge at lower doses.

## Public Health Significance

Psychedelic users indicated a number of benefits of employing meditation techniques *during* the psychedelic experience. Their accounts suggest that psychedelic/mystical effects are enhanced and/or emerge at lower doses when psychedelics are used alongside meditation. These observations may be a basis for designing psychedelic-assisted therapies that incorporate structured meditation components.

**Keywords:** meditation, psychedelics, thematic analysis

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Contemporary meditation practices have their origins in Eastern and Western wisdom traditions and encompass a variety of techniques (e.g., focused attention, breathing exercises, body-focused practices, mental imagery, and mantras/chanting, among other

techniques; Farias et al., 2021). As spiritual or religious practices, they have been employed for centuries to attain nonordinary states of consciousness in which the participant can become more receptive to insights about the true nature of reality or the self. Alternatively, a

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and an equal role in methodology.

The results presented here formed the basis of a chapter of Emily Thomas’s doctoral thesis. The quantitative data presented here will be made available upon reasonable request to the corresponding author. This study was not preregistered.

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practitioner's goal might be to develop a closer relationship to God (e.g., in the Western Christian tradition). In some instances, these experiences cross a certain threshold of intensity such that the individual experiences a moment of awakening to truth, with an accompanying sense of unity, sacredness, awe, and transcendence (Stace, 1960). In addition to religious and spiritual practices, such mystical experiences can have other causes. These have perhaps been most thoroughly characterized in the recent scientific literature on psychedelic experiences (Griffiths et al., 2008, 2011; Johnson et al., 2019). Natural plant products containing substituted phenethylamines (e.g., mescaline and its analogs) or tryptamines (e.g., dimethyltryptamine [DMT] and its analogs) consumed as sacraments during certain religious ceremonies can produce pronounced alterations in perception, affect, and cognition (Dos Santos & Hallak, 2020). Frequently, these experiences cross the threshold into peak or mystical experiences. Such instances can be accompanied by a significant loosening of attachment to a sense of self and a blurring of self–other boundaries (Nour et al., 2016).

These profoundly spiritually and existentially meaningful drug-induced mystical experiences have some parallels to states of mind produced by meditative practices, although psychedelic-induced mystical experiences are likely both more frequent and intense than those associated with meditation or other religious/spiritual practices (Yaden et al., 2017). Other parallels include psychedelic-induced ego-dissolution on the one hand, and similar (though usually milder) “hypo-egoic” states experienced during meditative practices (Leary et al., 2006). Either by design (Buddhist rituals, teachings, and meditative practices; Goss & Klass, 1997) or coincidence (psychedelics; Moreton et al., 2020) both can involve confrontation with mortality and may in fact help to ease existential anxieties. Importantly, both meditative practices and psychedelic use have extended beyond traditional spiritual or ritualistic settings, into Western medical and psychotherapeutic settings. In addition, of course, many will experiment with these approaches outside of formal or informal therapeutic settings, often with a goal of self-discovery or self-improvement.

Alterations in (perceptions of) the sense of self and reality, and the accompanying insights about these domains of experience, may mediate some of the therapeutic effects of meditation (Hoge et al., 2015; Sauer & Baer, 2010) and psychedelics (Griffiths et al., 2016; Uthaug et al., 2019) on mental health outcomes. In Buddhist psychology—and more recently, in clinical psychological theories of psychopathology (Hayes et al., 2006)—an inflexible attachment to self-concept plays a central role in suffering. Attainment of a hypo-egoic state (characterized by weaker attachment to a “conceptualized self”) is a desirable outcome of meditation practices and may explain the benefits of meditation on well-being and mental health (Hölzel et al., 2011). The related psychological construct of decentering is also a potentially important variable explaining the beneficial effects of psychedelic experiences (Soler et al., 2016). Emerging research suggest that the use of classic psychedelics may be associated with increased trait mindfulness (Franquesa et al., 2018; Madsen et al., 2020; Sampedro et al., 2017). Specifically, significant increases in nonreactivity and nonjudgment of internal experiences (two central aspects of trait and state mindfulness; Baer et al., 2008) and decentering are reported after episodes of psychedelic use (Murphy-Beiner & Soar, 2020; Soler et al., 2016; Uthaug et al., 2018). Similar increases in these outcomes are observed following long-term meditation practice (Soler et al., 2016). Taken together, the above discussion

suggests phenomenological and, potentially, cognitive-mechanistic overlaps, between psychedelic and mindfulness states (Heuschkel & Kuypers, 2020; Millière et al., 2018). These are characterized by a loss of self/other/world boundaries (e.g., ego loss) and a detached and observational stance (e.g., detached, mindful awareness), versus a reactive, self-focused position toward internal experiences.

Beyond noting their phenomenological similarities, a small number of recent randomized controlled studies have tested the combined effects of psychedelic use with meditative practices during meditation retreats or integrative mind–body programs. For example, administering psilocybin (equivalent to approximately 285 or 430 µg/kg) after 1 and 2 months of “high intensity” preparatory and integration-oriented spiritual practices (including meditation) produced modest subacute (within 7 hr of drug administration) enhancements in “mysticism” and appeared to encourage greater engagement with spiritual practices at 6 months relative to “standard support” plus psilocybin (Griffiths et al., 2018). In another study examining the effects of psilocybin (315 µg/kg vs. placebo) and mindfulness practice during a 5-day retreat in expert meditators (>5,000 hr of formal practice), Smigielski, Kometer, et al. (2019) reported that participants randomized to a psilocybin group experienced increases in meditation depth (measured at the end of the meditation session on the fourth retreat day, i.e., the day they received psilocybin), as well as larger increases in trait mindfulness postretreat (i.e., on the sixth day) compared to controls. In another study by these authors, the expert meditators receiving psilocybin (relative to placebo) showed greater decoupling between anterior and posterior regions of the default mode network during an open-monitoring meditation exercise conducted outside of the retreat context (Smigielski, Scheidegger, et al., 2019). Thus, while studies of concurrent psychedelics and meditation practice are few, preliminary findings indicate the potential for combined use.

