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Dissociation and Temporality in Substance Abuse: A Clinical Phenomenological Overview

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Abstract

The term "dissociation" encompasses a wide array of symptoms and phenomena, all sharing the common characteristic of involving altered states of consciousness where an individual temporarily loses the sense of continuity of their own identity. In the context of addiction pathology, however, the dissociative paradigm remains a topic of ongoing debate. It fluctuates between the description of individual dissociative symptoms and the notion of posttraumatic dissociation as a structural process. This process involves fragmentation that extends beyond the confines of perception and experience within a singular moment, instead ensuring a persistent discontinuity of the self throughout one's existence. Pathological addiction stresses the question of the donation of sense in this deep and dramatic experience; it situates individuals within a compressed and constricted realm of vital space, alongside a frozen perception of time. Within this context, every emotion, sensation, and comprehension becomes impaired. Consequently, we have embarked on a journey starting with a historical analysis: the aim was to construct an elucidative

framework for the dissociative paradigm in the context of addiction. This involves an in-depth exploration of the fundamental constructs of trauma and temporality, examined through the lens of phenomenological perspective.

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Introdution

Dissociation is a frequently observed psychological phenomenon characterized by an individual perceiving a sense of detachment from their cognitive processes, emotions, or surrounding environment. This state often presents as a feeling of being removed from reality or encountering disruptions in one's own consciousness.

The connection between dissociation and substance abuse is closely intertwined, and these phenomena frequently occur together. Many individuals with substance use disorders report experiencing symptoms of dissociation, such as a feeling of disconnection from their own body or memories. Numerous studies [1–10] suggest that the relationship between substance abuse and dissociation is bidirectional, implying that dissociation could initiate substance use, or conversely, substance use could lead to dissociation.



Clinical evidence indicates that individuals who experience dissociation may be more prone to resorting to substance abuse as a coping mechanism for emotional distress or trauma [11–13]. Dissociation can trigger feelings of numbness, detachment, or disengagement from reality, leading individuals to turn to drugs or alcohol for self-medication and avoidance of their emotions [11].

Substance abuse can also induce dissociation in certain individuals. For example, the consumption of specific drugs such as hallucinogens or dissociative anesthetics [14–17] can induce altered states of consciousness that share similarities with dissociative experiences.

Before delving into the content of this article, it is crucial to establish precise definitions for certain concepts discussed here. This necessity arises from the observation that specific terms can take on different meanings based on the context and theoretical framework in which they are used, as documented in the existing literature.

Let's start by clearly defining the term "dissociation" as it is employed in this article. This term encompasses a range of concepts, and without explicit clarification, it can impede understanding and introduce ambiguity when discussing intricate dynamics, such as the transition from trauma to the emergence of addiction.

"Dissociation" can denote multiple concepts. First, it functions as a defense mechanism, isolating a segment of an individual's mental content from their conscious awareness, which remains freely accessible. Unlike repression, where only the cognitive component is isolated, dissociation, as a defense mechanism, involves isolating both cognitive and affective elements of an experience, thereby preventing access to both aspects.

Second, the term "dissociation" is used to describe various symptoms and phenomena with a dissociative nature. These include derealization, depersonalization, dissociative amnesia, psychological numbing, absence phenomena, and symptoms related to the presence of distinct autonomous personalities within the same individual [18, 19]. It is evident that the term "dissociation" encompasses diverse symptoms and phenomena characterized by altered states of consciousness, wherein individuals temporarily lose the sense of continuity in their identity.

The term "dissociation" is also utilized to describe specific personality disorders characterized by a high prevalence of dissociative symptoms and/or a lack of integration among different facets of an individual's personality, experienced as distinct autonomous entities. This phenomenon is particularly noticeable in dissociative identity disorder, as well as in more recent theoretical frameworks [20, 21].

Finally, "dissociation" is used to indicate phenomena that result in the fragmentation of specific functions associated with intrinsic biopsychological subsystems. These functions may include attachment reactions, escape responses, seeking attachment figures through crying, and so forth [22]. Additionally, dissociation encompasses mechanisms that drive individuals to behave in ways that avoid triggering these essential subsystems, attempting to inhibit or disregard any stimuli that might potentially reactivate them (through behaviors resembling phobias and mental actions) [23]. Such actions inevitably lead to the reactivation of dissociated contents with a traumatic origin linked to these subsystems.

To examine the role of dissociation in substance abuse, we propose the identification of two perspectives. It is important to acknowledge that the distinction between these perspectives may be somewhat artificial, as contemporary authors often amalgamate these investigations into a unified model of the genesis of dissociative processes.

The first perspective is developmental in nature, positing that psychological-dissociative processes stem from traumatic experiences that wield a substantial impact on the formation of one's personality. This viewpoint underscores the enduring consequences of trauma and their role in shaping the emergence of dissociation.

The second perspective takes a phenomenological approach, integrating recent insights into the lived experience of time within the context of addiction. It emphasizes how dissociated consciousness can disrupt the organization of temporality, focusing on the subjective perception and experience of time continuity in the midst of addiction.

Before delving into a detailed explanation of these perspectives, it is essential to conduct a thorough psychopathological examination of the concept of dissociation in relation to substance abuse. This examination will draw upon key terms such as mental automatism and exogenous psychosis, providing foundational insights for comprehending the intricate interplay between dissociation and substance use.

