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The Self-Pattern and Buddhist Psychology

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Abstract

In this paper, we address core insights from Buddhist psychology about mind-body phenomena and the self, and we relate such insights to the notion of the self-pattern developed in the pattern theory of self. We emphasize the dynamic, temporal and enactive characteristics of the self-pattern, consistent with the core Buddhist notion of non-self. Although there is no one-to-one mapping of Buddhist psychological concepts onto the pattern theory of self, there are important similarities among such concepts and the various processes and dynamical relations that constitute a pragmatic self-pattern that can explain both experiences of self and non-self. Buddhist psychology and the notion of the self-pattern offer mutual insight into the processes, the dynamics, and the implications for questions about well-being and a flexibility that avoids anxiety and reduces attachment, craving, and suffering.

Keywords self · non-self · the five aggregates · dynamical pattern · meditation

Popular conceptions suggest that Buddhism denies the existence of the self. The situation is more complex. Buddhist scholars agree that the Buddhist view of non-self "is not an absolute denial of self as such, but a quite specific denial of self as an enduring substance" (Gethin, 1998, p. 145). In this respect, the self is not considered to be a substantial entity, but rather, a "construct that comes to be only in dependence on complex configurations of multiple mental and material events (the aggregates)" (Dreyfus, 2011, p. 118). Evan Thompson (2020), who emphasized how complicated the Buddhist views of non-self are, suggested that this does not mean that what we call the self is not real

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in some sense. Rather, it is consistent with thinking of self as a set of processes that form a real pattern. The idea is that rather than understanding the self as a substance or as an abstraction, it can be understood as forming a pattern of processes or factors that are dynamically interrelated.

Without developing this suggestion further, Thompson referenced the notion of a self-pattern as proposed in Gallagher (2013). In this paper we elaborate on this idea and consider how the notion of a self-pattern and Buddhist conceptions of non-self and the five aggregates (*khandhas*, Pali*; skandhas*, Sanskrit) can provide complementary insights into the nature of mind and the self.

We start with a brief primer on the idea of the self-pattern. We then look for ways in which this idea has turned up in Buddhist psychology, and finally suggest why the concept of self-pattern and the Buddhist notion of the five aggregates can lead to some mutual insights.

A brief primer on the idea of self-pattern

The notion of the self-pattern contrasts to traditional Western views of self as substance, as might be found in Descartes (1641). At the same time, it contrasts to deflationary or reductionist views where self or personal identity has been equated exclusively with psychological continuity, or bodily continuity, or narrative identity (Schechtman, 2011), or an illusion caused by neuronal processes (e.g., Metzinger, 2004). The self-pattern is more consistent with pluralist conceptions of self, as found in William James (James, 1890) and Ulrich Neisser (Neisser, 1988), who suggested that self is more than any one factor. Rather, a number of different factors contribute to what we call self (e.g., ecological, interpersonal, psychological, narrative factors). The pattern theory of self builds on this pluralist view to incorporate a set of factors derived from both traditional philosophical conceptions of personal identity and ongoing debates about the status of self-related processes in philosophy of mind and the cognitive sciences. It argues that what we call self, or what the self is, just is a pattern of dynamically integrated processes or factors (Gallagher, 2013). For example, ecological factors include how my body dynamically relates to the surrounding environment. Such relations can be shaped by a particular set of my skills or habits, and in turn can constrain my actions and my intersubjective interactions, as well as my sense of agency – all of which may contribute to my self-experience and to defining who I am. These are all factors that can also get expressed in my self-narrative about my actions and my encounters with others. Accordingly, these bodily, ecological, interpersonal, agentive and narrative factors interrelate to form a pattern which is what we call self.