Given the parallels between meditation and psychedelics, and the recent empirical studies examining their interactions, it is of interest to determine whether users of psychedelics who also meditate, commonly combine these approaches in order to achieve synergistic effects on, for example, desirable altered subjective states or well-being. If so, it is also of interest to ascertain the effects of meditating in a psychedelic state that are actually reported by such users. If participants do indeed experience enhanced subjective, well-being, or other effects associated with either psychedelics *or* meditation practice, this could have implications for the design of interventions that combine psychedelic treatments with contemplative therapeutics. In order to preliminarily develop an understanding of participants' experiences of, and attitudes toward, “psychedelic–meditation,” the present qualitative study used thematic analysis of free-text responses of users' comments about psychedelic substance use before meditating in naturalistic settings. Such an exploratory, hypothesis-generating approach seems particularly apt at this stage given the sparsity of research on this subject.

## Method

The study received ethical approval from the University College London's research ethics committee and was part of a larger cross-sectional survey examining the association between a number of mindfulness-related (e.g., decentering, trait mindfulness, acceptance) and mental health variables (anxiety, depression, substance use)

among psychedelic users. The latter data are not presented here. This study was not preregistered.

### Participants and Recruitment

Participants were included if they were adults ( $\geq 18$  years) with at least one lifetime use of a classic psychedelic (see below). Because we were recruiting a convenience and wanted to avoid participation by those who might have been motivated to provide invalid responses (e.g., for monetary compensation), the information sheet stated that there were no material benefits of participating. While Internet Protocol addresses were not stored, the survey program's functionality ensured that suspicious (e.g., multiple) responses from the same browser were prevented. No specific steps were taken to prevent respondents from providing spurious qualitative responses. However, all such text responses were read by two researchers independently, and there were no obvious signs of malicious or nonserious responding.

The study was advertised online via social media platforms (e.g., Facebook, Reddit, Twitter) and newsletters (e.g., via The U.K. Psychedelic Society) relating to psychedelics. Viewers of the advertisement were encouraged to share the survey link with others in their networks. The advertisement stated that the study was intended to "examin[e] the relationship between psychedelic drug use, mystical experiences, mental health and wellbeing" but deliberately made no mention of meditation. The generic term "psychedelics" was used in the advertisement, whereas the study site clarified that were seeking responses in relation to classic psychedelics (e.g., lysergic acid [LSD]/"acid," "magic mushrooms"/psilocybin, ayahuasca, yage, DMT/changa, 5-methoxy-N,N-dimethyltryptamine [5-MeO-DMT], peyoté/mescaline, iboga (ibogaine), *Salvia divinorum*, NBOMe/25I-NBOMe, N-Bomb), rather than drugs like cannabis, nitrous oxide, ketamine, and 3,4-methylenedioxy-methylamphetamine (MDMA). Participants entered the survey by clicking on a link on the advertisement.

The sample size was not determined a priori (i.e., by considerations of statistical power). Of  $n = 1,315$  who completed the survey,  $n = 875$  (66.5%) indicated that they practiced a form of meditation. Of these,  $n = 345$  endorsed having "ever taken a psychedelic drug shortly (i.e., minutes or hours) before a formal meditation" and were asked to indicate which drug they had used in this way (from the list of psychedelics presented earlier in the survey). The latter group of participants were invited to provide a text response describing their use of meditation in the context of psychedelic use. The  $n = 256$  participants who provided such a text response did not differ significantly on demographic characteristics from the  $n = 89$  who did not ( $p$  values  $> .2$ ). No data exclusions or manipulations were applied to these qualitative responses.

### Procedure and Measures

Participants who responded to the advert and met inclusion criteria were directed to the information page that outlined the aims of the study as relating primarily to mystical experiences. The information page also stated "We are also interested in psychedelic drug use in people who do and do not meditate," although no other aims were mentioned. Upon reading the study information, participants completed an online consent form in order to continue to the full survey.

Participants responded to questions relating to demographics, patterns and history of psychedelic drug use, and whether they

currently practiced any form of meditation. Because the term "meditation" encompasses a variety of techniques and traditions, producing a variety of effects (e.g., relaxation, heightened alertness, states of detached awareness), the definition provided to participants was deliberately broad:

Meditation ... mean[s] a practice in which you deliberately set time aside to use techniques to rest the mind and body by suspending the tendency to analyse or judge your experience. Many techniques can be used in meditation: focusing on an object, sound, experience or on the breath; using a mantra or chanting; special breathing practices (pranayama). It can involve sitting or lying still, or deliberate movement; it can be practiced alone or in groups, with or without an instructor. Some examples of types of meditation are: Vipassana, Zen meditation, Anapana Sati, mindfulness, transcendental meditation, yoga/yogic breathing, Qigong. There are many other types.

Participants who indicated that they practiced meditation were asked to provide information about their age, when they started meditating and the typical duration (min/day) and frequency (days/month) of their current practice. Type of meditation practice was not recorded.

They also indicated which psychedelic drug they had used before practicing meditation. This response was limited to only one drug. Although we did not specify which drug experience they should reference in their comments, for 55% of participants, this was the same drug as they indicated was responsible for their "most significant or important psychedelic experience" in a previous section of the survey. Participants were then invited to respond in a free-text box that requested "any comments you might have about using psychedelics before meditating." Note that the wording of the request was deliberately broad and open-ended in order to encourage a variety of responses. In particular, participants were not asked to tie their response to a particular psychedelic-meditation experience nor indeed to describe any specific *experience*. Rather, we intended the "invitation to comment" to elicit information about attitudes toward, patterns of behavior in relation to, concerns about, as well as general experiences of psychedelic-meditation. The phrasing of text response request, namely, on using psychedelics *before* meditating, reflected the authors' a priori assumptions about typical patterns of combined use (e.g., psychedelic use to aid meditation practices). This assumption will be discussed later in the article.

### Thematic Analysis

Thematic analysis (Braun & Clarke, 2006) was used to analyze participants' text responses. The text data were examined simultaneously and independently by authors KA and ET, with the aim of developing a single initial set of codes. Once codes were established and applied to the data, a structure of themes and subthemes was identified and agreed upon. This thematic structure was mapped back onto the original data by authors KA and ET to determine whether the initially identified themes were an appropriate representation of the data and to enable an understanding of the prevalence of each (sub) theme. Throughout this process, each theme was further refined and a final set of thematic labels developed.

