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Outonomy: Fleshing out the Concept of Autonomy Beyond the Individual

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Chapter 8
Process and Relational Ontology in Enactive Psychiatry

Enara García

Abstract This chapter examines mental disorders from an enactive perspective. It explores two key ontological claims—the processual and relational nature of cognition—and their implications for our understanding of mental disorders. Rather than viewing them as isolated brain disorders, mental disorders are presented as developmental sensorimotor trajectories that are shaped by embodied interactions and social contexts. It highlights the dynamic interplay between an individual's autonomy and their social environment in the emergence of mental disorders.

Keywords Mental disorders · Enactive cognition · Intersubjectivity · Process ontology · Relational autonomy

8.1 Introduction

Contemporary understanding of mental health has evolved significantly, moving beyond the notion of the self-sufficient autonomous individual. It now encompasses a more holistic view that recognizes the intricate interplay between personal well-being and the broader social, environmental, and relational contexts in which individuals live. This perspective emphasizes that mental health is not solely a matter of individual resilience or autonomy, but is deeply influenced by the quality of our relations with others, our communities, and the environments we inhabit.

In recent years, enactive cognition theories have garnered growing interest as a relational framework that transcends internalist, individualist, brain-centered and biomedical models of mental health (de Haan 2020; Maiese 2022; Nielsen 2023). One of the main contributions resides in the acknowledgement that mental processes –and therefore mental disorders– are scaffolded by processes that extend to the sociomaterial environment. It challenges prevalent dualisms between mind and body, or physiology and psychology and promotes viewing autonomous individuals as embodied, situated and ecological agents. Accordingly, the enactive approach

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conceptualizes mental disorders as phenomena emerging from the dynamic interplay between the agent and its environment, thereby recognizing the interconnectedness, mutual dependence, and multiscale embeddedness of psychiatric phenomena.

The aim of this chapter is to delve into two ontological principles that ground enactive psychiatry, its processual and relational ontology,[1] and clarify their relevance to better understanding psychiatric conditions.

8.2 Process Ontology

Philosophy of mind and psychiatry has long exhibited a static bias. The cognitivist framework, which was dominant in the 90s, viewed the mind as a series of discrete, static mental states, each generated by decomposable cognitive modules, viewing mental disorders as faulty or malfunctioning mental states (e.g., faulty beliefs in schizophrenic delusions). The same static bias is present in current models, such as the DSM, which classifies disorders based on fixed symptoms, or the biomedical model, which attributes them to specific brain dysfunctions. All these approaches have neglected the temporal course, diachronic character, and inherent dynamics of mental disorders. In contrast, the enactive perspective rejects this static view of the mind and adopts a process-oriented framework, emphasizing the dynamic nature of mental activity as processes that unfold in time, have a particular trajectory, and produce cumulative changes (Vintiadis 2022). Cognition is viewed as emerging from the regulation of organism-environment interactions, constituted by interactive processes that encompass the brain-body-environment system. Change, thus, is considered a fundamental property of cognition rather than a mere accident.

The enactive framework, drawing from organizational approaches in biology, views living organisms as self-producing autonomous entities that maintain their identity under precarious conditions (Varela et al. 1991, 2017). Autonomy extends beyond the biological (metabolic) domain to include sensorimotor and intersubjective dimensions (see Virenque 2026, this volume). Sensorimotor autonomy comes from networks of habits that endow the agent with adaptive behavior (Di Paolo et al. 2017), while intersubjective autonomy arises from social interactions, where individuals co-construct shared meanings, emotions, and collective identities (Di Paolo et al. 2017, 2018). The individual is thus constituted and traversed by normative processes that occur across these multiple domains of autonomy, often in tension with one another (García and Barandiaran 2024; Thompson and Varela 2001). Cognition involves the adaptive management of this plurality of normative tensions across the organic, sensorimotor and intersubjective domains, which are functionally coordinated at different timescales (e.g., the tension between biological hunger, cutlery skills and social manners in a formal dinner). This perspective rejects reductionism, by understanding domains of autonomy not as discrete levels that can be reduced

[1] Here, ontology refers not to metaphysical assumptions about ultimate reality, but to the objects of specific sciences (i.e., cognitive science, psychology, psychiatry).

to their isolated components, but as processes that maintain each other dynamically across different timescales. The dynamic interaction between local processes of a system leads to emergent processes that, in turn, exert a "global-to-local" influence on those elements (Thompson and Varela 2001).

