# HPSC 300:

Independent studies in the history and philosophy of science

# Distress and the body:

An exploration of the history and meaning of psychosomatic disorders

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#### 1. Introduction

The idea of "psychosomatic disorders" represents a link between the mind and the body, in which bodily ailments are thought to be exacerbated or caused by psychological conflicts or distressing social situations. This essay will explore some of the history, philosophy, and scientific approaches to this family of phenomena. The first section will explore in more detail some definitions and conceptions of the term "psychosomatic". The two following sections will describe the history of the psychiatric family of somatoform disorders and the non-psychiatric functional somatic disorders respectively. The last three sections will explore some frameworks used in the interpretation and explanation of psychosomatic phenomena, including the cultural approach of "idioms of distress", neo-Janetian theories of dissociation, and the role of trauma and attachment.

# 2. What does "psychosomatic" mean?

The term "psychosomatic" evokes many different frameworks and may have different connotations for people working in somatic medicine, psychiatry, psychotherapy, or the layperson. Furst suggests that no dictionary definition of the term is helpful, as any one definition tends to assume one version to the exclusion of others (Furst, 2002). To clarify some of the confusion from the outset, we will explore some of these different conceptions of the term. There are perhaps three broad categories to which the term "psychosomatic" may be applied.

In the first case is the idea of a disorder or condition in which somatic symptoms, that is, distress experienced in relation to the body (e.g. pain) or symptoms of an apparently neurological nature (e.g. paralysis, epilepsy, blindness, fatigue), are rooted in psychological or social conflicts. That is, they are "psychogenic" or have a psychological etiology. This is the most narrow case, and most practitioners in medicine and psychology may not attribute it to more than a handful of

illnesses. An example of this may be the idea of "conversion disorder", now somewhat antiquated, although the term is still present in the latest edition of the DSM-V. In the original psychoanalytic view, a psychological stress or conflict is converted by some mechanism into a physical or seemingly neurological complaint for which no underlying physical pathology can be identified (North, 2015).

A second version of "psychosomatic" may refer to illnesses which are in large part, but not exclusively, moderated by psychosocial factors. This can include any condition in which the physical symptoms are known to intensify or abate in response to psychosocial stress in a considerable way. However, a partly or entirely physical etiology is still compatible with this definition. This could include the family of chronic pain conditions, where the precipitating cause is often thought to be a physical injury or trauma, but where the development and course of the condition is heavily intertwined with psychosocial factors (Linton & Shaw, 2011).

The third sense of "psychosomatic" is the most broad and all-encompassing, and reflects the fundamental inseparability of the mind and body. This stance is often confluent with a rejection of mind-body dualism, and sees the distinction between the biological and the psychological as rooted in philosophical misconceptions. This version is essentially accepted in modern medicine, where it is known as the "biopsychosocial" framework. Regardless of whether the illness is due to a cancer, infection, or broken limb, the interaction between the central nervous system and the immune system mean that psychosocial factors are always relevant (Furst, 2002). However, this "soft" version of psychosomatic medicine may ignore considerations of "psychogenesis", or psychological root causes, versus "organogenesis" – physical root causes – which may be critical in determining whether a patient is best served by psychotherapy or surgery. For example,

iatrogenic surgeries are a common issue in people presenting with somatization disorder (North, 2015).

Since the third sense of psychosomatic can be taken for granted, the topics pursued in this paper will focus on the first two. Namely, in the first case, are somatic complaints that are thought to be psychogenic. As a case study, we will explore the history of hysteria, which developed into the modern category of somatoform disorders. In the second case are illnesses which are thought to have a physical pathology, but which are heavily intertwined with psychosocial factors. For this, we will explore the history of fibromyalgia, which is a chronic pain condition. However, the assumption of a physical etiology in this example is not taken for granted – as part of the family of "functional somatic syndromes", the roots of fibromyalgia remain uncertain, and it remains to be seen whether it falls solidly into the first or second category.