Given the open-ended nature of the free-text responses, there was a considerable breadth of responses provided. For instance, some participants simply stating the context in which they meditated after psychedelic use, whereas others provided in-depth reflections on their

experiences and the effects of these experiences. In order to make sense of the data in its totality, no responses were discarded before analysis irrespective of how participants interpreted and responded. Rather, the extracted themes aimed to capture the broad nature of responses and tell a story about the data with regard to both its content and style. Illustrative quotes are intended to highlight specific (sub) themes, and where these are provided for specific subthemes, each is from a different participant. The quantitative data presented here are available upon reasonable request to the corresponding author.

## Results

### Sample Characteristics

Participants ( $N = 256$ ) ranged in age from 18 to 72 years old ( $M = 31.8$  years,  $SD = 10.8$ ) were mostly men ( $n = 168$ ; 65.6%) and nonreligious ( $n = 166$ ; 64.8%). They were predominantly White European, North American, or other White ethnicity (77.6%) and mostly educated to at least bachelor's degree level (83.6%). Their nationality was mostly North American (46.5%) or British (16.8%). See Table 1, for further details regarding demographic characteristics.

### Previous Psychedelic and Meditation Experience

Participants reported that their first experience with a psychedelic drug occurred 11.2 ( $SD = 10.7$ ) years prior to the study (mean age at first use: 20.6,  $SD = 7.5$ ), and on average, their most recent use occurred in the past half year ( $M = .5$  years,  $SD = 2.7$ ). Their most significant psychedelic experiences occurred on average 4.1 ( $SD = 5.9$ ) years ago. They reported starting their meditation practice an average of 8.8 ( $SD = 9.4$ ) years prior to completing the survey, and practiced an average 15.9 ( $SD = 9.5$ ) days/month for an average of 32.3 ( $SD = 32.3$ ) min/day. Regarding the psychedelic consumed prior to meditating, these were primarily psilocybin or LSD (Table 2).

### Thematic Analysis

Six overarching themes were identified, each with corresponding subthemes. Themes/subthemes are illustrated with extracts from the data. A compact and simplified map depicting the data-driven thematic structure is presented in the Supplemental Material. Table 3 provides an overview of the main themes and subthemes alongside illustrative quotes, as well as details of the prevalence of each (sub)theme within the data set *as a whole*.

### Compatibility Between Psychedelic and Meditative States (Theme 1)

Participants referred to a qualitative similarity between psychedelic and meditative experiences, but indicated that the psychedelic experience was more intense than the meditative experience, for instance:

They make the same effect although less intense with yoga/meditation.

Others noted that psychedelic and meditative effects might represent a similar core experience:

I think that psychedelic experiences are meditations.

Beyond their correspondence, some participants' accounts spoke more specifically to their compatibility, a discussion of which often

**Table 1**

*Sample Characteristics by Gender, Religion, Ethnicity, and Education Level (Frequency and Percentage)*

Sample demographics	<i>N</i>	%
Gender		
Male	168	65.6
Female	70	27.3
Other	18	7.0
Ethnicity <sup>a</sup>		
White	198	77.6
Mixed heritage	35	13.7
Asian	9	3.5
Other	7	2.7
Hispanic/Latin American	4	1.6
Black	2	0.8
Religion		
No religion	166	64.8
Other	39	15.2
Buddhist	16	6.3
Spiritual	14	5.5
Christian	11	4.3
Hindu	4	1.6
Jewish	4	1.6
Muslim	2	0.8
Education level		
Bachelor's degree	117	45.7
A-level/equivalent	87	34.0
Master's degree	33	12.9
GCSE/equivalent	10	3.9
Doctoral degree	9	3.5

Note. GCSE = General Certificate of Secondary Education.

<sup>a</sup> Ethnicity data missing for  $n = 1$ .

co-occurred with the notion of meditation having utility during the psychedelic experience (explored in more depth in Subtheme 5.1):

They work in harmony, as the meditation helps your mindset as you go into the experience.

**Intuitive and Spontaneous Meditation (Subtheme 1.1).** A spontaneous drive to meditate after consumption of psychedelics encompassed embodied movement and body-oriented practices, as well as sitting meditations:

I found the most comfortable position(s) my body would be, was in yoga poses. After some intense stretching I usually end up meditating ...

Notably, this subtheme was not the preserve of experienced meditators (see Table 3). Participants alluded to an increased accessibility

**Table 2**

*List of Psychedelics Used Before Meditating (Frequency and Percentage)*

Psychedelic substance	<i>n</i>	%
Psilocybin (magic mushrooms and truffles)	103	39.1
LSD and analogs	100	40.2
Ayahuasca or yage	20	7.8
DMT and changa	16	6.3
Other psychedelic drug <sup>a</sup>	13	5.1
Peyoté or San Pedro	3	1.2
<i>Salvia divinorum</i>	1	0.4

Note. LSD = lysergic acid; DMT = dimethyltryptamine.

<sup>a</sup> Specific drug not recorded.

**Table 3**

*Overview of Main Themes and Subthemes and Their Prevalence in the Data, Alongside Illustrative Quotes*