Historical and Psychopathological Backgrounds: Paradigm of Dissociation in Substance Abuse

In the year 1845, Moreau de Tours [24], following a journey to the East, conducted a psychological investigation into the effects of hashish. Subsequently, he performed experiments on himself, sharing his findings with the public, a move that stirred controversy. However, his

research was not an isolated case. In the same year, in Paris, a group of artists, poets, and writers including Théophile Gautier, Gérard de Nerval, Balzac, and Baudelaire secretly convened at a dilapidated hotel on the island of Saint Louis to collectively explore the effects of hashish. Moreau de Tours provided descriptions of the altered states of consciousness induced by hashish and introduced the concept of dissociation for the first time. This was a significant contribution that helped establish the trance paradigm.

This study gave rise to the exogenous theory of psychosis, which countered the dominant endogenous theory in European psychiatry from Kraepelin to Bleuler. Moreau de Tours aimed to replicate psychotic manifestations akin to those observed in classical schizophrenia by employing substances. In a different context unrelated to substance abuse, neurologist Sigbert Ganser [25] described phenomena of twilight dissociation similar to the classic symptoms of hysterical psychosis. This clinical picture emerged in specific circumstances, such as prison settings, where repeated stress and trauma could lead to the emergence of such symptoms.

The exogenous psychosis paradigm, characterized by dissociation that deviated from the processuality of schizophrenic splitting proposed by Bleuler [26], and instead emerged as a disruption of consciousness induced by external factors, reached its apex with Bonhoeffer [27], who worked in Germany during the first half of the previous century. Bonhoeffer is renowned for his descriptions of significant psychopathological syndromes in alcoholism, depression, and most notably, his doctrine of the "exogenous type of reaction." According to this doctrine, any exogenous harmful agent (infectious, toxic, traumatic, degenerative) acting on the brain generates a relatively uniform, nonspecific complex of symptoms, with the key feature being a mandatory disturbance of consciousness ranging from confusion to oniroidism, stupor, or coma.

Bonhoeffer introduced the concept of exogenous reaction types as the brain's responses to injury. Since he could not establish a direct correlation between a specific trauma or toxin and the resulting mental disorder, he hypothesized the existence of intermediate products (Dtiologische Zwischenglieder) formed in the body that was responsible for delirium, twilight and confusional states, hallucinosis, and the Korsakoff syndrome. This approach requires precise delineation of the scope of symptomatic psychoses [27].

An additional crucial framework for understanding the emergence of dissociative phenomena resulting from substance abuse, which can escalate to psychotic symptoms, is the concept of mental automatism introduced by Gaetan de Clerambault [28]. De Clerambault's mental automatism syndrome, identified by the author between 1920 and 1926, constitutes a foundational element within the realm of "chronic hallucinatory delusions." This syndrome revolves around the subject's self-perception of a series of basic phenomena encompassing motor, sensory, and cognitive aspects. Despite occurring within the individual's internal experience, these phenomena appear detached from their own volition. Consequently, they manifest as uncontrollable, repetitive, and unrelated to other aspects of their overall experience.

De Clerambault's insights were shaped during his work at the Paris Prefecture in 1920, where he interacted with individuals who were intoxicated by substances such as absinthe, ether, and chloral hydrate. Drawing on the comprehensive theoretical framework laid out by Jackson, De Clerambault hypothesized that intoxications had the potential to release activities typically controlled by hierarchically organized inhibitory centers. This liberation allowed these activities to manifest as automatisms characterized by what seemed to be a spontaneous or involuntary nature. Consequently, De Clerambault asserted that mental automatism, given its mechanistic nature, had a robust organic and, hence, biological underpinning.

According to Jaspers, mental automatism represents a disturbance of self-consciousness. This phenomenon is characterized as mechanistic and parasitic, deeply impacting the patient's inner world. In this scenario, the critical ego of the patient becomes dissociated, taking on a helpless role as it observes the automatic phenomena unfolding. De Clerambault's significant contribution in this context is his identification of this dissociated core, which critically observes a series of parasitic automatic phenomena. This core serves as the foundation for the development of secondary superstructures within the patient's experience, including delusional thinking and sensory hallucinations, such as tactile, visual, and auditory disturbances. In essence, De Clerambault's work sheds light on the intricate interplay between dissociation, automatic phenomena, and the resulting psychopathological manifestations.

The aforementioned theories initiate a fresh discussion on the term "exogenous," which has long been overshadowed by the more renowned endogenous paradigm. "Endogenous" initially carried connotations of hereditary factors and was often associated with "degenerative" processes. This view suggested that certain disorders stemmed from inherent factors passed down through generations, leading to progressive deterioration. The ideas proposed by Morel [29] and Magnan [30] found

support among German psychiatrists who emphasized the importance of degeneration as a key component of endogenous disorders. However, Bonhoeffer offered a more nuanced perspective, suggesting that the clear differentiation between exogenous and endogenous factors was not straightforward. He acknowledged the complexity of psychiatric disorders and the likelihood of encountering mixed etiological factors in many cases, blurring the lines between exogenous and endogenous clinical features: "We cannot be entirely certain about the ultimate nature of what is considered endogenous. . . In fact, we will rarely encounter pure forms of exogenous and endogenous etiology. . . We cannot make a clear and complete differentiation between the exogenous clinical features and those we have classified as endogenous."

Bonhoeffer's viewpoint implies that the distinction between exogenous and endogenous factors may not always be clear-cut. This recognition aligns with the complexity of mental health conditions, where multiple factors, including environmental stressors, trauma, genetic predisposition, and neurobiological mechanisms, can interact to contribute to the development of disorders. This perspective encourages a more comprehensive understanding of the various influences on mental health, moving beyond a strict categorization of exogenous and endogenous factors.