A pattern of this sort can be thought of as a system of factors or processes that lacks any strictly necessary conditions, but rather consists of several jointly sufficient conditions. For this reason, the concept of a self-pattern can, at the most general level, accommodate different conceptions of self or personal identity. For example, one might think that a self certainly requires a body, or that in some sense I am or have a particular body. On some theories, however, a body, or a specific body is not necessary. For example, some medieval Christian theologians, who, despite thinking that in the human case bodies help to individuate the person, consider angels, who have no bodies, to have self-identities (e.g., John of Damascus, although there is a dispute between Thomists and the Scotists about whether angels have a species identity, or individual identity, respectively; see Pini, 2012). Likewise, cognitive scientists who endorse functionalism may think that my body does not contribute anything essential to my self-identity since what counts for self-identity is psychological continuity and that can be uploaded or instantiated in an artificial system (a computer or a robot, perhaps) – no human body needed (e.g., Dennett, 1981; Kurzweil, 2005; see Cappuccio, 2017 for a critical review). It is also the case that in some pathologies, typical characteristic features of a person may be disrupted or go missing – for example, the sense of agency in some psychotic patients (Frith, 2015; Gallagher, 2000; Stephens & Graham, 2000), or a self-narrative in cases of dysnarrativa (as in Korsakoff syndrome) (Bruner, 2003). Such conditions, however, would not disqualify these patients from being a person or self, since other aspects of the self-pattern are still intact.

The processes or factors that constitute the self-pattern are variables that can take different values and weights. A pattern exists not simply as a collection of elements, but, importantly, as a set of relations among these elements. As Gallagher (2021, p. 129) has suggested, "[t]he specific value and weight each element has in the pattern will depend on its relations with other elements. We can think of the pattern as a dynamical gestalt where, if one factor (or value or weight relative to the whole) is changed above a certain threshold, some or all of the other factors, as well as their interactions, will change." For example, an intervention that changes bodily function in a patient with Parkinson's Disease or Obsessive Compulsive Disorder (such as medication or Deep Brain Stimulation) does not simply affect the body, it can have a profound effect on the patient's personality, and on his intersubjective relations, to the extent that others who are close to the patient may describe him as a different person – someone who not only is more capable, but who also takes more risks than he did prior to the intervention, and may be more difficult to live with (de Haan et al., 2017). As a

dynamical gestalt, the pattern is recursively self-organizing, involving a process of identity constitution, consistent with what Francisco Varela calls 'operational closure' (Varela, 1997, §2):

The following set of factors which are likely to contribute to a self-pattern, has been proposed by Gallagher (2021, p. 128). based on "a broadly Western philosophical history that includes discussions of self and personal identity."

(1) *Bodily processes,* including bio-systemic processes related to motoric, autonomic, endocrine, enteric, immune, interoceptive functions, supporting homeostasis and a basic distinction between self and non-self.

(2) *Prereflective experiential processes:* Prereflective self-awareness is a structural feature of consciousness constrained by bodily factors; it includes a sense of ownership or mineness, and a sense of agency for intentional action. These processes form what is sometimes called the minimal self (Gallagher, 2000; Gallagher & Zahavi, 2020; Gallagher & Zahavi, 2021).

(3) *Affective processes,* including factors ranging from basic bodily affects (e.g., hunger, fatigue) to typical emotion patterns, existential feelings, and moods (Newen et al., 2015; Ratcliffe, 2008).

(4) *Behavioral/action-related processes*, that is, our actions and habitual behaviors which contribute significantly to our self-identity and character (Dewey, 1922; Verplanken & Sui, 2019).

(5) *Social/intersubjective processes,* ranging from a basic capacity for attuning to others (de Waal, 2003; Reddy, 2008; Rochat, 2011; Trevarthen, 1979) to a more developed consciousness of self as distinct from others (Mead, 1913; Sartre, 1969; Taylor, 1989).

(6) *Cognitive and psychological processes:* standard theories of personal identity highlight psychological continuity and memory (e.g., Shoemaker, 2011); self-related cognitive processes include concepts, beliefs, cognitive dispositions, and personality traits.

(7) *Reflective processes:* "The ability to consciously reflect on one's experiences and actions, closely related to notions of autonomy and moral personhood, including the capacity to evaluate and form second-order volitions about one's desires" (Gallagher, 2021, p. 129; see Frankfurt, 1988; Taylor, 1989).

(8) *Narrative processes:* narrative self-interpretation recursively reflects other processes in the self-pattern. Theories of self-narrative may include strong claims about how narratives constitute the self (Dennett, 1991a; Ricoeur, 1992; Schechtman, 2011).

(9) *Ecological processes:* "Our embodied-situated actions engage with (and sometimes incorporate) artifacts, instruments, bits and structures of the environment in ways that define us and scaffold our identities. Situations shape who we are, and affordances define our possibilities" (Gallagher, 2021, p. 129).