(Sub)theme identifier	(Sub)theme name	Number of occurrences	Illustrative quotes
1	Compatibility Between Psychedelic and Meditative States	41	"... They go hand in hand."
1.1	Intuitive and Spontaneous Meditation	10	"After a 7-gram psilocybin mushroom trip. I meditated for 2 hr straight. Had never meditated before that day."
2	Enhancement of the Meditative and Psychedelic Experience	103	"amazing experience. Was able to visualize and see so much mor[e]" "... I feel that meditating greatly increased the experience in a spiritual way. This was my most profound experience" "[meditation] intensifies the appreciation of the beauty that is coming up over you"
2.1	Enhanced Meditation Experience	65	"Very insightful meditating tool when employed properly. Almost like an enhancer."
2.1.1	Enhanced Meditative Ability	24	"found it helped step back and observe passing thoughts"
2.1.2	Enhanced Depth/Quality of Meditation	23	"It seems deeper. There's usually a sense of me becoming impatient when meditating, but there's a feeling of it not lasting long enough upon taking the psychedelic." "I find I am able to go a lot 'deeper' and gain more useful insight by combining psychedelics and meditation, as each enhances the other."
2.1.3	Psychedelics as a Shortcut to Meditative States	10	"... It felt like if I temporarily had a lot more experience meditating and thus the meditation was more successful and greater. It felt like I got in 15 minutes where one would get if he meditated for hours."
3	Beneficial Changes in Relating to the Internal and External World	96	"It puts me in a much better place and my experience always ended up being more positive and helpful."
3.1	Acceptance	5	"I had to deal with me, my past, my future and myself, my ego. I couldn't run away because there was nothing to distract me."
3.2	Connection	20	"Felt more aware of the connection between my body/mind as well as the connection between Me and The World. Grounded, aware, more in tune with spirituality."
3.3	Peacefulness	17	"I found my mind was in a state of effortless stillness, serenity ..."
3.4	Transformation	20	"I felt like I was given answers to questions I've always had." "After waking for meditation I had intense appreciation for my body and my mind, which set me to follow with other practices for the mental and physical well-being and set me on a mindset where I would constantly figure how to improve everything about myself." "It was a wondrous experience to say the least, that left me with a profound feeling of altruism that lasted for far longer than the trip itself."
4	Negative Effects of Combined Use	28	"I found it uncomfortable to try and control my trip through meditation." "Gives muddled results."
4.1	Becoming Overwhelmed	17	"Scary how thoughts can be irrational. Decided to stop meditation because of the rabbit hole I created."
4.2	Difficulty Meditating	6	"I found it almost impossible to do." "I think you need to get the dose right or it isn't possible to meditate!" "Harder to concentrate, but if you can let go, a magical experience."
5	Meditation as a Preparatory and Navigational Tool	49	"Meditation helps to increase focus and grounding."
5.1	Meditation as Preparation	33	"On the come up of a strong dose of magic mushrooms, it is pleasant to meditate beforehand and 'meditate' into the experience. It provides a profound sense of calmness, relaxes random thoughts ..." "The meditation ensures I can focus on my intention before going into the experience." "It helped set the intention for my trips really well. The DMT trip that was the most profound for me personally was preceded and included meditation in the morning ..."
5.2	Meditation to Navigate the Psychedelic Experience	12	"Meditative practices have been very useful in calmly navigating intense psychedelic experiences." "The meditation ensures I can ... become open to the experience whatever will come up."
6	Contextual Considerations	70	"I played ambient music, closed my eyes and practiced deep breathing."

*(table continues)*

**Table 3** (continued)

(Sub)theme identifier	(Sub)theme name	Number of occurrences	Illustrative quotes
6.1	Reflections on Personal Processes	39	“Meditation and prayer before each experience.” “All my practices involving plant medicines are meditations, done alone in the dark or like intentional group setting.”
6.2	Advice for Implementation	14	“Allowance and receptivity are key. Go with the flow and not fight it.” “Low doses are the best option.”

*Note.* Each occurrence counted in the “number of occurrences” column corresponds to an extract within the entire collated data set. A single participant’s written response often covered more than one theme/subtheme. Where a participant’s complete written response included >1 reference to a single specific (sub)theme, only one occurrence of that specific (sub)theme was counted. However, separate occurrences were counted when different subthemes of a single overarching theme were present. For instance, a participant’s response may describe Acceptance (Subtheme 3.1), Connection (Subtheme 3.2), as well as general Beneficial Changes (Theme 3). All would be counted, despite all pertaining to the same overarching theme. Further, the total number of occurrences for each of the six overarching themes subsumes the totals of the subthemes, as well as occurrences of the broad theme itself (i.e., those extracts which referred to an overarching theme, but not any specific subtheme). For example, of the 103 extracts reporting Enhancement (Theme 2), 65 described an Enhanced Meditation Experience (Subtheme 2.1) specifically. Of these 65 extracts describing an Enhanced Meditation Experience (Subtheme 2.1), 24 spoke specifically of an Enhanced Meditative Ability (Subtheme 2.1.1), 23 spoke of an Enhanced Depth/Quality of Meditation (Subtheme 2.1.2), and 10 described Psychedelics as a Shortcut to Meditative States (Subtheme 2.1.3). The final eight extracts comprising the Enhanced Meditation Experience subtheme (Subtheme 2.1) refer to those more general extracts which are not captured by the subsequent subthemes. The remaining 38 extracts of the Enhancement theme not otherwise captured, spoke only to the overarching theme, and did not provide detail that was better captured by any subthemes.

of the meditative state, relating to the subtheme of Enhanced Meditation Experience discussed below (Subtheme 2.1).

### ***Enhancement of the Meditative and Psychedelic Experience (Theme 2)***

Closely related to the alignment between psychedelic and meditative states is the second theme, referred to as Enhancement. Whereas compatibility can be assumed to be necessary for enhancement of the psychedelic and/or meditative experience, enhancement is not a necessary consequence of compatibility. Accordingly, Enhancement was considered a distinct (and prevalent: 103 responses) overarching theme. Broadly, this theme captures enhancement of the overall experience, encompassing a reciprocity between meditation and psychedelic effects. Extracts that did not specify the direction of enhancement but rather spoke to an overall enhanced experience are captured within this theme. “Enhanced Meditation Experience” was identified as a distinct salient subtheme and is described separately below.

The generalized enhanced state arising from combined psychedelic use with meditation was explicitly described in many participants’ narratives, for instance:

[meditating with psychedelics] enhanced the experience tenfold.

Others highlighted enhancement relative to prior expectations:

I was surprised by the intensity of the trip while meditating relative to the dose I took.

Some noted an amplification of specific aspects of the psychedelic experience. More specifically, these enhanced effects referred to visual components of the psychedelic experience:

... mainly to accentuate the visual aspects of the experience.

Specific mystical or spiritual aspects of the psychedelic experience were induced or enhanced by meditating:

it gave me the single most mystical experience of my life.