The next two sections will explore the histories of two families of disorder concepts, which may arguably be called psychosomatic disorders. The first will be a study of the somatoform disorders, which are part of the speciality of psychiatry, and have their roots in the concept of hysteria. The second group will be the functional somatic syndromes, which are associated with several non-psychiatric medical domains. It will focus mainly on fibromyalgia, a musculoskeletal pain disorder that has its roots in rheumatology.

## 3. History of somatoform disorders: Hysteria to the DSM-V

According to Carole North, the idea of a hysteria-type syndrome goes back at least 4000 years. Records from ancient Egypt describe a condition with multiple physical and behavioural dysfunctions. The Bible contains a story of a man possessed by spirits who claimed, "My name is

Legion, for we are many," evoking the multiple identities sometimes observed in hysteria. Hippocrates (460 – 370 BC) coined the term "hysteria" at a time when it was conceptualized as a displacement of the uterus throughout the body. The movement of the uterus into different organs was thought to produce the various symptoms. Throughout antiquity to the end of the 18<sup>th</sup> century, the dominant interpretation of hysterical phenomena, including altered states of identity, convulsive fits, and other unexplained presentations, was through the supernatural lens of spirits, demonic possession, witchcraft, and sorcery. In the 19<sup>th</sup> century, these beliefs were maintained through the popularity of spirit seances and other occult practices (North, 2015).

The modern medical history of hysteria began when a Swiss alchemist and astrologer, Paracelsus (1493 – 1541), provided the first clear description of a case of multiple personalities. Paracelsus gave a complex medicalised account of the condition involving a theory of magnetism and its effects on mental and bodily health. This theory was later adopted by the German doctor Anton Mesmer (1734 – 1815), who advanced the theory of "animal magnetism", which proposed the influence of the planets and tidal forces on human health. His therapeutic practices, which seemed to operate though suggestion and social contagion, paved the way for the practice of hypnosis and its application to hysteria. Though this led to a professional medical interest in hysteria which displaced the older supernatural notions, Mesmer's work also contributed to a rise in popularity of occultism and charlatanism in the 19<sup>th</sup> century – as well as perhaps contributing to epidemics of hysteria (North, 2015).

The practice of treating hysteria with hypnosis was taken up by Jean-Martin Charcot (1825 – 1893) and his student Pierre Janet (1859 – 1947) at the Salpêtrière state hospital in Paris in the 19<sup>th</sup> century. They viewed hysteria as a neurodegenerative disorder, and eagerly attempted to separate it from its historical roots in superstition and supernatural ideas. However, Charcot, like Mesmer,

was also fond of dramatic and flamboyant public demonstrations of his therapies, and this may also have contributed to epidemic rates of hysteria at the time. He was criticized for many methodological flaws, such as influencing reactions in subjects via suggestion, and promoting symptoms in patients by housing hysterical patients together with non-hysteric epileptics (North, 2015).

Janet, Charcot's student, coined the term dissociation, which he thought played an essential role in generating the various physical and psychological symptoms of hysteria. While Janet's theories strongly influenced subsequent writers, such as William James, Sigmund Freud, and Carl Jung, they were widely overtaken by Freud's conversion-based theory of hysteria, and did not resurface until much later (Moskowitz & van der Hart, 2020; B. A. van der Kolk & van der Hart, 1989). However, the distinction between Janet's and Freud's theories was never very clear, and Carole North argues that the confusion produced an unfounded distinction between dissociative and conversion disorders that has persisted to the present day. Along these lines, Janet originally accused Freud of plagiarising his ideas (North, 2015).