Similarly, mental disorders can be understood as emergent, organized wholes constituted by interacting processes across organic, sensorimotor, and intersubjective domains. This idea is also captured by the concept of "Dynamic Gestalt Patterns"— a set of interrelated factors that, while not individually necessary, collectively define a psychiatric disorder (Gallagher 2024). These complex, multi-layered feedback systems do not follow a linear cause-effect model but operate through organizational non-linear causality (Gallagher 2022; de Haan 2020). Changes in one part of the pattern influence and modify other parts, resulting in a constantly evolving, integrated whole. The apparent stability of mental disorders is, therefore, not a fixed trait of individuals but a temporary outcome of their dynamic self-organization.

One consequence of this view is that mental disorders are closely tied to the historical and developmental processes of individuation of the person. They are not external entities that can simply be removed from the individual; rather, they are ways in which the person is organized. This explains the self-illness ambiguity often seen in mental disorders —the difficulty of distinguishing between an individual's sense of self and the symptoms of the condition (e.g., identifying with negative thoughts in depression or manic states in bipolar disorder). In other words, they involve disturbances in the sense of self. Therefore, by shifting our focus from viewing individuals and selves as fixed and fulfilled to exploring their individuation process and becoming, we can better grasp the temporal asymmetry and path-dependence of mental disorders. Their progression over time—e.g., emergence, recovery, relapse, and chronicity—is not just a feature of traditionally recognized developmental disorders but is integral to all mental conditions. Plaintly said, I suggest that not only those traditionally classified as developmental disorders are indeed developmental.

One way of making sense of this path-dependence is through Piagetian mechanisms of sensorimotor equilibration (Di Paolo et al. 2017). The development of new skills and habits occurs through a dynamic equilibration between integrating new experiences into existing cognitive and sensorimotor schemas and adapting these schemas to accommodate new experiences. While developmental trajectories remain flexible, they also exhibit a diachronic channelling of possibilities within the broader space of behavioral possibilities. As habits and sensorimotor structures stabilize, they constrain future developmental paths by making some coping mechanisms more accessible while rendering others less likely. This form of habit stabilization can be viewed as the *character* of the person, that is an idiosyncratic cognitive, affective and behavioral style that marks a distinct personal identity. A crucial point here is that habitual interaction styles imply unique vulnerabilities, which predispose individuals to specific conditions over others (Hovhannisyan and Vervaeke 2022). The reason is that if sensorimotor individuation constitutes a person's character, then all characters involve a reduction of potential behaviors, limiting the individual's developmental field and predisposing them to specific rigidities and maladaptations. These rigidities endow the person with differential vulnerabilities, which draw idiosyncratic

patterns of onset, relapse, and recovery in a person's history of mental health. All living systems are precarious, and thus, vulnerable. However, given the idiosyncratic nature of developmental individuation processes, not all persons are vulnerable in the same way and to the same extent.

In this regard, non-linear dynamical models offer both the mathematical and conceptual tools necessary to model mental conditions in a processual fashion and to understand developmental rigidities (Nelson et al. 2017; Olthof et al. 2023). Mental disorders are represented as dynamical networks of collective variables (Borsboom 2017), whose evolution over time is explained by general principles of pattern formation in complex adaptive systems. Psychopathological states, such as persistent sadness or fluctuating moods, are interpreted as attractors—stable states that the system naturally gravitates towards. Mental disorders are thus understood as "stuck states". For instance, a person may be drawn into a state of depression, or cycle between depressive and manic episodes, forming what is called a fixed-point or limit-cycle attractor. Certain psychopathological dynamics unfold slowly, such as episodes of depression or psychosis, which can remain stable for extended periods, often lasting for months. In contrast, other dynamics evolve rapidly, like panic attacks, which represent attractors that persist for only a few minutes. And most of them present a combination of attractors at different timescales that influence each other. The persistence of such habitual states over time, especially when an individual cannot escape them and overrule the performance of other situationally relevant habits and behaviors, is a common feature of psychopathology (Ramírez-Vizcaya and Froese 2019).

In mental disorders the brain-body-environment dynamics can be either too flexible (e.g., psychotic and dissociative conditions) or too rigid (e.g., neurotic conditions), but in either cases, they imply a diminishment of metastability and meta-flexibility in the behavior of the system. A healthy system, in order to cope with changes in the environment, must keep a relative degree of metastability, that is, a state of mixture between stable and unstable patterns, not being trapped into rigid attractors, but not being disintegrated either. This requires meta-flexibility —the ability to dynamically adjust its level of flexibility in response to a stressor while maintaining a degree of robustness in the system. This second-order flexibility allows resilient systems to balance change and preservation and to maintain an adequate range of degrees of freedom, while ensuring their integrity under varying conditions. Note that meta-flexibility and metastability define mental disorders in a continuous-dimensional manner, rather than establishing a categorical and binary health-disease demarcation. Yet, the explanatory relevance of dynamical models is that although they describe phenomena at a particular level of analysis, their dynamics can be linked to higher-scale processes. This allows us to describe and explain mental disorders in a processual, multiscale and multidimensional manner.