(10) *Normative processes:* including social and cultural features that are expressed in value-determining norms that define oughts, obligations and expectations. Self-identity or the sense of who one is, is shaped by everything that comes along with one's profession, one's religion, social status, the various roles involved in marriage, in parenting, in friendship, as well as constraints imposed by gender, race, and economic circumstances, for better or worse.

Notably, if we think of these processes arranged in a dynamical gestalt pattern, there is no one element that is the self, or that operates as an agent. As Scott Kelso indicates, "patterns in general emerge in a self-organized fashion, without any agent-like entity ordering the elements, telling them when and where to go" (Kelso, 1995, p. 1). On this view, "there is no self within a self-pattern; a self, of the sort that you are, and that I am, just is a pattern" (Gallagher, 2021, p. 127).

Does this mean that the self-pattern is an illusion? Daniel Dennett (1991b) has argued that patterns are real if we think in terms of scientific (or pragmatic) realism (rather than metaphysical realism). On this view, X is real if it gives us explanatory power that we do not get from a more basic account. X is real if it cannot be reduced to or computed from all the facts about some lower-level account. John Haugeland (1998), in his commentary on Dennett's essay, 'Real Patterns', suggested that the closer one looks, the more each element looks like a pattern that lacks a well-defined border. In addition, and in agreement with Dennett, he contended that both the elements and the constituted pattern are observer-relative. This just is as it should be for the self-pattern – I see myself, and others see me, from a variety of perspectives. Moreover, the processes that make up the pattern will "depend, in part, on their participation in the arrangement of which they are the elements" (Haugeland, 1998, p. 275). We note that the notion of real pattern continues to be the subject of debates in the philosophy of science, where some have defended instrumentalist and functionalist views, and others have defended positive realist approaches (see e.g. Ladyman & Ross, 2007). It's beyond the scope of this paper to enter into these debates.

Buddhist psychology and the self-pattern

Can the notion of a self-pattern give us a way to conceive of a non-self view? We argue that both similarities and differences in how we understand the self-pattern and the
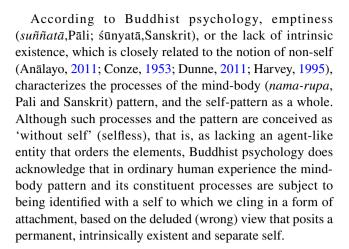
Buddhist psychological view of the self are important, and that in considering both together, we can arrive at some complementary insights.

For Buddhist teachings and psychological insights about the self, we refer in particular to the Sutta Nikayas in their earlier versions, as we can best access them today through scholarly work in the field of early Buddhist teachings (Anālayo, 2017; Gethin, 1998, 2008; Gombrich, 2006; Harvey, 1995, 2012) and their main developments as reflected in the Abhidhamma (Bodhi, 1993) and Visuddhimagga (Nyanamoli, 2011) treatises. Here, we will in particular address the notion of non-self in reference to three Buddhist models: (1) the three characteristics of existence and emptiness; (2) the five aggregates; and (3) (co)dependent origination (arising).

Non-self, the three characteristics and emptiness

A fundamental notion in Buddhist teachings and psychology is *non-self* (*anattā*, Pāli, *anātman*, Sanskrit), which is one of the three characteristics or marks of existence and experience, together with *impermanence* (*anicca*, Pāli; *anitya*, Sanskrit) and *suffering* (*dukkha*, Pāli; *duḥkha*, Sanskrit; also translated as unsatisfactoriness, uneasiness and stress) (Anālayo, 2003, 2011; Conze, 1953; Dunne, 2011; Harvey, 1995). This notion of non-self does not mean the negation of the self, as if there is first a self that is then negated. The historical Buddha refused both the extremes of eternalism and nihilism, positing a dynamically changing self, thus realizing and teaching a 'middle way' (Harvey, 1995). Non-self emphasizes a mind-body pattern of phenomena and processes, including the mental states of the individual, which are simultaneously or sequentially occurring and are ordinarily linked to the experience of a self. This is a dynamic pattern view, following causal laws and conditions of nature, in which there is no reification of a self as a separate and permanent entity.