Sigmund Freud (1856 – 1939) studied under Charcot at the Salpêtrière for several months before returning to Vienna, bringing with him the practice of hypnotherapy. Along with his colleague Joseph Breuer (1842 – 1925), he published a memory-based theory of hysteria, in which traumatic memories that were repressed and insufficiently processed were at the root of hysterical symptoms (Breuer & Freud, 1957). The co-authored volume, however, did not present a unified view of the two authors. Breuer favoured a trauma-based view of hysterical symptoms, in which a traumatic event paired with a "hypnoid state" was necessary for the development of hysteria. Freud, however, rejected the notion that a hypnoid state was necessary, and claimed that an internal psychological conflict between incompatible beliefs or drives was sufficient to cause hysteria

(Bessel A. van der Kolk, 2014). Accordingly, he coined the term "conversion hysteria", which referred to a psychological conflict that was repressed and converted into somatic or other symptoms (North, 2015). The dissociation-based theory of Janet, along with the trauma-based theory of Breuer, resurfaced in the second half of the 20<sup>th</sup> century and were adopted by theorists attempting to understand the effects of post-traumatic stress disorder, childhood trauma, and sexual abuse (B. A. van der Kolk & van der Hart, 1989).

Carole North also outlines the history of hysteria-type concepts in the American diagnostic system, culminating in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM). It can be traced back to an English physician, Thomas Sydenham (1624 – 1689), who in the 17<sup>th</sup> century conceptualized hysteria as an emotional, rather than a physical condition. He named the condition "proteus" to reflect the idea that it could mimic almost any condition. In the 19<sup>th</sup> century, a French physician, Paul Briquet (1796 – 1881) developed an operational concept of hysteria, as a chronic disorder consisting of various medically unexplained physical (i.e. bodily complaints) and neurological (e.g. amnesia, paralysis, pain, spasms, etc.) symptoms occurring in multiple organ systems. Like Syndenham, he also emphasized the emotional distress and symptomatology that tended to accompany the somatic symptoms (North, 2015).

Later, another English physician, Thomas Savill (1855 – 1910), resurrected Sydenham's ideas and created a similar concept of the disorder. His ideas, as well as Briquet's, were adopted in America by the Washington University psychiatric group. Their called the disorder "Briquet's syndrome" instead of the historical name "hysteria" to avoid the stigma and pejorative connotations the term had acquired. It was viewed as a lifelong, chronic, uncurable disorder that affected primarily women, occurring in 1-2% of the female population. It was diagnosed by observing at least 25 of a set of 59 clinically significant but medically unexplained symptoms, in

at least 9 of 10 organ systems, before the age of 30. Treatment consisted primarily of addressing psychosocial stresses that usually accompanied and exacerbated the disorder, and attempts were made to prevent iatrogenic surgeries and medications. Though the Freudian concept of conversion appeared to be embedded in the disorder, "conversion disorder" became a separate classification, in which the symptoms were restricted to those of a neurological type (e.g. paralysis, blindness) (North, 2015).

The first edition of the DSM, published in 1952, contained separate classifications for "dissociative reactions" and "conversion reactions", where the former was a version of Briquet's syndrome. They were listed together under the family of "psychoneurotic disorders", alongside "anxious" and "depressive" reactions. The DSM-II (1968) continued to separate dissociation and conversion as two types of "hysterical neuroses", under the general category of "neuroses". The concept of dissociation was, therefore, thought to be essential to Briquet's syndrome, on the basis of psychoanalytic theory which at that time still informed American psychiatry (North, 2015).

Between the second and third editions of the DSM, the term "somatoform" began to come into use. It was conceptualized in essentially the same way as Briquet's syndrome, that is, it was characterized by a variety of physical symptoms without a discernable medical basis. The name "somatoform disorder" was adopted in the DSM-III (1980). This was the first edition of the DSM to abandon classifications based on psychoanalytic theories of etiology in favour of an atheoretical, agnostic approach to syndromes based on measurable, reliable features and characteristic longitudinal course. A simplified version of Briquet's syndrome was included as "somatization disorder", under the umbrella of "somatoform disorders". Also included in this category was conversion disorder, psychogenic pain disorder, and others (North, 2015).