8.3 Relational Ontology

The relational ontology underpinning the enactive approach posits that cognition is inherently situated within the continuous, dynamic interaction between an individual and its sociomaterial environment. This framework rejects the traditional view of cognition as an isolated, brain-bound process, instead framing it as emergent from embodied engagement with the world. Cognition is thus not a matter of passively representing the world, but an active engagement with it, where the individual exercises autonomy in shaping and being shaped by its sociomaterial environment.

Ontologically, the relational nature of cognitive agents can be understood in two complementary ways (Dengsø and Kirchhoff 2023): On the one hand, the agent and its environment can be viewed as autonomous and individualized systems that interact and form relationships with each other, that is, constitutive processes precede interactive ones, with the relata being a priori separated entities that interact externally. On the other hand, both systems can be understood as differentiated through distributed, metastable relations, where the entities (relata) do not precede the relations but rather co-exist with and are shaped by them. I shall focus on this latter view, where agent and environment are not pre-existing, independent entities placed into relation, but instead, it is the broader relational dynamics that co-constitute and individuate them. Here, autonomy is understood, not as a property of individuals, but as emerging from distributed entangled processes along the individual-environment system that establish significant local asymmetries between them (McGann 2024). This relational perspective is present in the Simondonian turn in enactivism (Di Paolo 2021; García 2023; García and Arandia 2022; James 2020), where individuals are said to emerge from matrices of relational forces, and also in Hans Jonas's concept of "mediation", which refers to the human "inwardness" or self-referentiality as a form of dialectical achievement of encounters with others (Benevides et al. 2023). This shift proposes to look at sympoiesis (co-organization) rather than autopoiesis (self-organization) as fundamental biological structures that support mindedness (Dengsø and Kirchhoff 2023). As McGann puts it, "we become individuals, therefore, not by separation, but by differential entanglement" (2024, p. 8).

The enactive approach to social cognition as participatory sense-making (De Jaegher and Di Paolo 2007), can indeed be read from these two perspectives. Participatory sense-making explains how two autonomous agents come to create shared meanings within an autonomous relational domain that is, to some extent, independent from individual intentions. The autonomy of the relational domain allows for subtle or transformative modulations of individual meaning-making processes, enabling the co-creation of new meanings that would not be accessible to individuals in isolation. In its original formulation, social cognition is viewed as the process by which individual and autonomous agents come together to engage in shared meanings, highlighting the need to maintain individual autonomy for a social interaction to be genuinely social. However, from this latter relational perspective, participatory sense-making may also be seen as the process by which individuals engage with and

shape each other's potential for growth and development, that is, the way by which we influence in the individuation of the other. Indeed, taking a diachronic perspective, there is a sense in which the interactants are individuated by the wider relational system they are elements of, via "global to local" or "top down" constitution. Rather than assuming that individuals exist independently before any interaction, we can view interaction itself as the force for individuation (James and Loaiza 2020). Humans are inherently relational beings, assemblies of historically developed interpersonal interactions and affective entanglements that define and individuate their embodied being-in-the-world.

Following this perspective shift, a recent relational turn has taken place calling for a figure/ground inversion between social and non-social cognition (e.g., Dingemanse et al. 2023; Trasmundi and Steffensen 2024). The point is to challenge the prevailing belief in cognitive science that by understanding basic, non-social cognition (e.g., perception of objects, navigation, etc.) we will be better equipped to understand social cognition as its complex derivative. However, this individualistic approach may be misleading, as the human brain has evolved in response to social demands and is largely shaped by our need to monitor and navigate complex social contexts (Dunbar 1998). Human cognitive flexibility arises from neoteny, as much of our cognitive development takes place postnatally through social interactions. This social embedding fosters remarkable plasticity, enabling learning, habit formation, and emotional attachment, which in turn enhance our ability to adapt to diverse socio-ecological niches through enculturation. This is not trivial, as many of the autonomous processes that constitute our sensorimotor identity extend to our coordination with others. Even the most fundamental sensorimotor schemes, like the Piagetian breastfeeding scheme, require coordination between the child and caregiver. Indeed, developmental psychologists have long noted the innate "readiness to interact", coordinate and imitate present in human infants (Meltzoff 2002; Reddy 2008).