In the Buddhist context, craving and attachment or aversion to any aspect of the self-pattern (e.g., particular sensory or mental events, including one's sense of mineness or the sense of self as a permanent entity), is what continually reinforces underlying ignorance and distortions of reality and a sense of continual dissatisfaction or suffering. The experience of a self as permanent as well as causally separated from others and the world, is regarded as a delusion. This form of delusion is described as "wrong view" (*sakkaya-ditthi*) in Buddhist teachings and psychology (Anālayo, 2010; Harvey, 1995; Sayadaw, 2016). The remedy to this "wrong view" comes from systematic mental training through forms of meditation that contribute to meditative insight.

According to Buddhist psychology, emptiness (*suññatā*,Pāli; śūnyatā,Sanskrit), or the lack of intrinsic existence, which is closely related to the notion of non-self (Anālayo, 2011; Conze, 1953; Dunne, 2011; Harvey, 1995), characterizes the processes of the mind-body (*nama-rupa*, Pali and Sanskrit) pattern, and the self-pattern as a whole. Although such processes and the pattern are conceived as 'without self' (selfless), that is, as lacking an agent-like entity that orders the elements, Buddhist psychology does acknowledge that in ordinary human experience the mind-body pattern and its constituent processes are subject to being identified with a self to which we cling in a form of attachment, based on the deluded (wrong) view that posits a permanent, intrinsically existent and separate self.

The model of the five aggregates and its relation to the self-pattern

The components of the self-pattern can be related to the five aggregates (*khandhas* in Pali; *skandhas* in Sanskrit) in Buddhist teachings and psychology (e.g., Bodhi, 1993; Dalai Lama, 1966; Davis & Thompson, 2013; Harvey, 1995; Thanissaro, 2006; Trungpa, 1978). The five aggregates are five groups of mind-body phenomena which are subject to identification and clinging, which can correspond to the following categories of experiences (and processes): (1) bodily and sensory experiences in different modalities (*rūpa*); (2) feeling tone (or valence; *vedanā*); (3) knowledge representations (*saññā* in Pali; *saṃjñā* in Sanskrit; e.g., categories, mental images); (4) mental habits and states (*saṅkhāra* in Pali; *saṃskāra* in Sanskrit; e.g. emotions, motives, intentions); and (5) consciousness (*vijñāna* in Pali; *viññāṇa* in Sanskrit), meant as the awareness of an object and discrimination of its components and aspects (Harvey, 1995, 2012).

To bridge the model of the five aggregates with the notion of self-pattern, the following correspondences can be noted:

- Bodily processes in the self-pattern can be linked to the 1st aggregate (body).
- Prereflective experiential processes to prereflective sensory consciousness (reflecting an interplay of the 1st body aggregate with the 5th aggregate of consciousness).
- Affective processes to the 2nd (feeling tone; pleasant, unpleasant, neutral) and 4th (mental formations linked to emotions such as anger and joy) aggregates, as well as to the 1st body/sensory aggregate for interoceptive aspects related to feelings.
- Behavioral processes to the interplay of all five aggregates resulting in patterns observed at the behavioral level involving physical actions (through body and speech).
- Intersubjective processes to feelings, motivations, schemes and views with an interpersonal focus, involv-

ing the interplay of the four mental aggregates on such themes, e.g., mental factors (in terms of *cetasika* in Buddhist psychology) in the 4th aggregate of mental formations related to social emotions such as jealousy, envy, shame and guilt, among others, or categories like stereotypes in the 3rd aggregate.

- Psychological/cognitive processes to the interplay of the 3rd and the 5th aggregate (in both prereflective and reflective forms).
- Reflective processes to the main reiterated and higher-order involvement of the 5th aggregate, also in an interplay with the 4th aggregate, e.g., with mental factors related to morality, and with the 3rd aggregate for providing the necessary concepts and rules.
- Narrative processes centrally to the 5th aggregate both in terms of thought construction, in interplay with the 4th aggregate for motivations, intentions, dispositions and automatized cognitions, as well as access to episodic/autobiographical memory and the related autonoetic consciousness, to the 3rd aggregate for providing the necessary units of knowledge (semantics and syntactics), and the 2nd aggregate for the involved feeling tone.
- Ecological processes to the 1st aggregate in the broader sense of owned physical objects (accessed through the body), as well as more abstract cultural, institutional entities as conceived at the level of the 3rd aggregate, and likely linked to mental factors of attachment (4th aggregate) and comparative judgments also involving reflectivity at the level of the 5th aggregate.
- Normative processes plausibly relate to a range of conditions involving all five aggregates and their interactions related to dispositional and long-term contextual factors.