Notably, the psychological symptoms typical of Briquet's syndrome (e.g. anxiety, depression) were excluded from the clinical description of somatization disorder. Meanwhile, all mentions of dissociation were grouped into a separate category of "dissociative disorders", since the reason for equating dissociation with somatization had been in the now-abandoned psychanalytic theory. This represented a further divergence of psychological and somatic symptomatology in the American diagnostic system (North, 2015).

Throughout subsequent versions of the DSM (DSM-III-R in 1987, DSM-IV in 1994, and the DSM-V in 2013), the concept of somatization disorder continued to be streamlined and simplified. The dissociative disorders, meanwhile, continued to be separate from the somatoform disorders. The diagnosis of "psychogenic pain disorder" was renamed to "pain disorder", and then dropped entirely. Somatization was also removed and replaced with "somatic symptom disorder," whose clinical criteria were reduced to the presence of one or more distressing physical symptoms. The requirement that the symptom be medically unexplained was removed, making it apparently agnostic to psychogenic or organogenic considerations. Conversion was subtitled "functional neurological symptom disorder," and still required proof of a medical incongruity. However, the theoretical link to psychological distress was removed from the clinical description (North, 2015).

North notes that in classifying conversion as a somatoform disorder, in a separate category from dissociative disorders, the DSM-III and subsequent editions were falling out of step with the International Classification of Diseases (ICD). The ICD-9 and ICD-10 list conversion as a dissociative disorder. A separate category, somatoform disorders, contains syndromes such as somatization/Briquet's, body dysmorphic disorder, and pain disorder.

Hysteria and its modern descendants therefore remain controversial in their theory, explanation, and classification. Sections 4, 5, and 6 will try to shed some light on its multifaceted

presentation, and offer some theories and potential explanations for its mechanisms and culturespecific manifestations.

### 4. History of functional somatic syndromes: The case of fibromyalgia

Functional somatic syndromes refer to disorders in which physical complaints are present which cannot be attributed to "verifiable, conventionally defined diseases" (Fink & Schröder, 2010). These include syndromes such as fibromyalgia, chronic fatigue syndrome, and irritable bowel syndrome. While a physical pathology has not been identified for these disorders, different mechanisms have been proposed such as an abnormal immune response or central sensitization (Yunus, 2008). Other researchers suggest that fibromyalgia and functional somatic disorders should not be considered as primarily physical diseases at all, and have substantial overlap with the psychiatric category of somatoform disorders (Bass & Henderson, 2014; Fink & Schröder, 2010). In this section, we will explore the history of fibromyalgia, a syndrome characterized principally by widespread musculoskeletal pain.

Records of a fibromyalgia-like syndrome go back at least as far as Hippocrates, who posited a "Rheuma theory" of pain. Rheuma, or liquid, was released from the brain and accumulated in various parts of the body, causing pain. Later, Theophrastus (371 - 287 BC) wrote of a condition called "lassitude" which consisted of a general pain in the muscles and tendons. Galen (130 - 210) considered the brain the source of pain and other sensations, and claimed that pain resulted from the passions disorders of the soul (Perrot, 2012).

Hippocratic medicine was revived in Europe in the 16<sup>th</sup> century by the French physician Guillaume de Baillou (1538 – 1616), the founder of epidemiology. He coined the term

"rheumatism" and provided the first medical description of a fibromyalgia-like syndrome in his book "Liber de rheumatism". In the 19<sup>th</sup> century, a number of physicians attempted to describe the pathophysiology of the syndrome with reference to the inflammation of fibrous tissue, tender points, and nodules. Among them was William Balfour (1823 – 1903), a Scottish surgeon who coined the term "fibrosistitis" for a muscular rheumatism involving inflammation of the "fibrous and white tissues" (e.g. tendons). A French pediatrician, Francois Valleix (1807 – 1855), introduced the concept of "tender points" as referred pains (i.e. displaced pain) produced by palpating certain trigger points. In 1904, Sir William Gowers (1845 – 1915), a British neurologist, coined the term "fibrositis" implying an inflammation of the fibrous tissue. However, the pathologies suggested by these physicians – principally inflammation – failed to be reliably demonstrated, suggesting that the "-itis" suffix, which refers to inflammation, was a misnomer (Wang et al., 2015).