As research continues to advance, it is important to consider the interplay between genetic, environmental, and biological factors in shaping the development and manifestation of psychiatric disorders. This holistic approach recognizes the dynamic nature of mental health and the need to consider a wide range of factors when studying the origins and progression of psychological conditions. Bonhoeffer's original statements introduce the notion of external pathogenic agents and the development of dissociative psychosis on a heteroplastic basis, thereby challenging the longstanding debate between endogenous and exogenous factors.

Evolutive Theory: Substance Abuse, Trauma, and Dissociation

Building upon the studies mentioned above, particularly drawing on De Clerambault's clinical observations and the extensive research by Hughlings Jackson, dissociation emerges as a central concept for a rethinking of the theory of the mind. This reevaluation envisions the personality not solely in unified terms but as a complex structure organized into multiple states and hierarchies [31, 32]. In this context, dissociation assumes a natural role as a defensive response to trauma, serving to

maintain an illusory sense of continuity to counteract the risk of identity dispersion. Consequently, numerous contemporary studies [33–36] have brought back into focus Pierre Janet [37] and his dissociation theory, especially within specific psychopathological domains such as substance abuse, where certain symptoms are interpreted as manifestations of a pathological dissociative reaction.

The Dissociation Theory of Pierre Janet

In contrast to psychoanalysis, which historically focused on the concepts of repression and conflict as the underlying causes of hysteria, Pierre Janet proposed a different perspective. He emphasized the significance of real trauma in the development of dissociation and subsequent psychological disorders, diverging from Freud's emphasis on "phantasmatic" trauma resulting from repression and childhood seduction. Contemporary understanding now acknowledges the profound impact of actual traumatic experiences during development, including childhood relational trauma, as well as cases of abuse, maltreatment, and severe neglect. This recognition has sparked a renewed interest in studying dissociation across various pathological conditions, such as substance use disorders, borderline and other personality syndromes, dissociative identity disorders, post-traumatic stress disorders, and somatoform disorders.

In Janet's work "Automatisme psychologique" [37], he proposes that dissociation and the pathology of hysteria arise from "psychological disaggregation" instead of the fundamental process of synthesis associated with psychological well-being. According to Janet, certain symptoms exhibited by individuals with hysteria can be attributed to fragmented aspects of their personality that have become detached from consciousness. These fragments exist independently and have their origins in past traumatic events.

Janet's perspective assigns significant importance to environmental trauma occurring during an individual's emotional and cognitive development. Unlike Freud's early writings that primarily focused on sexual experiences, this trauma has a fragmenting and disorganizing effect on the individual's psychic activities. It prevents the individual from forming a conscious memory of the event, resulting in the creation of "subconscious fixations" and "frozen emotions" that are rigidly excluded from personal consciousness. These fixations often result from sudden or terrifying shocks. If these traumatic memories are repeated during development or are exceptionally intense, they can solidify outside the individual's conscious awareness, leading to the formation of distinct secondary dissociated personalities (referred to as "successive existences").

These "fragments" tend to resurface abruptly and intensely. Another characteristic of hysterical disorders is the automatic and intrusive nature of the traumatic memories that contributed to their development. Janet posits that dissociation, termed "disintegration," involves the disconnection of normally interconnected and integrated functional levels. This disconnection is a direct result of the violent emotions provoked by traumatic experiences. Janet's model draws on the psychological theories of Hughlings Jackson [38], who proposed that the mind is the outcome of hierarchical integration of different functions. These functions, reflecting the evolutionary history of the species, progressively integrate more complex levels that coordinate with each other.

One can hypothesize that a childhood marked by recurring traumatic events and the repeated utilization of dissociative detachment processes hinder the progression of higher integrative functions. This hindrance, in conjunction with other pathogenic mechanisms associated with neurotoxic processes triggered by cumulative traumatic stress responses in critical structures like the hippocampus, cingulate gyrus, frontal lobes, and insula, can weaken the higher functions of consciousness. Consequently, this impairment may prevent the capacity to integrate experiences, leading to the fragmentation of autobiographical memories and the sense of self.

Vulnerability and Dissociation in Addiction: The Role of Trauma

Expanding on Janetian concepts of dissociation, there has been a growing interest in the relationship between substance abuse and dissociation, leading to the development of evolving research lines. The etiology of pathological addiction is now recognized as multifactorial, involving interactions between neurobiological, psychological, and socioenvironmental dimensions. Various explanatory models have been proposed to understand the connection between trauma, dissociation, and addiction.

According to the self-medication hypothesis, addiction can be seen as a maladaptive attempt to address fundamental disturbances in self-regulation, self-consistency, relationships, and self-care [39, 40]. This model suggests that deficits in attachment relationships, particularly insecure or disorganized/unspecified attachment, combined with childhood traumatic experiences, can lead to an inability to recognize and regulate emotional states. Individuals may resort to dissociative defense mechanisms, including substance use or addictive behaviors, as a way to cope with internal distress. This establishes a psychobiological vulnerability to addiction, becoming a preferred strategy for dealing

with intolerable internal states by seeking pleasure or alleviating pain, with a predisposition toward relying on substances or addictive behavior [41–43].

In this context, Olievenstein, a disciple of Lacan, identifies a specific psychological mechanism to describe the genesis of addiction: the theory of the "broken mirror phase," in which a primary traumatic fracture activates the patient's continuous search for the substance, aiming to re-experience, through the substance itself, the initial successful encounter with the Self's image. The substance is thus able to take the place of the fracture and momentarily erase it, elucidating the inherent inability of the drug-dependent individual to halt in a state of tranquility, alongside the potential to engage in a cohesive encounter with the passage of experiential time [44].