In convergence with the dynamical integration in the self-pattern, in Buddhist psychology such aggregate processes are regarded as influencing each other in the mind-body system, and as influencing the whole pattern, and in turn being influenced by the whole pattern, in terms of reciprocal or circular causality (Thompson & Varela, 2001). Likewise, in an embodied/enactive understanding, the self-pattern is dynamically affected by changing factors and conditions in the whole brain-body-environment system, including other people and socio-cultural factors.

The important point emphasized by the Buddhist accounts is that one cannot find the self in any one of these aggregates; nor is there a self in the totality of the aggregates. "Each aggregate taken singly is transitory and impermanent; how, then, are we to combine them into something lasting and coherent?" (Varela et al., 1991, p. 69). There is rather a dynamically changing process, a pattern of phenomena and processes which are simultaneously or sequentially occurring, and which may be linked to a self-awareness understood as a witnessing (Albahari, 2006, 2011).

One question is how the different aggregates are related. There are different ways to think about this. For example, one might think of them as in a nested or cascading order, or arranged in a more organic relation, or as a reciprocal network. Varela, Thompson and Rosch suggest the nested view: "Consciousness is the last of the aggregates, and it contains all of the others. (Indeed, each of the aggregates contains those that precede it in the list)" (Varela et al., 1991, p. 67). Evan Thompson (personal correspondence) attributes this view to Trungpa Rinpoche. Thompson now prefers the analogy of hand and its fingers: the five aggregates, as traditionally presented as distinct elements, are organically related. This may also include reciprocal relations: "They can't function independently (feeling requires a basis in [bodily] form, perception requires feeling, consciousness requires them all, and they require consciousness)" (Thompson, personal correspondence).

The pattern theory characterizes these 'requirements' as dynamical relations, including non-linear causal relations, among the processes and across different time scales. Varela (1999) makes a threefold distinction among elementary, integrative and narrative time scales – a distinction based on both neurobiology and phenomenology (see Gallagher, 2017):

- The elementary scale (varying roughly across tens to hundreds of milliseconds) – the scale of neural bodily-physiological processes.
- The integrative scale (varying roughly from 0.5 to 3 seconds) – the scale of basic action or cognitive act and consciousness.
- The narrative scale involving memory (above 3 seconds).

Narrative processes can be understood to explicitly reflect all of the other factors in the self-pattern (Gallagher & Daly, 2018). We have an inclination to fit all of the processes that make up the self-pattern into a more or less coherent self-narrative. But also, through various practices (which may include therapy, meditation, etc.) we can become conscious of this inclination and modify it. For example, mindfulness practices may come with changes in self-related processing that reduce the effects of self-narrative while enhancing an awareness of the present moment (Dunne, 2015; Farb et al., 2007; Wielgosz et al., 2019). Mindfulness practice has also been described as increasing the flexibility to switch between narrative and experiential modes of self-reference, suggesting more access and meta-awareness of the self-pattern (Vago & Silbersweig, 2012; Vago & Zeidan, 2016).

Buddhist psychology emphasizes discreteness or discontinuity of mental phenomena and consciousness underlying self-experience. Nested (discrete) periods or time-scales in mental activity are indeed suggested by Buddhist psychology treatises, such the Abhidhamma, through the notions of

cetas, *vithis* and compound *vithis* (Barendregt, 2006; Nyanaponika, 1998) and the subsequently developed Abhidharma (Gethin, 1998; Willemen et al., 1998). The pattern theory can converge with these models with the assumption of discrete integrative processes in the self-pattern on multiple time scales.

The model of (co)dependent origination

The notion of the self-pattern echoes insights from Buddhist psychology, according to which mind-body phenomena and processes are conceived as co-produced by interdependent causes and conditions in the mind, body, and environment. This is described in the model of (co)dependent origination or (co)dependent arising or production (*paṭiccasamuppāda* in Pāli; *pratītyasamutpāda* in Sanskrit), which is also related to the notion of 'emptiness' (Della, 2002). Unlike the characterization of the five aggregates as a bottom-up progression from sensory experience to conscious reflectivity, the model of co-dependent origination includes several circular sequential influences, creating self-consciousness.