Other extracts emphasized the transcendent aspects of the experience:

... made me feel that feeling of oneness much faster and more “real” that it has before.

**Enhanced Meditation Experience (Subtheme 2.1).** This related to specific enhancement of the meditative rather than psychedelic aspects of the experience. In describing this enhancement, some participants alluded to contextual determinants (see Theme 6 “Contextual Considerations” below):

... if used appropriately, psychedelics greatly enhance my meditation practice.

Some alluded to a potential dose-dependence, with the implication that higher doses might not have an enhancing effect on meditation:

Up to a certain dosage, it heightens the meditation.

**Enhanced Meditative Ability (Subtheme 2.1.1).** This subtheme tended to encompass the detached awareness or “defusion” that is characteristic of meditative states:

Augmentation of the mind’s capabilities to slow down and process thoughts; an ability to feel the nature of part of the mind to attach to thought-forms and become fixated, and then a very clear ability to un-fixate said thought-forms.

In addition to ostensibly facilitating this form of detached awareness, an altered relationship to internal experience was also captured (e.g., “... increased sense of focus and ability to quiet ... thoughts and allow [the] mind to flow”). An enhanced ability to focus on the here-and-now—a feature of mindful mental states—was also identified (e.g., “They [psychedelics] greatly enhanced my ability to focus on the present”). Some noted an enhancement in sustained attending:

Using psychedelics before meditating helps you get to an extreme high in your meditation, and it allows your mind to focus more on the meditation and for a longer period of time.

These descriptions, with their emphasis on focused and sustained attention, resemble aspects of the definition of mindfulness meditation (Kabat-Zinn, 2013).

**Enhanced Depth/Quality of Meditation (Subtheme 2.1.2).** Participants described an enhancement of the depth and/or quality of

meditation after psychedelic use, which, while perhaps related to an enhanced meditative ability, appeared to express a distinct and salient subtheme focusing on depth. This depth of meditation was contrasted against nonpsychedelic meditative experiences in terms of ease of attaining a sustained meditative state:

Makes it easier to get into deep states of meditation and stay there.

This meditative depth elicited insight (see Table 3) and other desirable outcomes:

It makes the meditation so much more profound, beautiful, and powerful.

Overall, participants alluded to, or—as below—explicitly expressed the psychological processes that they believed to underpin the enhancement of meditation (i.e., altered focus, presence, self-relating):

While tripping my perception, focus, and insight are sharpened to a seemingly superhuman degree. Time dilates, the ego subsides. This all facilitates extremely potent meditative experience.

**Psychedelics as a Shortcut to Meditative States (Subtheme 2.1.3).** Finally, descriptions of being able to more quickly or efficiently achieve desired meditative states were present among participants' responses. This is closely related to the subthemes of an enhanced ability or depth of meditation but specifically describes attributions of this enhancement to psychedelics having accelerated or acted as a catalyst for an otherwise slow and effortful process. For instance, while the subtheme of "Enhanced Meditative Ability" might capture a greater degree or ease of detached awareness from cognitions, the subtheme, "Psychedelics as a Shortcut" speaks to arriving more readily at this state:

The psychedelic felt as if it was a catalyst or helping hand, so to speak, to realize I am not my thoughts.

Psychedelics throw you over the figurative fence that meditation helps you build a ladder for ...

This subtheme also emphasized that psychedelics may be capable of mimicking the effects of long-term meditation:

Psychedelics essentially give you a shortcut to the place an experienced practitioner would reach through meditating.

Though, notably, despite this seemingly desirable shortcut, one participant cautioned against a belief that psychedelics can or should replace meditation:

you are able to travel to spaces of your mind that were otherwise unattainable unless you were to meditate for days on end. While I do not believe psychedelics should be a substitute for meditation, I do think they can be used concurrently with great success.

### ***Beneficial Changes in Relating to the Internal and External World (Theme 3)***

While Enhancement may be considered an effect of combining psychedelics with meditation, a broad theme referred to as "Beneficial Changes" captured the general positive effects of psychedelic-meditation (see Table 3), subthemes of which are described here.

**Acceptance (Subtheme 3.1).** This subtheme was characterized for some, by a sense of *self*-acceptance. The below extracts indicate

that this state may contribute to an enhanced ability to meditate and the notion that psychedelics offer a shortcut to desired meditative states (see Subtheme 2.1.1 and Subtheme 2.1.3, respectively):

My experience is that psychedelics help me to enter a meditative state more readily and with less judgement of self.

My best trips have been from taking mushrooms/acid and just sitting and breathing for hours. It's resulted in an overall calmness and sureness of myself and who I am.

This subtheme further refers to an acceptance of the experience itself and being able to "surrender" or turn toward the psychedelic experience, even when it was accompanied by difficult feelings:

it helps to be conscious with the experience from the start [and] ... [to] deal with/surrender to emotions as fear.

**Connection (Subtheme 3.2).** This related to a sense of connection to the self, others, and the world/universe (see Table 3). In some individuals, this sense of connection was ineffable or accompanied by awe, in line with the known mystical effects of both psychedelics and meditation:

There are no words that can fully describe the experience. The ultimate connection with the soul.

**Peacefulness (Subtheme 3.3).** Participants referred to the effects as "very peaceful," involving complete or total "relaxation" or having some "calming" effect, for instance:

When meditating on psychedelics, there's a sense of timelessness, and inner calm.

This sense of calm was mentioned in relation to meditation as preparation for the psychedelic experience (as explored below in Subtheme 5.1):

It helped me start off the trip in a positive and relaxed way ...

Alternatively, extracts linked the sense of calmness with a feeling of "connection" with the external world (relating to Subtheme 3.2):

Getting into a state of calmness and inner peace, losing sense of self and being emerged into the senses.

Participants also highlighted accessing depths or qualities of peacefulness not ordinarily inaccessible by them (as characterized also by Subtheme 2.1.2):

Many levels deeper in meditation into a whole new headspace of peace never experienced before.