Around this time, the American neurologist George Beard (1838 – 1883) described a condition named "neurasthenia" that was characterized by many somatic and psychological symptoms. These included pain, sleep disturbances, and fatigue, as well as problems with cognition and mood. Beard gave the syndrome a neurological explanation in terms of a depletion of "nervous energy", and the diagnosis became popular as it gave an honourable and apparently medical rationale for the exhaustion experienced by industrialized people (Schuster, 2003). Though the diagnosis fell out of favour, many of its characteristics would later appear in the American College of Rheumatology's 2012 criteria for fibromyalgia (Wang et al., 2015). It is also considered the forerunner of chronic fatigue syndrome, for which it is almost identical. In fact, Abbey & Garfunkel claim that the latter plays a similar exculpatory role in today's society, as an

apparently medical – and thereby legitimate – way of sanctioning responses to overwhelming exhaustion or psychosocial stress (Abbey & Garfinkel, 1991).

In the 20<sup>th</sup> century, two additional psychogenic or psychosomatic interpretations of widespread muscular pain became significant. After the second world war, soldiers presented with fibromyalgia-like syndromes in very high numbers, with 24% of those visiting one hospital presenting with the disorder. This was termed "psychogenic rheumatism", and a similar phenomenon was observed years later during the Gulf war. Meanwhile, the stress-based paradigm of the Hungarian-Canadian endocrinologist Hans Seyle (1907 -1982) also gained traction. His model of dysfunction of the hypothalamic-pituitary-adrenal axis was applied to theories of widespread muscular pain (Perrot, 2012).

Between 1970 and 1990, significant progress was made in clarifying and unifying the concept of fibromyalgia. Smythe and Moldofksy extensively described fibrositis as a syndrome including generalized pain, poor sleep, fatigue, morning stiffness, emotional distress, and multiple tender points. Philip Hench coined the term "fibromyalgia" in 1976. Finally, Frederick Wolfe published the first American College of Rheumatology criteria for the disorder in 1990 (ACR 1990), which was included in the ICD-10. These criteria involved the manual testing of tender points by a physician with a standardized weight, but excluded the various sleep, cognition, and mood related symptoms that were typical of the disorder. In fact, the criteria were intended for research purposes and not meant to be used in a clinical context. This led to later revisions in 2010 (Wang et al., 2015).

The 2010 revision (ACR 2010) of the fibromyalgia criteria attempted to simplify the process of diagnosis for clinicians, as well as including psychological and sleep-related symptoms. The testing of tender points was converted into a patient-reported account of the number of painful

spots – the "widespread pain index". Meanwhile, fatigue, non-refreshed sleep, and cognitive problems were included in a "symptom severity scale". While this revision succeeded in its goals, it was met with various criticisms. For example, the lack of an identifiable mechanism, the focus on symptomatology and self-report, and the lack of objective biomarkers (Wang et al., 2015).

The pathology of fibromyalgia and other similar disorders therefore represents an unresolved issue, as well as the question of whether it is more appropriately defined as a disease or a response to stress. The following sections will explore some of the frameworks that have been applied to the study of somatoform disorders and functional somatic syndromes, in an attempt to discern their mechanisms or causes.

# 5. Polysymptomatology and idioms of distress

An essential theme of somatoform and functional somatic disorders is an incongruity between the physical symptoms observed, and the typical presentation of those symptoms in similar medical disorders. That is, patients report with complaints that mimic known physical ailments, but which appear almost randomly reorganized. As Carole North argues, "areas of sensory anesthesia do not follow dermatomal distribution, motor paralysis does not follow the anatomy of motor nerve supply, [and] non-epileptic seizures lack demonstrable brain waves of epilepsy" (North, 2015).