A possible biological basis for this relationship may involve alterations in the response to reward, affiliative behaviors, and stress responses, sensitive to different types of traumatic experiences [45]. Patients affected by both post-traumatic conditions and addiction often exhibit common distress patterns arising from the correlation between insecure attachment [46, 47] and the presence of childhood trauma. Regarding dissociative psychopathology in opioid use disorder, Somer et al. [48] introduced the concept of "chemical dissociation," suggesting that some substance-abusing patients may not exhibit high levels of dissociation despite their trauma history, as they may achieve dissociative-like states through chemical consumption to manage overwhelming emotional states. The substances themselves may also decrease tolerance to painful states, reinforcing substance use and the persistence of addiction (hyperkatifeia) [49].

Recent studies have investigated the role of post-traumatic stress disorder in individuals with substance abuse [50, 51], but fewer studies have specifically addressed the comorbidity of dissociation, which is a common consequence of early trauma [52, 53]. Current findings suggest that this type of psychopathology is associated with a more severe course of the disorder, additional problems (e.g., suicidality and self-mutilation) [54, 55], and a negative impact on treatment outcomes [56, 57]. Higher levels of dissociative symptoms and a greater prevalence of dissociative disorders have been observed in individuals with drug addiction and both alcohol and drug dependence, compared to those with pure alcoholism [51–58].

Through structured clinical interviews using tools like the Structured Clinical Interview for Dissociative Disorders, Tamar-Gurol [55] demonstrated that 26% of the substance dependence patients in their study had a dissociative disorder. Among these patients, the majority (59.3%) reported that the dissociative disorder preceded the onset of substance abuse. This blurs the ability to differentiate between the dissociative effects of the substance itself and its use as a coping mechanism against emotional distress. Even before substance use, the capacity to recognize the need for employing dissociative defenses appears compromised.

Substance Abuse, Dissociation, Temporality: On the Footsteps of Phenomenology

Along and not separate from the evolutionary line of the concept of dissociation, phenomenologically oriented psychopathology paved the way for understanding psychopathological paradigms such as lived time. The temporal dimension has always been a crucial element in the evaluation and treatment of mental disorders, and this understanding began with phenomenological analyses of thought processes. Phenomenology distinguishes between various aspects of time, such as objective time, world time, and the subjective perception of temporal flow. It differentiates between the individual and the social, memory, and anticipation and provides a rich framework for exploring the temporal experiences of individuals. In this context, an important question arises: What is the "lived-time" experience of an addicted person? Furthermore, is there a relationship between dissociation and the experienced time in addicted patients?

Drawing from the phenomenological tradition, we can offer comprehensive insights into these questions. However, it is essential to acknowledge that while this approach helps address some aspects, not all the questions raised by addiction can be fully answered through this lens. The nature of addiction itself remains a complex and multifaceted inquiry that extends beyond the scope of phenomenology alone.

Temporality, Synchronicity, and Psychopathology

Jaspers' seminal work [59, 60] established that human existence is inherently bound within the framework of birth and death, making temporality a fundamental aspect of being. Temporality encompasses two key dimensions: vital time and time consciousness, each with distinct significance. From this viewpoint, existence is profoundly intertwined with temporality, as individuals possess a personal history that shapes their past, influences their present, and guides them toward an anticipated future. This perspective characterizes individuals as historical beings, and the temporal sequence plays a

foundational role in their existence. However, the demarcation of past, present, and future does not imply distinct, isolated stages. Instead, time, as a constitutive element of the individual, unfolds along a continuous line, where the past remains relevant and informs the present, while the present acts as a juncture where the "no longer" of the past and the "not yet" of the future converge. Consequently, the experience of time manifests as a fluid continuum within which conscious experiences find their place and order.

Husserl [61] recognized the significance of the temporal dimension by identifying three instances: retentio, praesentatio, and protentio, which unfold along the timeline, allowing subjective consciousness to establish a past, present, and future, respectively. Under normal circumstances, individuals live within the present dimension, drawing upon past events that amalgamate and merge into a collective pool of experiences, serving as a reference point for constructing personal history. There exists a profound connection between past experiences and future anticipations, both actualized in the present moment, as individuals simultaneously revisit their past while shaping their future. The continuity of temporality is further elucidated by two fundamental functions: "perpetual planning," involving the creation of meaningful connections between psychic events and an array of experiences, and the construction of personal history, which involves recognizing these experiences as coherent and integral to one's own life. The ego itself becomes the center of a temporality that it generates, existing solely as an activity that constitutes and is shaped by time.

Closely interrelated with the notion of temporality is the concept of synchrony, referring to an individual's capacity to adapt their own sense of time to that of the world and those around them. Synchrony measures an individual's ability to harmonize their temporal experience with the temporal context of the environment and interpersonal interactions. Synchrony holds particular significance in Thomas Fuchs' contribution to understanding melancholic alienation [62-64]. Fuchs challenges the prevailing perspective that analyzes disturbances in time experienced in melancholic conditions as solely resulting from individual inhibition, suggesting a paradigm shift. Rather than attributing alterations in temporality solely to interpersonal or social time, Fuchs proposes a different understanding. He suggests viewing the pathology of time in melancholic disorder as a direct disruption of the synchronized temporal relationship between the individual and the environment. In this state, the individual becomes detached from the continuous flow of time in relation to the surrounding environment,

which plays a significant role in shaping their experiences [65]. In the context of schizophrenia, this perspective suggests that the weakening and temporal fragmentation of self-experience contribute to a disturbance in self-coherence, ultimately affecting intersubjective synchrony. Schizophrenia can be interpreted as a condition characterized by the disruption and fragmentation of self-experience, which subsequently impacts the synchronization of experiences between individuals [66].