**Transformation (Subtheme 3.4).** While the above-described Beneficial Changes subthemes relate broadly to acute effects occurring during the psychedelic experience, "Transformation" refers to positive consequences of combined psychedelic use and meditation, which seemed to extend beyond the acute phase. Participants described a sense of emergence or freedom:

It is one of the most liberating experiences of my life.

Others noted a shift in perspective or altered attitudes, while some reported enduring transformative changes, characterized by a compassion and care for self and others (see Table 3).



### *Negative Effects of Combined Use (Theme 4)*

Accounts relating to some negative consequence of combining meditation and psychedelics fell into one of two subthemes: “Becoming Overwhelmed” or “Difficulty Meditating.” Few responses referred to more general undesirable effects of psychedelic–meditation, such as not wanting to interfere with the unfolding psychedelic experience by meditating (see Table 3).

**Becoming Overwhelmed (Subtheme 4.1).** In contrast to the subtheme of Peacefulness, some participants reported that their experience was “too intense,” even in the context of generally positive subjective feelings, highlighting the nuanced nature of any benefits of combining meditation with psychedelic use:

there can be a profound sense of connection and peace which is always there when meditating but is almost overwhelming when tripping as well.

Some participants explored this sense of being overwhelmed as attributable to a loss of cognitive control or coherence and an apprehension of this path (see Table 3). Becoming overwhelmed was also linked to the above subtheme of Acceptance (see Subtheme 3.1), or more specifically its precursor of nonavoidance, and the difficulty of confronting unwanted internal experiences:

I find meditating actually make it more likely to have a challenging [experience] because it forces me to be [with] my thoughts and emotions.

**Difficulty Meditating (Subtheme 4.2).** Another “negative effect” resulting from meditating after taking psychedelics was that, for some, the capacity to concentrate/maintain a mental space appropriate for meditation was inhibited:

It is more challenging to calm my mind.

Some participants discussed the potential for the combination to be helpful, but this depended on dosage (see Table 3). Others noted an initial difficulty engaging, followed by a positive summary of experience, for instance:

I find it hard to concentrate on meditating while tripping, but once going it feels like my whole body is glowing.

Alternatively, some admitted an enhancement of effects (as per Subtheme 2.1), simultaneous with a difficulty concentrating:

Very interesting experience. It seemed to amplify it, but was hard to stay focused.

### *Meditation as a Preparatory and Navigational Tool (Theme 5)*

As described in Method section, responses were treated as referring to meditating shortly after psychedelic consumption, that is, their simultaneous combined use/effects, unless otherwise specified by participants. Indeed, some participants indicated meditating as a form of preparation within this theme. This theme and its associated subthemes are closely related to Enhancement and Beneficial Changes: Meditation may be a tool used for the enhancement of particular psychedelic effects (e.g., the visual/mystical) and/or the beneficial changes described above. These overlaps are described below.

**Meditation as Preparation (Subtheme 5.1).** A proportion of participants ( $n = 33$ ) described using meditation to establish a receptive mindset or bodily state:

Great way to let the anxiousness that is often associated to the wait period of psychedelic onset. It’s also a great way to sort of stretch the mind prior to a psychedelic experience.

I believe in meditating not just after but also BEFORE taking psychedelics. It’s extremely important to root oneself beforehand. I’ve had the most powerful results when I do shavasana (corpse pose) and breath awareness before any kind of entheogenic journey.

I meditated to deal with come up anxiety, (up to 2 hours after ingesting LSD) and I experienced increased synaesthesia/visually creative ideas.

Some participants described practicing meditation in order to set intentions for the psychedelic experience:

it helps to be conscious with the experience from the start [and] helps to set intention [and] check in to deal with/surrender to emotions as fear.

I decided to meditate immediately following ingestion of the mushrooms in order to focus my intention of the experience. I had finished meditating before I began feeling the effects of the mushrooms, however I feel that meditating greatly increased the experience in a spiritual way. This was my most profound experience in which I gain much insight into the nature of things, and was more than a recreational trip.

**Meditation to Navigate the Psychedelic Experience (Subtheme 5.2).** Participants’ responses described meditation as a supportive adjunct to the psychedelic experience, with regard to “any unsettling parts of [the] trip”:

being in meditation helps navigate potential difficult thoughts/experiences that might come up during the trip.

More specifically, meditation appeared capable of providing a greater ease with regard to managing the often-difficult alterations in self-relating known to occur under both psychedelic and meditative states (i.e., varying degrees of “ego-dissolution”):

Meditation made ego deaths easier and smoother to accept.

The participant’s depictions alluded to how meditation may support navigating psychedelic experiences, including through establishing a sense of willingness (relating closely to Subtheme 3.1: Acceptance):

I credit my ongoing meditation practice as well as the meditation session I had immediately prior to taking 5-MEO-DMT with my ability to let go and surrender into what I imagine would otherwise have been a negative experience due to its overwhelming nature.

An additional way in which participants described benefiting from using meditation was as a “tool” to enable a sense of control over an otherwise intense and seemingly uncontrollable journey:

I remember feeling less consumed or overwhelmed by the experience, more stable and like the visuals were more decided by my mind than my surrounding environment.

### *Contextual Considerations (Theme 6)*

The fifth and final theme refers to those extracts that interpreted the question not as an invitation to describe effects but to provide details of the environment or context within which combination has taken place or should take place. This theme of Contextual Considerations subsumes the subthemes “Reflections on Personal Processes” and “Advice for Implementation,” though a number

of participants simply noted the historical context within which they meditated in combination with psychedelics, for example:

... done alone in the dark or like intentional group setting.

**Reflections on Personal Processes (Subtheme 6.1).** These responses included individual recollections of the “how or what” of combined experience (not otherwise captured by the (sub)themes), referring not necessarily to a singular experience or memory but alluding to a ritualistic or habitual way of approaching psychedelic meditation experiences, for instance (see Table 3). Others identified a felt necessity for integrating meditative practices with psychedelics:

mediation, breathing, music and nature are the most important parts of the experience.

**Advice for Implementation (Subtheme 6.2).** Finally, a subtheme was identified which offered reflections and suggestions on how one should (or indeed, should not) proceed with combined practice, offering advice across a number of domains. Some spoke to the significance of one’s mental state and physical surroundings:

Have a sitter, be open minded and in a safe environment.