In addition, counter to their separation in the DSM, the diagnoses of somatization, conversion, and dissociative disorder frequently co-occur. North reports that multiple personality disorder (renamed "dissociative identity disorder" in the DSM-V) exhibits comorbidity with somatization disorder in 33-100% of cases, and with conversion disorder in more than 50% of

cases. Along these lines, North supports a view of dissociative disorders as "polysymptomatic" and "polysyndromic," reminiscent of the original conceptions of hysteria or Briquet's syndrome (North, 2015). Similarly, Fink & Schroder argue that the separation of the different somatoform disorders, as well as their distinction from the medical family of functional somatic syndromes, is an obstacle to the understanding and treatment of somatic distress. Part of this problem is the apparent assumption that the somatoform disorders are more heavily related to psychological distress than the functional somatic disorders — however, they appear equally related to psychological variables. Accordingly, they propose a unified "bodily distress syndrome", with single-organ and multi-organ subtypes, which notes the similarity of the different canonical disorders while also allowing room for the amorphous and idiosyncratic nature of medically unexplained somatic illness (Fink & Schröder, 2010).

North extends these themes not only to the somatoform and dissociative disorders, but also includes a discussion of borderline personality disorder. Borderline personality is characterized by a pattern of unstable relationships and difficulties with self-image and emotional regulation. It shares the same extensive rates of comorbidity with dissociative, somatization, and conversion disorders as the latter do with each other. In addition, people with these diagnoses tend to have similar psychopathological and personality profiles as measured by the Minnesota Multiphasic Personality Inventory, suggested that they comprise a shared axis of pathology (North, 2015).

According to North, borderline personality also shares the "medically incongruous" aspect of the somatoform disorders. That is, it suggests of a psychiatric illness, but its symptomatology does not cleanly correspond to any well-documented existing diagnosis. This leads North to suggest that borderline personality is a "psychoform" disorder, in analogy to the "somatoform" disorders, which are suggestive of a physical disease but are not explained by any known physical

pathologies. The dissociative disorders also fit under this rubric of "psychoform" disorder. Jointly, North considers these to form a family of "oForm" disorders (North, 2015). This concept readily evokes the old concepts of Briquet's syndrome and hysteria, which included somatic, neurological, memory-based (dissociative), and psychological symptomatology, and may be considered an attempt to reify the old "polysymptomatic, polysyndromic" categories.

We can also recall Thomas Sydenham's idea of "proteus", which could present as any other syndrome or disorder. How is this type of syndrome to be explained?

A popular interpretation amongst medical anthropologists is in terms of "idioms of distress". The phrase reflects the idea that psychological distress can be variously expressed through cognitions, emotions, and bodily ailments and sensations (somatization). Conversely, bona fide physical illnesses can also be "psychologized" and experienced and expressed symbolically, through metaphors and language. The particular form that distress takes is influenced by the "preferred" mode of experiencing and expressing in that individual, as well as the social mores, medical beliefs, labels, and patterns of stigmatization of the surrounding culture (Furst, 2002; Kirmayer, 1989).

The idea of idioms of distress points to a fundamental inseparability of the mind and body, similarly to the discussion of the biopsychosocial paradigm in the introduction. Kirmayer even suggests that the concept of somatization, while useful, is insufficient to address the breadth of possible mechanisms and manifestations of idioms of distress and illness behaviours, as it implies a dualistic Western separation between the psychological entities and the body. In our culture, we expect people to express distress through language and idioms of intrapsychic or social conflicts, and as such somatization is viewed as somewhat of a mystery or abnormality. However, in other cultures, somatic complaints may be a normal and taken-for-granted way of communicating

distress (Kirmayer, 1989). For example, Angel and Thoits studied the prevalence of somatization in Mexican Americans with psychiatric conditions, and concluded that more traditional cultures experience a lesser differentiation between psychological distress and somatic illness. They suggest that learned cognitive structures are essential for the subjective interpretation, and therefore the presentation, of psychosomatic distress (Angel & Thoits, 1987).