The (co)dependent origination model can be interpreted in terms of discrete momentary processes (Amaro, 2019), and in terms of a chain of cognitive and affective events or processing steps (see also Nicolardi et al., 2022). Specifically, these may be interpreted as follows: wrong views and 'ignorance', such as about the true nature of the self (*avijjā* in Pali; *avidyā* in Sanskrit) affect mental formations or states, such as motivational and emotional factors, as well as cognitive biases (*saṅkhāra* in Pali; *saṃskāra* in Sanskrit). These, in turn influence consciousness (*vijñāna* in Pali; *viññāṇa* in Sanskrit), such as the state of consciousness and predictions about sensory inputs, as well as the reciprocal influences of consciousness with the whole mind-body system (*nāma-rūpa*). This has a predictive influence on sensory processing in the different modalities (*salāyatana* in Pali; *sadāyatana* in Sanskrit), and on attentional processes (*phassa*, in Pali; *sparśa* in Sanskrit), which modulate sensory inputs. This, in turn, affects the progression of feeling tone or emotional valence (*vedanā*), arousal or emotional activation states, giving rise to mental formations or behavioral drives, such as craving or the avoidance drive (*taṇhā* in Pali; *tṛ́ṣṇā* in Sanskrit). This stage of drive (impulse) toward action is 'fueled' by identification and self-involvement (*upādāna*; see more below). Then, conditioned action has its consequences on the world and the mind-body system itself, plausibly including learning and habit formation (*bhava*).

According to this Buddhist model, various processes are in co-determination cycles which ultimately tend to reproduce themselves, and to sculpt or crystallize preferences, habits, views, emotional reactivity patterns, fears, desires, aversions, delusions, judgments, which form and sustain self-consciousness, reflecting an equivalence to the dynamics of the self-pattern. Stability and the automaticity of meanings, views and habits, which serve useful functions in human life, may come however at the cost of stress, dissatisfaction, anxiety, lack of clarity about oneself and others, emotional confusion, and other afflictions and emotional vulnerabilities, as a reflection of the wrong view. Thus, the wrong view in Buddhist psychology can also be interpreted as the wrong view on co-dependent origination and the related aspects of emptiness and interdependence.

Mutual insight

We propose that these two views – the self-pattern, and the Buddhist psychology of the self – provide a complementary set of perspectives on the nature of self. The composite, integrated and dynamic properties of the self-pattern appear compatible with the Buddhist psychological view concerning the processes and the dynamics of the mind-body system, in a way that reveals the non-self characteristic of existence. Moreover, the view of the self-pattern and of the mind-body system in Buddhist psychology converge on their enactive emphasis about the interdependence or dynamic interactions between organism and environment (Christoff et al., 2011; Varela et al., 1991). On such analyses we may better understand how aggregate self-organizing processes can become rigid or inflexible. In Buddhist teachings, of course, the issue is not just a phenomenological, psychological, or ontological one; it has implications for living a healthy life as well. As Miri Albahari put it: "On the Buddhist position, we are to understand that the witnessing subject makes the (deeply mistaken) assumption of being a self through its very act of assuming various aggregates" (Albahari, 2006, p. 51) – a delusion or unhealthy attitude by identification with the five aggregates and assuming that they are constitutive of a fixed self (*sakkaya-ditthi*) (Anālayo, 2010, 2021; Harvey, 1995; Sayadaw, 2016). Affective aspects of craving or attachment with respect to any one aspect of the self-pattern (which may be framed in self-narrative) is what continually reinforces underlying distortions of reality and a sense of continual dissatisfaction or suffering. On the Buddhist view, a deep meditative insight on non-self and thus on the nature of the self-pattern, can lead to a liberating 'breakthrough', giving way to an 'unshakeable wellbeing' (Amaro, 2019), with a dramatic reduction of negative or unwholesome mental states (such as existential anxiety, stress, greed, hatred and unhappiness), and to the enhancement of salutary or wholesome mental states and virtues (such as equanimity, wisdom, love, compassion and happiness) (Barendregt, 1988; Sayadaw, 2016).