While the above extract alludes to the known considerations of “set” and “setting,” this was also stated explicitly:

Set & setting, don’t do it if it doesn’t feel right at the time. Zero distractions!

Further advice for implementation related to dosing with all extracts pertaining to this advice highlighting the “right dose” or more commonly a sufficiently “low dose.” Finally, reflections were offered on the need for a level of familiarity with both psychedelic and meditative states, to be best supported through the experience:

I think you need to be proficient and experienced at both, or with someone who is who can guide you

## Discussion

The present study describes a thematic analysis, based on a large qualitative data set of participants’ experiences of meditation in the context of psychedelic use. Here, we attempt to link our findings to related theory and empirical work. In the interest of brevity, we focus our current discussion on a limited number of salient (sub)themes described above.

As outlined in the Results section, the themes of Compatibility and Enhancement were closely related. Indeed, a degree of compatibility can be understood as a necessary condition for enhancement of meditation effects by psychedelics and vice versa. This is highlighted in previously published studies examining the combined effects of compassion-oriented meditative techniques and the nonclassic, mild psychedelic, MDMA, in naturalistic settings. These studies (Kamboj et al., 2015, 2018) proposed that the additive effects of MDMA and compassionate imagery on feelings of self-compassion relied on the experiential consistency (or compatibility) between the meditative and MDMA-induced subjective states. As such, meditative practices might provide a suitable set for psychedelic experiences (see below), and conversely (and more directly relevant to the present study), psychedelics may themselves produce a conducive *set for meditation*.

The theme of Compatibility aligns with recent literature exploring the parallels between the effects and outcomes of psychedelics and meditation, especially in relation to psychological disorders. Over-elaborated and inflexible self-conceptualization plays a particularly important etiological role in psychopathology (Hayes et al., 2006), and meditation techniques are thought to alleviate suffering and promote well-being by loosening one’s ties to a rigid self-concept. This is achieved through various cognitive and attentional meditation techniques, which allow habitual patterns of thinking, feeling and perceiving to be noticed, and for a more clear-eyed understanding of these modes of experience to emerge (i.e., insight or meta-awareness; Lutz et al., 2008). Similar, but more sudden and dramatic insights into the nature of the mind and reality are thought to be a consequence of psychedelic-induced mystical experiences (Johnson et al., 2019). In addition, as discussed in the introduction, psychedelic use produces similar outcomes to those found following periods of extended meditation.

Recently, research trials have either examined the combined effects of psychedelics and meditation (referred to as “spiritual practices,” which incorporated aspects of attentional, insight, and mantra meditation; Griffiths et al., 2018) or compared psychedelic effects with meditation-based psychosocial treatment (mindfulness-based stress reduction; Soler et al., 2018). These studies suggest that in the absence of any meditation practice, psychedelics alone mimic the effects of meditation, although this might not be a unique characteristic of psychedelics (Thomas et al., 2021). Findings from Smigielski, Kometer, et al. (2019) also highlight the ability of psilocybin treatment to enhance meditation outcomes (state/trait mindfulness), partially in line with the present study’s observed theme of Enhanced Meditation Experience.

The notion that psychedelic drugs are a “shortcut” to meditative states (Subtheme 2.1.3) was highlighted in a separate subtheme under Enhancement. It should be noted that this subtheme is generally distinct from the apocryphal notion that psychedelics could substitute for thousands of hours of monastic practice (Goleman & Davidson, 2017), although infrequent examples of this idea also appeared in the data (see Results section: Subtheme 2.1). Instead, participants seemed to have a realistic view of psychedelics as catalysts for achieving desired meditative states, rather than as substitutes for meditation practice. In addition, the notion of overall enhancement of the psychedelic experience through the use of meditation is worth considering in terms of its clinical implications. We suggest that meditation might act as a “psychedelic-sparing” strategy in psychedelic psychotherapy, enabling therapeutically important subjective (e.g., mystical) states to emerge at lower doses.

Within the subtheme of Beneficial Changes, the analysis indicated that psychedelic–meditation might support experiences of (self-)acceptance, in line with research findings that psychedelics alone (without meditation) increase specific facets of mindfulness (nonjudgment and nonreactivity; Soler et al., 2016, 2018). Relatedly, acceptance is a defining feature of mindfulness (Bishop et al., 2004), as well as a putative mediator of its therapeutic benefits (Baer et al., 2006). Our analysis also highlighted that acceptance of emotions arising during the psychedelic experience might be aided by meditation.

The subtheme of Transformation was related to experiences of insight, shifts in emotional state, and a sense that desirable effects persist beyond the acute psychedelic–meditative state. Experimental

studies with healthy volunteers (Griffiths et al., 2008, 2011) have shown moderate-sized, enduring (>12 months) positive effects attributable to a single or small number of psychedelic doses. On the other hand, some researchers (Payne et al., 2021) have expressed understandable skepticism that one-off or infrequent psychedelic treatment (coupled with low intensity psychological support) could produce lasting symptomatic improvement in patients with treatment-resistant mental health difficulties. However, theoretically driven treatments that target etiologically important mechanisms can indeed have enduring effects on chronic symptomatology (e.g., Das et al., 2019). In the context of the present study, psychedelics may “[initiate] an often-dramatic reorientation toward more adaptive values, attitudes, and behaviors” (Payne et al., 2021, p. 417). Openness to (or acceptance of) these dramatic effects is likely facilitated by mindfulness-type meditation (or trait mindfulness) during acute psychedelic effects. In terms of enduring benefits, state (memory)-dependent effects might enable the adaptive changes occurring during psychedelic–meditation to arise (i.e., be recalled) during subsequent drug-free meditation practice.

To expand on this, what we mean here by “meditation practice” is an ongoing, intentional, and committed use of meditation techniques outside of the psychedelic context. A tendency to practice *during* the psychedelic state could reflect the intuitive drive to meditate referred to in the Results section (Subtheme 1.1), but this might not itself be the primary mechanism by which enduring, transformational effects occur (other than by facilitating openness to the psychedelic experience). Instead, we suggest that lasting beneficial effects of psychedelic–meditation are likely to rely upon ongoing meditation practice, which, in addition to promoting benefits arising from meditation per se, also allows rehearsal and strengthening of any adaptive learning that occurred during the psychedelic–mediation experience(s).