The influence of culture on illness behaviours also extends to the role of social mores and stigma. As was mentioned in the history of functional somatic disorders, neurasthenia and chronic fatigue syndrome arose at times when many people were experiencing depletion, apparently as a function of their fast-paced, industrialized lifestyles. In our biologically-oriented medical culture, these diagnoses, ostensibly based on biological processes, offered a culturally sanctioned way of escaping the social circumstances that were causing the distress (Abbey & Garfinkel, 1991). Thus, people's illness behaviours may come to align with the clinical description of the diagnosis in order to get this form of social relief. Other diagnoses, such as hysteria and multiple personality disorder, also had their moments of epidemic growth (North, 2015), which heavily suggests sociocultural influences over biological or genetic roots.

In the case of functional pain disorders, people presenting with fibromyalgia or other conditions may – and often are – affected by psychological forms of distress as well. If physical symptoms are taken more seriously than psychiatric ones such as despression or anxiety, or if they engender less stigma than the latter, then people suffering from a variety of symptoms may emphasize the ones to which their physicians respond more favourably (Kirmayer, 1989; Bessel A. van der Kolk, 2014). Alternatively, personal factors such as alexithymia or a tendency towards emotional suppression may play a significant role in deciding whether distress is expressed through primarily somatic or psychological language (see section 7).

The framework of idioms of distress seems to be effective in accounting for cultural differences in somatization phenomena through the lenses of culture, language, and cognition. However, it leaves open questions about the mechanisms and psychophysiology of psychosomatic disorders. The following two sections will explore some approaches to this.

## 6. Dissociation as a mechanism for somatization: Janet, Freud, and Jung

The link between the somatoform disorders and the family of dissociative disorders has led North and others to hypothesize that dissociation could be a mechanism by which odd somatic or pseudo-neurological symptoms may emerge. This concept of dissociation in medicine goes back to the theories of Pierre Janet, who viewed the symptoms of hysteria as the result of a failure to integrate different psychological processes. Neo-Janetian perspectives have been adopted by authors such as van der Kolk in the field of trauma (B. A. van der Kolk & van der Hart, 1989) and Moskowitz in the study of psychosis (Longden et al., 2020).

In Janet's view, the mind is made up of many semi-autonomous circuits called "automatisms", which can involve a combination of cognitive, affective, and sensory-motor processes. These automatisms can be considered behavioural adaptations to the person's environment. Automatisms form part of cognitive hierarchy, at the top of which is the "fonction du réel", which integrates them and grounds the person in the present moment (termed "presentification"). Traumatic experiences can cause this capstone function to operate in a diminished way, which results in an "abaissement du niveau mentale," a dissociated mental state which shares some features in common with hypnotic trances and sleep. This dissociated condition can lead to automatisms functioning in a split-off manner, in parallel to the conscious mind. For

example, one patient of Janet's had a blindness in her left eye. He traced this symptom to an experience in her childhood of having had to sleep to the right of a boy with an aggressive skin infection. This link could only be elicited when the patient was under hypnosis, since in this state she was somehow able to access a greater repository of memories (B. A. van der Kolk & van der Hart, 1989).

Carl Jung (1875 – 1961), when formulating his theories of hysteria and schizophrenia, borrowed from Janet all the essential elements of this picture. He called the automatisms "emotion-toned complexes of representations", emphasizing that they were a combination of emotions, ideas, and memories. They tended to be centered around a memory with a particularly strong emotional tone, such as a traumatic memory. In addition, he described them in much the same was as we conceptualize semantic networks: complexes were part of a network of associations, and the activation of a related trigger word or concept could in turn activate the complex and its related emotions (Jung, 1960).