Again, according to Buddhist psychology, emptiness (*suññatā*, Pali*; śūnyatā,* Sanskrit), which is closely related to the notion of non-self (Anālayo, 2011; Conze, 1953), would characterize the processes of the self-pattern as a whole as well as of the aggregates in terms of the lack of intrinsic or substantive existence, and their dependence upon causes and conditions or dynamic interdependence. The Buddhist emphasis on impermanence, non-self, or emptiness may motivate some philosophical worries for some Western thinkers, since the latter are inclined to place emphasis on a continuing, identical self – an agentive person. If we think of this as the ongoing whole that emerges from or enacts itself in the processes and dynamical connections of the self-pattern, anchored in bodily existence, is this still too substantive? For example, James (1904), more consistent with the Buddhist view, took issue with the worry about continuity and identity, and suggested that reflection introduces a rigid dualism and comes to attach itself to the substantive parts that are always gathered to form a self. James quoted G. E. Moore: If we try to fix attention on consciousness, "it seems to vanish. It seems as if we had before us a mere emptiness" (James, 1904, p. 479).

Some Buddhist teachings reject both the fixity and the flow. In some contemplative traditions, the phenomenological claim is that experiences (prereflective experiential processes in the self-pattern) are discontinuous – "a moment of consciousness arises, appears to dwell for an instant, and then vanishes, to be replaced by the next moment" (Varela et al., 1991, p. 73). Varela notes, however, that this view has been under debate in Buddhist schools as much as in Western philosophy – the vanishing and replacement might itself be viewed as a flow process by some.

Both Buddhist psychology and the notion of dynamical gestalt would emphasize that the self-pattern is dynamically 'metastable', i.e., characterized by transient integration or coherence periods (Kelso et al., 1994; Varela, 1995). For Western thinkers this could also allow for an emergent self-organizing agent. On the pattern view, even if there is no pre-existing entity, agent, or self as organizer or driver of the self-pattern, a practical agent emerges as an embodied subject capable of actions, intersubjective interactions, social engagement and cultural practices, a person who has affective/emotional experiences, and is capable of cognition, reflection and narrative, and who changes as a result of these experiences and engagements. For some Buddhist views, however, this may be in tension with the idea of impermanence (emptiness or non-self).

On the one hand, the Buddhist caution in this regard is that in ordinary human experience the self-pattern and its constituent processes are subject to being identified with a permanent self to which we cling in a form of attachment, something that may be addressed in meditation practices. On the other hand, the Western caution is that, in some cases, meditation practices may involve or lead to dissociative disorders which may trigger a deep lasting anxiety (Lindahl & Britton, 2019). "Voluntarily induced experiences of depersonalization/derealization can be a part of meditative practices that are prevalent in many religions and cultures and should not be diagnosed as a disorder. However, there are individuals who initially induce these states intentionally but over time lose control over them and may develop a fear and aversion for related practices" (American Psychiatric Association, 2013, 300.6, p. 304; see Lindahl et al., 2020). Buddhist views acknowledge that meditation practice at first may cause disorientation and even outright fear, although through further practice the meditator can attain a peaceful, anxiety-free experience.

Both the pattern theory and Buddhist psychology agree that unhealthy habits and attitudes can lead to an experienced inflexibility (unhealthy attachment [*upadana*] or overinvestment [Gombrich, 2005]) in a particular aspect of the self-pattern. The self-pattern can become 'rigid', and self-narrative can reflect and reinforce this rigidity – leading to a reiteration or elaboration of thoughts running through many cycles of conceptualization and narration (Ñāṇananda, 1997).

This inflexibility can be addressed by meditation practices – practices that start with the body and consciousness (reflective and prereflective experiential aspects), with the aim of re-ordering and creating more flexibility, opening up the dynamics of the self-pattern (see Giommi et al., 2023).

Conclusion

Although there is no one-to-one mapping of Buddhist psychological concepts onto the pattern theory of self, there are important similarities among such concepts and the various processes and dynamical relations that constitute a pragmatic self-pattern. Exploring the convergences between the notion of self-pattern and the Buddhist non-self can offer some mutual insight in regard to understanding the processes, the dynamics, and the implications for questions about well-being and a flexibility that allows more freedom from anxiety and reduces attachment, craving, and suffering. This is an important issue for further research that would take us beyond the theoretical insights discussed here. Specifically, we suggest, some further practical and therapeutic implications may be discerned by focusing on the self-pattern, and on the hypothesis that improved well-being may be understood as a flexibility in the self-pattern that can be induced by mindful-based interventions (Giommi et al., 2023).

Compliance with Ethical Standards

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