The key point here is that human openness to interaction and underdeveloped potential are not only essential for growth but also create the conditions for mental disorders to emerge (Brüne 2000). This cognitive flexibility allows for diverse, socially shaped developmental paths to become maladaptive. Indeed, a widespread symptom in diverse mental disorders involves interpersonal misattunement, a sense of disconnectedness from a shared world and altered forms of interpersonal coordination (Gallagher 2013). Examples in adulthood can be found in personality disorders, where the core issue often lies in the individual's impaired ability to skillfully and adaptively engage with others and conform to socially accepted norms (Roche and Ansell 2020; Wright et al. 2022) or in schizophrenia –which has been traditionally understood as disturbances of the individual self in phenomenological psychopathology, but which also involves altered patterns of self- and other-centeredness perspective taking (Kyselo 2016; Nelson et al. 2009). Moreover, human developmental openness and freedom often manifest as existential anxiety and fear, underlying many disorders (Fuchs 2013). In other words, dysfunction arises when one fails to fulfill an evolutionarily fixed function, whereas disorder stems from maladaptive coping mechanisms arising in social development.

Consequently, mental disorders should not be conceptualized merely as isolated individual conditions but rather as interactively organized processes. Enactivism supports a systemic approach, emphasizing how social values and norms are embodied through interactions, shaping character, habits, and social repertoires. Rather than being strictly individual or social, mental disorders arise as (mal)adaptive responses relative to particular social contexts (e.g., adaptive preferences, Maiese 2026, this volume). This is evident in concepts like the "double empathy problem" in autism (Milton et al. 2018) and relational models of disability. While neural correlates of disorders may exist, they reflect circular causal processes involving social interactions rather than a fixed underlying dysfunction. In other words, there is no singular brain-based cause behind interpersonal difficulties—rather, these difficulties both constitute and express the disorder over time. The issue is not just "in the head" but in our ability to coordinate and engage with others, which are interpersonally developed skills. Mental disorders emerge thus as relational phenomena—impairments in the ability to engage in successful social interactions, meet others' expectations, coordinate behaviors, and maintain standards of predictability in interpersonal relationships.

In conclusion, although individual autonomy and its impairments have often been the focus of describing mental disorders, autonomy should be viewed as a regulatory process that extends diachronically to the history of interactions with the sociomaterial environment. The relational and processual view of cognition presented in this chapter redefines autonomy as a distributed phenomenon, sustained and transformed within the web of interpersonal entanglements and contextual relations in which the subject is embedded. Within this framework, psychiatric conditions cannot be understood merely as internal failures of the individual but as dynamic configurations that emerge from interaction patterns across multiple levels of organization and constitute forms of the individual's relational patterns. Mental disorders are seen as processes evolving along the developmental history of the person and compromise their metaflexibility and metastability in their relational habit repertoire. Mental disorders, therefore, are no longer seen as isolated dysfunctions but as specific modes of regulation and dysregulation within a broader relational system. This shift in perspective not only challenges traditional reductionist approaches but also opens new pathways for understanding and addressing mental health, fostering interventions that consider both the individual's organization and the interpersonal and collective dynamics that sustain it (e.g., promoting salutogenic environments, Menatti 2026, this volume).