Temporality and Addiction

In the context of clinical recognition, phenomenological psychopathology has undertaken a comprehensive exploration of methodological concepts related to temporality and addiction. Kimura Bin [67] extensively examined the role of temporality in the shaping of human beings, accentuating the paramount significance of lived time in the constitution of one's self. He discerned a distinction between the conscious awareness of time's passage and the experiential encounter with time itself. Notably, individuals grappling with substance abuse displayed a distinct constitutive temporality he termed the "intra-festum." This intrafestum temporality denotes a point-like perception of time, wherein individuals become immersed in the immediate present, devoid of a coherent sense of continuity. Kemps [68], through meticulous analysis, introduced the notion of the temporal dimension within addiction, accentuating how lived time in addiction can be marked by dissociation, subsequently disrupting conventional temporal developmental trajectories. He conceptualized addiction as an endeavor to manipulate the emotional essence of life, likening it to a form of personal self-deception.

Binder [69], in a parallel vein, identified alcoholic psychosis as a gradual erosion of one's ability to contextualize oneself within a historical framework. Messas [70-73] delved into the notion of substance intoxication as an abrupt suspension of consciousness, leading to a state devoid of temporal markers. Such intoxication disrupts the conventional trinary temporal structure (past, present, and future), wherein emphasis is placed on the present moment while distancing from the continuity of historical trajectory. This temporal suspension effectively halts the embodiment and spatiality intrinsic to human experience. Within this narrative, endogenous psychosis converges with substanceinduced psychosis, as outlined by Di Petta [74, 75]. The intertwined concepts of timelessness and splitting play a significant generative role in shaping the experience of individuals caught within the throes of substance misuse and psychological disturbances.

Messas [71] further defines substance abuse as a condensation of reality, an intensification of the present moment that erases waiting time. This "continuous present" dominates the scene and disrupts the prereflective experience of time. As a result, the temporal horizon, which provides a background for imagining the future, contracts, and the future becomes both actualized and dissociated. The lived future, which typically encompasses aspirations and plans, loses its continuity with the present, leading to a narrowing of temporal distances and the collapse of all experiences into a single, infinite present. To delve deeper, Messas introduces the term "Anthropological Hyperpresentification" to describe the narrowing of temporality solely to the present, devoid of a connection to the past and future in conscious awareness. Based on these premises, it can be speculated that there is a dissociation of consciousness or, more specifically, a dissociation of the future and an endless present. Aspirations and projects become detached from the present moment, which expands and becomes eternal, while the future loses its contextual framework, and aspirations lose continuity with the present.

A dissociated future can be understood as an outcome arising from the efforts of dependent individuals to escape a distressing and traumatic past, as well as a seemingly purposeless present, as elucidated by von Gebsattel in 1954 [76]. This concept diverges from conventional hope as it severs the connection between the present and the future. It is reasonable to hypothesize that a dissociated future serves a compensatory function, originating from a fundamental experience of dissociation.

In alignment with this proposition, Moskalewicz [77] identifies specific shared characteristics in individuals with substance addiction, including reduced temporal horizons, which impede the ability to envision long-term concrete scenarios and hinder the formulation and attainment of aspirations. Moreover, a dissociated future is recognized, characterized by a disruption in an individual's life story continuity and a traumatic past where negative past experiences intrude upon the present. These theories can be readily linked to the perspective of Janet and Olievenstein, which asserts that actual traumatic experiences lay the groundwork for subsequent psychological disorders, intimately connected with the sense of time as experienced by substance users.

According to Janet's theory, dissociation is a process that involves the disconnection of integrated functional levels in response to traumatic experiences. This theoretical framework is influenced by the psychological model proposed by Hughlings Jackson [38]. In Jackson's model, the evolution of functions in the nervous system is

characterized by a progression from more primitive and anatomically lower structures to higher and cortical centers, with increasing complexity and flexibility. At the lower levels of this hierarchical organization, basic functions are more rigidly organized and less under voluntary control. As one moves to the higher levels, there is a greater capacity for voluntary behavior and the integration of various functions. The mind, in this context, represents itself at these higher levels and is able to bring together the coherent elements of the body and memories of the self. Janet introduces the concept of "Personal Synthesis," which refers to the achievement of a unified representation of oneself. This synthesis allows for increased self-consciousness, enabling an individual to have a more cohesive and integrated sense of identity.

From this viewpoint, self-representation coincides, at least in part, with concepts of mentalization and metacognition [78–81]. The deficiency in mentalization precludes the attainment of a comprehensive perspective on temporality, constraining it to a singular moment or life fragment. This momentary state is relegated to mere gratification through substance consumption, forsaking its inherent projective nature and eroding both memory capacity and the scope for intersubjective and empathic connections. The encounter with drug addiction, marked by an absence of mentalization, forfeits the capacity to construct a narrative structure and a communal temporal experience, fixating exclusively on the consolidation of the present instant. This fixation temporally effaces prior traumatic ruptures, echoing the observations of Olievenstein.

Conclusion

The intricate connections between substance use, dissociation, and temporality transcend the explanatory capabilities of the scientific paradigm. By situating human existence within a continuous process of transformation, the dissociative dimension and temporal disconnection observed in substance misuse assume a significant and unique role as diagnostic clinical features. However, understanding existence as a whole necessitates more than just isolated evaluations of each element or their simple summation. To gain comprehensive insights into existence, an integrative perspective is essential, focusing on how these aspects articulate with one another within the individual [82].