We also acknowledge that for some, the combined effects of meditation and psychedelics might be overwhelming or mutually impairing. Based on our (admittedly limited) data summarized under the Negative Effects subtheme, a sense of feeling overwhelmed might be understood as a confrontation with typically avoided internal events, beyond the individual’s capacity to tolerate these. One possibility is that those who experienced such negative effects might be less experienced meditators. Such participants might have a less well-developed “protective awareness,” namely, the capacity to discern potentially harmful contents and processes of mind (Feldman & Kuyken, 2019). Such discernment might be important for enabling the individual to wisely steer their psychedelic experience in a benign or beneficial direction, especially in the absence of a guide or therapist.

The theme of Negative Effects is also a reminder that individually, meditation or psychedelics can cause distressing experiences. For example, experiences of fear, grief, and physical distress are not uncommon after psychedelic use (Barrett et al., 2016). A recent review (Schlag et al., 2022) examining the potential harms of psychedelic drugs notes that while medical risks are minimal, adverse psychological events may occur more readily in unsupportive environments. Meditation alone should also not be considered universally beneficial or benign. A nontrivial proportion of participants undergoing meditation-based or “mind–body” interventions suffer from adverse effects (usually in the form of symptoms indicative of affect dysregulation, e.g., hyperarousal, insomnia, panic; see Britton et al., 2021; Taylor et al., 2022). Given their separate potential for

causing adverse effects, and the fact that their effects may be mutually synergistic, it is likely that those who are susceptible to adverse responses to either meditation or psychedelics alone may experience augmented negative responses with psychedelic–meditation. In addition though, adverse responses to one consciousness-altering practice might be indicative of a more general vulnerability to negative effects of such practices/interventions. For example (speculatively), psychedelic naïve individuals who experience adverse effects of meditation alone might consider this diagnostic of their potential response to psychedelics and should perhaps avoid these drugs.

The subtheme of Peacefulness was relatively common and expressed an enhanced state of equanimity (relative to any relaxing effects produced by meditation or psychedelics alone). Further, the use of meditation and establishing a sense of peace/calm was considered to be part of forming a *preparatory set* for the psychedelic experience. The presence of this subtheme was noteworthy because participants were primed to discuss meditating *after* psychedelic consumption. This might explain references to the use of meditation “On the come up . . .” (i.e., in the acute postconsumption phase; see Table 3: Subtheme 5.1, Meditation as Preparation). Participants’ responses also highlighted the value of meditation in managing anxiety, building focus, and supporting a grounded position and intention setting. These effects suggest that meditation can provide an appropriate “set” prior to the onset of psychedelic effects. The value of preparatory meditation practices in the months preceding psychedelic use was recently demonstrated in an experimental, lab-based study (Griffiths et al., 2018).

## Strengths and Limitations

By qualitative study standards, our sample size was relatively large, and the reliability of our results was enhanced by independent analyses of all text entries by two researchers. However, we also acknowledge some significant limitations of this exploratory study. Some of these are inherent to the use of internet surveys, which must balance participant burden with the desire to obtain greater and more detail information about the phenomena of interest. In this respect, it should be noted that we had no strong a priori basis for guessing what proportion of respondents would indicate that they meditated during psychedelic experiences and hence consider detailed questions about psychedelic–meditation to be relevant to them. However, as a result of favoring a concise set of questions, some variables of interest were not obtained through questionnaires/scales (e.g., whether participants had experimented with different psychedelics during meditation; whether they believed different psychedelic drugs to interact differently with meditation; whether they used different types of meditation techniques with different drugs). We also did not obtain quantitative information about the regularity with which participants combined psychedelics with meditation practices nor the typical pattern or motivation for doing so (although some of these details emerged in the qualitative responses). For example, we did not enquire about whether participants tended to use meditation as preparation or as an integration tool. Instead, we specifically enquired about participants’ use of meditation techniques in the context of an acute psychedelic episode, based on our assumption that this timing is optimal for pharmacologically augmenting the effects of a behavioral “intervention” (e.g., Thomas et al., 2021). In other words, we were asking participants (indirectly) to comment on

their use of psychedelics as a means of *generating* an appropriate “set” for meditation, rather than the other way around. Set and setting are familiar concepts in psychedelic research, although equivalent ideas relating to therapeutic ritual, persuasion, and expectations/beliefs (Frank & Frank, 1993) are also relevant for therapeutic meditation practices. These ideas remind us that in addition to the genuine potential for synergy, it is possible that extrapharmacological and nonspecific influences of context and expectation were potentially amplified and contributed to participants’ reported experiences and beliefs about compatibility and enhancement. These influences are clearly more likely to be evident in cross-sectional, nonexperimental studies with a convenience sample of self-selecting psychedelic users than in participants who are naive to both psychedelics and meditative practices. Such participants were more likely to volunteer based on positive psychedelic experiences. However, notably, the study information made no mention of meditation, and as such, expectancy effects related to the specific issue of combining meditation with psychedelic use were minimized. Moreover, a proportion—albeit a minority—also disclosed negative aspects of psychedelic–meditation. Finally, the phrasing of our request for qualitative information about psychedelic–meditation encouraged participants to discuss their experience of meditating *after* psychedelic use. Although this did not preclude discussion about meditation as preparation, this theme may have been considerably underrepresented in our transcripts. The qualitative responses were garnered from an open-ended request to comment about psychedelic–meditation, and no further guidance was provided in relation to the time frame or specific experience that participants should reference when writing their responses. This lack of guidance gave participants wide latitude on what they chose to write about the emphasis they chose. Had the sample size been substantially smaller, this may have resulted in a great deal of variability in (relative to the number of) responses, leading to problems in achieving saturation. However, in the current relatively large (at least for qualitative studies) sample, this was less of a concern. Despite these limitations, the findings are based on a large sample size (for qualitative studies), increasing our confidence in the reported themes.

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