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References

Benevides R, Feiten TE, Chemero A (2023) Life after 'life after Kant' other minds with Jonas and Merleau-Ponty. J Conscious Stud 30(11–12):104–130
Borsboom D (2017) A network theory of mental disorders. World Psychiatry: off J World Psychiatr Assoc 16(1):5–13
Brüne M (2000) Neoteny, psychiatric disorders and the social brain: hypotheses on heterochrony and the modularity of the mind. Anthropol Med 7(3):301–318
de Haan S (2020) Enactive psychiatry. Cambridge University Press
De Jaegher H, Di Paolo E (2007) Participatory sense-making. Phenomenol Cogn Sci. https://doi.org/10.1007/s11097-007-9076-9
Dengsø MJ, Kirchhoff MD (2023) Beyond individual-centred 4e cognition: systems biology and sympoiesis. Constructivist Foundations 18(3):351–364
Dingemanse M, Liesenfeld A, Rasenberg M, Albert S, Ameka FK, Birhane A, Wiltschko M (2023) Beyond single-mindedness: a figure-ground reversal for the cognitive sciences. Cogn Sci 47(1):e13230
Di Paolo EA (2021) Enactive becoming. Phenomenol Cogn Sci 20(5):783–809
Di Paolo EA, Cuffari EC, De Jaegher H (2018) Linguistic bodies: the continuity between life and language. MIT Press
Di Paolo E, Buhrmann T, Barandiaran X (2017) Sensorimotor life: an enactive proposal. Oxford University Press
Dunbar RI (1998) The social brain hypothesis. Evol Anthropol: Issues, News, Rev: Issues, News, Rev 6(5):178–190
Fuchs T (2013) Existential vulnerability: toward a psychopathology of limit situations. Psychopathology 46(5):301–308
Gallagher S (2013) Intersubjectivity and psychopathology. International perspectives in philosophy and psychiatry. Oxford handbook of philosophy and psychiatry 258–274.
Gallagher S (2022) Integration and causality in enactive approaches to psychiatry. Front Psych 13:870122
Gallagher S (2024) The self and its disorders. Oxford University Press, London, England
García E (2023) Affectivity in mental disorders: an enactive-simondonian approach. Phenomenol Cogn Sci. https://doi.org/10.1007/s11097-023-09929-8
García E, Arandia IR (2022) Enactive and simondonian reflections on mental disorders. Front Psychol 13:938105
García E, Barandiaran XE (2024) Varieties of normativity and mental health. An enactive approach. Synthese.
Hovhannisyan G, Vervaeke J (2022) Enactivist Big Five Theory. Phenomenol Cogn Sci 21(2):341–375
James MM (2020) Bringing forth within: enhabiting at the intersection between enaction and ecological psychology. Front Psychol 11. https://doi.org/10.3389/fpsyg.2020.01348
James MM, Loaiza JM (2020) Coenhabiting interpersonal inter-identities in recurrent social interaction. Front Psychol 11:577
Kyselo M (2016) The enactive approach and disorders of the self - the case of schizophrenia. Phenomenol Cogn Sci 15(4):591–616
Maiese M (2026) Mindshaping and adaptive preferences. In: Barandiaran XE, Etxeberria A (eds) Outonomy: fleshing out autonomy beyond the individual. Springer
Maiese M (2022) Autonomy, enactivism, and mental disorder: a philosophical account. Taylor & Francis
McGann M (2024) Facing life: the messy bodies of enactive cognitive science. Phenomenology and the Cognitive Sciences, 1–18
Meltzoff AN (2002) Imitation as a mechanism of social cognition: origins of empathy, theory of mind, and the representation of action. Blackwell Handbook of Childhood Cognitive Development, 6–25

Menatti L (2026) Salutogenesis, adaptivity and the continuum of health. In: Barandiaran XE, Etxeberria A (eds) Outonomy: fleshing out autonomy beyond the individual. Springer
Milton D, Heasman B, Sheppard E (2018) Double empathy. Encyclopedia of autism spectrum disorders
Nelson B, McGorry PD, Wichers M, Wigman JTW, Hartmann JA (2017) Moving from static to dynamic models of the onset of mental disorder: a review. JAMA Psychiat 74(5):528–534
Nelson B, Sass LA, Thompson A, Yung AR, Francey SM, Amminger GP, McGorry PD (2009) Does disturbance of self underlie social cognition deficits in schizophrenia and other psychotic disorders? Early Interv Psychiatry 3(2):83–93
Nielsen K (2023) Embodied, embedded, and enactive psychopathology: reimagining mental disorder. Springer Nature
Olthof M, Hasselman F, Oude Maatman F, Bosman AMT, Lichtwarck-Aschoff A (2023) Complexity theory of psychopathology. J Psychopathol Clin Sci 132(3):314–323
Ramírez-Vizcaya S, Froese T (2019) The enactive approach to habits: new concepts for the cognitive science of bad habits and addiction. Front Psychol 10:301
Reddy V (2008) How infants know minds. Harvard University Press
Roche MJ, Ansell EB (2020) Interpersonal models of personality pathology. The Cambridge handbook of personality disorders, 171–184
Thompson E, Varela FJ (2001) Radical embodiment: neural dynamics and consciousness. Trends Cogn Sci 5(10):418–425
Trasmundi SB, Steffensen SV (2024) Dialogical cognition. Lang Sci 103:101615
Varela FJ, Thompson E, Rosch E (1991/2017) The embodied mind, revised edition: cognitive science and human experience. MIT Press
Vintiadis E (2022) Mental disorders as processes: a more suited metaphysics for psychiatry. Philosophical Psychology, 1–18
Virenque L (2026) Intrinsic purposiveness and autonomy in interaction. In: Barandiaran XE, Etxeberria A (eds) Outonomy: fleshing out autonomy beyond the individual. Springer
Wright AGC, Ringwald WR, Hopwood CJ, Pincus AL (2022) It's time to replace the personality disorders with the interpersonal disorders. https://doi.org/10.31234/osf.io/7syvf