Dissociation involves a profound experience that goes beyond being just a symptom in substance addiction. It extends to a twilight alteration of consciousness itself. This alteration follows a hierarchical organization similar to temporal structuring. Substances act as psychopathological agents, capable of dismantling the field of consciousness. This deconstruction initially impacts synchronic consciousness, which includes functions such as sustaining focused and directed attention, as well as maintaining orientation in space and time. From a neurological perspective, these aspects of consciousness play crucial roles in adapting to the environment. Subsequently, diachronic consciousness begins to erode from the foundation: this involves self-awareness and the subjective sense of individuality and presence in space. Conscious existence unfolds diachronically, revealing the significance of temporality: the addicted patient does not evolve over time, losing a sense of self and intentionality. Lived time is framed as the unique psychological and psychopathological existential condition of these patients: they become absorbed by an immanent instantaneity. Existence becomes trapped in a fragment of pure present, devoid of all relationships, where the construction of the "self" lacks the symbolic function of language and narration. Narrative memory dissolves, leading to a repetitive series of moments lacking coherence and continuity. Consequently, substances demonstrate the ability to replace a trauma-inducing fracture characterized by dissociative tendencies, resulting in a transient obliteration of such tendencies. This process accentuates the inherent inability of the drug-dependent individual to attain a state of tranquil cessation, with a cohesive engagement with the continuous flow of experiential time.

Future studies will be essential to explore the role of dissociation and temporality as constituent elements of the addictive experience. In this context, phenomenologically oriented psychopathology will provide a valuable interpretive framework, shedding light on unexplored domains crucial for understanding the patient's suffering.

Conflict of Interest Statement

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References

- Bates MLS, Trujillo KA. Use and abuse of dissociative and psychedelic drugs in adolescence. Pharmacol Biochem Behav. 2021; Apr;203:173129.
- 2 Najavits LM, Walsh M. Dissociation, PTSD, and substance abuse: an empirical study. J Trauma Dissociation. 2012;13(1):115–26.
- 3 Yang J, Millman LSM, David AS, Hunter ECM. The prevalence of depersonalization-derealization disorder: a systematic review. J Trauma Dissociation. 2023;24(1):8–41.
- 4 Van Den Bosch LM, Verheul R, Langeland W, Van Den Brink W. Trauma, dissociation, and posttraumatic stress disorder in female borderline patients with and without substance abuse problems. Aust N Z J Psychiatry. 2003;37(5):549–55.
- 5 Klanecky A, Tuliao AP, Landoy BVN, McChargue DE. The Desire to Dissociate Scale: factor analysis, cross-cultural findings, and links to substance-induced dissociation. Am J Drug Alcohol Abuse. 2020;46(4): 390–400
- 6 Ricci V, Ceci F, Di Carlo F, Lalli A, Ciavoni L, Mosca A, et al. Cannabis use disorder and dissociation: a report from a prospective firstepisode psychosis study. Drug Alcohol Depend. 2021;229(Pt A):109118.
- 7 Terock J, Van der Auwera S, Janowitz D, Spitzer C, Barnow S, Miertsch M, et al. From childhood trauma to adult dissociation: the role of PTSD and alexithymia. Psychopathology. 2016;49(5):374–82.
- 8 Wenzel K, Bernstein DP, Handelsman L, Rinaldi P, Ruggiero J, Higgins B. Levels of dissociation in detoxified substance abusers and their relationship to chronicity of alcohol and drug use. J Nerv Ment Dis. 1996; Apr; 184(4):220-7.
- 9 Mulder RT, Beautrais AL, Joyce PR, Fergusson DM. Relationship between dissociation, childhood sexual abuse, childhood physical abuse, and mental illness in a general population sample. Am J Psychiatry. 1998; Jun;155(6):806–11.
- 10 Evren C, Cinar O, Evren B, Ulku M, Karabulut V, Umut G. The mediator roles of trait anxiety, hostility, and impulsivity in the association between childhood trauma and dissociation in male substance-dependent inpatients. Compr Psychiatry. 2013;54(2):158–66.
- 11 van der Kolk B. Posttraumatic stress disorder and the nature of trauma. Dialogues Clin Neurosci. 2000;2(1):7–22.
- 12 Khoury L, Tang YL, Bradley B, Cubells JF, Ressler KJ. Substance use, childhood traumatic experience, and posttraumatic stress disorder in an urban civilian population. Depress Anxiety. 2010;27(12):1077–86.
- 13 Ogden P. The different impact of trauma and relational stress on physiology, posture, and movement: implications for treatment. Eur J Trauma Dissociation. 2021;5(4):100172.

- 14 Solmi M, Chen C, Daure C, Buot A, Ljuslin M, Verroust V, et al. A century of research on psychedelics: a scientometric analysis on trends and knowledge maps of hallucinogens, entactogens, entheogens and dissociative drugs. Eur Neuropsychopharmacol. 2022;64: 44–60.
- 15 Salomone A, Gazzilli G, Di Corcia D, Gerace E, Vincenti M. Determination of cathinones and other stimulant, psychedelic, and dissociative designer drugs in real hair samples.

 Anal Bioanal Chem. 2016;408(8):2035–42.
- 16 Ballard ED, Zarate CA Jr. The role of dissociation in ketamine's antidepressant effects. Nat Commun. 2020;11(1):6431.
- 17 Mori T, Suzuki T. The discriminative stimulus properties of hallucinogenic and dissociative anesthetic drugs. Curr Top Behav Neurosci. 2018;39:141–52.
- 18 Brown RJ. Different types of "dissociation" have different psychological mechanisms. J Trauma Dissociation. 2006;7(4):7–28.
- 19 Holmes EA, Brown RJ, Mansell W, Fearon RP, Hunter EC, Frasquilho F, et al. Are there two qualitatively distinct forms of dissociation? A review and some clinical implications. Clin Psychol Rev. 2005;25(1):1–23.
- 20 Classen CC, Pain C, Field NP, Woods P. Posttraumatic personality disorder: a reformulation of complex posttraumatic stress disorder and borderline personality disorder. Psychiatr Clin North Am. 2006;29(1):87–112, viii.ix
- 21 Steele K, Van der Hart O, Nijenhuis ER. Phase-oriented treatment of structural dissociation in complex traumatization: overcoming trauma-related phobias. J Trauma Dissociation. 2005;6(3):11–53.
- 22 Liotti G. Trauma e dissociazione alla luce della teoria dell'attaccamento. Infanzia e Adolescenza. 2005;4(3):130–44.
- 23 van Dijke A, Ford JD, van der Hart O, Van Son MJ, Van der Heijden PG, Bühring M. Childhood traumatization by primary caretaker and affect dysregulation in patients with borderline personality disorder and somatoform disorder. Eur J Psychotraumatol. 2011;2.
- 24 de Tours M. Du hachisch et de l'aliénation mentale. Paris: Fortin Masson; 1845.
- 25 Ganser SJ. Ueber einen eigenartingen hysterischen Dämmerzustand. Archiv f Psychiatrie. 1898;30(2):633–40.
- 26 Bleuler E. Dementia praecox or the group of schizophrenias. New York: International Universities Press; 1911.
- 27 Bonhoeffer K. Der Geisteszustand des Alkoholdeliranten. Psychiatrische Abhandlungen Wernicke Breslau: Schletter; 1897.
- 28 De Clerambault G. Automatismo mentale-Psicosi passionali. Soteria 7. Chieti: Métis; 1994.
- 29 Morel HA. Traitè de degenerescences Physiques, Intellectuelles et Morales de l'espece humaine. Paris: Bailliere; 1857.

- 30 Magnan V. Lecon Cliniques sur le maladies mentales. Paris: Lecrosnier: 1890.
- 31 Feldman PJ, Cohen S, Doyle WJ, Skoner DP, Gwaltney JM Jr. The impact of personality on the reporting of unfounded symptoms and illness. J Pers Soc Psychol. 1999;77(2):370–8.
- 32 Whitmer G. On the nature of dissociation. Psychoanal Q. 2001;70(4):807–37.
- 33 Bühler KE, Heim G. Psychopathological approaches in Pierre Janet's conception of the subconscious. Psychopathology. 2009;42(3): 190–200.
- 34 Van der Hart O, Dorahy M. Pierre Janet and the concept of dissociation. Am J Psychiatry. 2006;163(9):1646; author reply 1646.
- 35 Walusinski O, Bogousslavsky J. Charcot, Janet, and French models of psychopathology. Eur Neurol. 2020;83(3):333–40.
- 36 Spitzer C, Barnow S, Freyberger HJ, Grabe HJ. Recent developments in the theory of dissociation. World Psychiatr. 2006;5(2):82–6.
- 37 Janet P. L'Automatisme psychologique. Paris: Felix Alcon; 1890.
- 38 Hey H. Des Ideés de Jackson à un modèle organo-dynamique en psychiatrie. Toulouse: Privat; 1975.
- 39 Khantzian EJ. The self-medication hypothesis of addictive disorders. Focus on heroin and cocaine dependence. Am J Psychiatry. 1985; 142(11):1259–64.
- 40 Khantzian EJ, Albanese MJ. Self-medication, bipolar disorders, and stimulant dependence. J Clin Psychiatry. 2009;70(6):935–6; author reply 936-7.
- 41 Schimmenti A, Passanisi A, Caretti V, La Marca L, Granieri A, Iacolino C, et al. Traumatic experiences, alexithymia, and Internet addiction symptoms among late adolescents: a moderated mediation analysis. Addict Behav. 2017;64:314–20.
- 42 Schimmenti A, Billieux J, Santoro G, Casale S, Starcevic V. A trauma model of substance use: elaboration and preliminary validation. Addict Behav. 2022;134:107431.
- 43 Craparo G, Ardino V, Gori A, Caretti V. The relationships between early trauma, dissociation, and alexithymia in alcohol addiction. Psychiatry Investig. 2014;11(3):330–5.
- 44 Olievenstein C. La drogue ou la vie. Paris: Robert Laffont; 1987.
- 45 Seidemann R, Duek O, Jia R, Levy I, Harpaz-Rotem I. The reward system and posttraumatic stress disorder: does trauma affect the way we interact with positive stimuli? Chronic stress (thousand oaks). Chronic Stress, 2021;5:2470547021996006.
- 46 Schindler A, Thomasius R, Sack PM, Gemeinhardt B, Küstner U, Eckert J. Attachment and substance use disorders: a review of the literature and a study in drug dependent adolescents. Attach Hum Dev. 2005;7(3):207–28.
- 47 Kassel JD, Wardle M, Roberts JE. Adult attachment security and college student substance use. Addict Behav. 2007;32(6):1164–76.

- 48 Somer E, Altus L, Ginzburg K. Dissociative psychopathology among opioid use disorder patients: exploring the "chemical dissociation" hypothesis. Compr Psychiatry. 2010; 51(4):419–25.
- 49 Koob GF. Drug addiction: hyperkatifeia/ negative reinforcement as a framework for medications development. Pharmacol Rev. 2021;73(1):163–201.
- 50 Jacobsen LK, Southwick SM, Kosten TR. Substance use disorders in patients with posttraumatic stress disorder: a review of the literature. Am J Psychiatry. 2001;158(8):1184–90.
- 51 Schäfer I, Najavits LM. Clinical challenges in the treatment of patients with posttraumatic stress disorder and substance abuse. Curr Opin Psychiatry. 2007;20(6):614–8.
- 52 Chu JA, Dill DL. Dissociative symptoms in relation to childhood physical and sexual abuse. Am J Psychiatry. 1990;147(7):887–92.
- 53 Draijer N, Langeland W. Childhood trauma and perceived parental dysfunction in the etiology of dissociative symptoms in psychiatric inpatients. Am J Psychiatry. 1999; 156(3):379–85.
- 54 Evren C, Sar V, Karadag F, Tamar Gurol D, Karagoz M. Dissociative disorders among alcohol-dependent inpatients. Psychiatry Res. 2007;152(2-3):233-41.
- 55 Tamar-Gurol D, Sar V, Karadag F, Evren C, Karagoz M. Childhood emotional abuse, dissociation, and suicidality among patients with drug dependency in Turkey. Psychiatry Clin Neurosci. 2008;62(5):540–7.
- 56 Karadag F, Sar V, Tamar-Gurol D, Evren C, Karagoz M, Erkiran M. Dissociative disorders among inpatients with drug or alcohol dependency. J Clin Psychiatry. 2005;66(10):1247–53.
- 57 Sar V, Ross C. Dissociative disorders as a confounding factor in psychiatric research. Psychiatr Clin North Am. 2006;29(1):129–44, ix.
- 58 Langeland W, Draijer N, van den Brink W. Trauma and dissociation in treatmentseeking alcoholics: towards a resolution of

- inconsistent findings. Compr Psychiatry. 2002;43(3):195–203.
- 59 Jaspers K. Allgemeine psychopathologie. 4th ed. Berlin: Springer Verlag; 1948.
- 60 Jaspers K. The phenomenological approach in psychopathology. Br J Psychiatry. 1968; 114(516):1313–23.
- 61 Husserl E. Cartesian meditations an introduction to phenomenology Kluwer Academic; 1988.
- 62 Fuchs T. From self-disorders to ego disorders. Psychopathology. 2015;48(5):324–31.
- 63 Fuchs T, Schlimme JE. Embodiment and psychopathology: a phenomenological perspective. Curr Opin Psychiatry. 2009;22(6): 570–5
- 64 Fuchs T. Delusional mood and delusional perception: a phenomenological analysis. Psychopathology. 2005;38(3):133–9.
- 65 Fuchs T. Corporealized and disembodied minds. A phenomenological view of the body in melancholia and schizophrenia. Philos Psychiatry Psychol. 2005;12(2):95–107.
- 66 Fuchs T. Pathologies of intersubjectivity in autism and schizophrenia. J Conscious Stud. 2015;22(1–2):191–214.
- 67 Kimura B. Ecrits de Picopathologie phènomènologique. Paris: Presses Universitaires de France; 1992.
- 68 Kemp R. The temporal dimension of addiction. J Phenomenol Psychol. 2009;40(1):1–18.
- 69 Binder H. Über alkoholische Rauschzustände. In: Bash K, editor. Ausgewählte arbeiten. Band I: klinische psychiatrie. Bern-Stuttgart-Wien: Hans Huber Verlag; 1979. p. 166–220.
- 70 Messas G. A phenomenological contribution to the approach of biological psychiatry. J Phenomenol Psychol. 2010;41(2): 180–200.
- 71 Messas G. On the essence of drunkenness and the pathway to addiction: a phenomenological contribution. J Addict Behav Ther Rehabil. 2014;03(02):2.

- 72 Messas G. Plea for using dialectical phenomenological psychopathology as an approach for substance-use disorders. Clin Neuropsychiatry. 2021;18(4):185–7.
- 73 Messas G, Fulford BKWM. Three dialectics of disorder: refocusing phenomenology for 21st century psychiatry. Lancet Psychiatr. 2021; 8(10):855–7.
- 74 Di Petta G, Tittarelli D. The "We-Ness": a dasein-analytical approach to group therapy. Psychopathology. 2019;52(2):110–6.
- 75 Di Petta G, Tittarelli D. Le psicosi sintetiche. Il contributo della psicopatologia fenomenologica italiana alle psicosi indotte da sostanze. Roma: Giovanni Fioriti Editore; 2016.
- 76 Von Gebsattel VE. Zur Psychopathologie der Sucht [On the psychopathology of addiction]. Stud Gen. 1948;1(5):258–65.
- 77 Moskalewicz M, Messas G. Lived future in addiction. SUCHT. 2022;68(2):83–8.
- 78 Fonagy P, Bateman AW. Attachment theory and mentalization-oriented model of borderline personality disorder. In: Oldham JM, Skodol AE, Bender DS, editors. The American psychiatric publishing textbook of personality disorders. Washington: American Psychiatric Publishing; 2005. p. 187–205.
- 79 Mohaupt H, Holgersen H, Binder PE, Nielsen GH. Affect consciousness or mentalization? A comparison of two concepts with regard to affect development and affect regulation. Scand J Psychol. 2006; Aug;47(4):237–44.
- 80 Carr D, Time, Narrative, and History. Bloomington: University of Indiana Press; 1986.
- 81 Phillips J. Psychopathology and the narrative self. Philos Psychiatr Psychol. 2003;10(4): 313–28.
- 82 Passie T. Phänomenologisch-anthropologische Psychiatrie und Psychologie: eine Studie über den "Wengener Kreis": Binswanger - minkowski - von Gebsattel – straus. Stuttgart: Guido Plessner Verlag; 1995.

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