In his word association experiments, which were adapted from Wundt, he observed that certain constellations of words would be met with abnormally long reaction times, increased skin conductance, and unusual or highly superficial associations (e.g. rhymes or conjugations). He interpreted these words as belonging to a highly charged complex, which, when activated, created an "inner distraction" that interfered with attention and thinking. In many cases, his subjects seemed to be unaware of what caused their unusual response patterns – Jung interpreted these as being caused by complexes that had been "split-off" and were inaccessible to the conscious mind. However, they still operated in parallel, causing confusion and emotional arousal. Schizophrenics, according to Jung, responded to the association experiment in essentially the same way as normal subjects, but their abnormal responses were exaggerated, showing longer response delays and

disruptions that persisted long after the initial trigger word was given. To him, this meant that they were suffering from particularly strong complexes, as well as Janet's "abaissement du niveau mentale" (Jung, 1960).

The dissociation-based theory of psychosomatic symptoms was retrieved in the 60s and onwards, particularly in the study of trauma (Bessel A. van der Kolk, 2014). An essential component was Janet's idea of multiple memory systems and their lack of integration in traumatic events. The first type of memory that is encoded, according to Janet, is a sensory or enactive representation of events. This has to be integrated with cognitive and linguistic structures in order to produce a complete memory that has a narrative structure and is verbally expressible. Under exceptional fear, the integration process may break down, resulting in a dissociated automatism and subsequent disturbances of consciousness and behaviour. Kolk writes: "Janet believed that when people are terrified, the usual cognitive schemata are inadequate to create a mental construct which places the experience in the perspective of prior knowledge schemas, causing it to be left unintegrated and to persist as a psychological automatism" (B. A. van der Kolk & van der Hart, 1989).

Similarly, Sigmund Freud and Joseph Breuer's joint theory of hysteria predicted most of the features of this recent view of PTSD. In Breuer's view in particular, traumatic experiences could create a "double conscience", a form of dissociation in which the unintegrated or repressed experiences continued to exert an influence on the mind and body from a secondary consciousness. This, again, was viewed as a type of somnambulism that could be accessed under hypnosis. In their theory, hysteria could be successfully treated by producing a sufficient "abreaction" or integration of the memory and its associated emotions. This involved producing an appropriate response to the event or emotion in question; for example, if the original trauma produced hurt or

anger, then an abreaction might consist of some form of revenge. However, language could also serve this cathartic function, and successfully talking through the experience – at the same time as experiencing its associated emotions – could have a similarly cathartic effect, giving rise to the talking cure and psychotherapy (Breuer & Freud, 1957). Van der Kolk points out that this strategy is not always effective in treating PTSD, but it was nevertheless an important breakthrough (Bessel A. van der Kolk, 2014).

North argues that the role of dissociation in somatoform disorders has been overlooked since the advent of the DSM-III (North, 2015). Likewise, Moskowitz argues that the neurosciences have still to catch up with the theories of Janet, and that dissociation has an essential part to play in explaining psychosis (Moskowitz & van der Hart, 2020). Dissociation therefore appears to be a strong candidate for the mechanism driving the various somatic and psychological symptomatology of North's "oForm" disorders.

Having covered cultural and neuropsychological perspectives, the next section will explore the possible role of relationships in psychosomatic disorders, through the frameworks of trauma and attachment.

### 7. The social world: The role of trauma and attachment

Somatoform and dissociative disorders have been studied in the context of wartime trauma, sexual abuse, and childhood abuse and neglect. A handful of diagnostic categories, such as post-traumatic stress disorder and developmental trauma disorder (DTD), seek to encompass these experiences and the symptoms that may result from them. The latter, DTD, seeks to describe the effects caused by "complex" trauma, which, rather than reflecting a single traumatic event as in

PTSD, typically results from a prolonged history of adverse childhood experiences (Bessel A. van der Kolk, 2005). A comprehensive, large-scale study of adverse childhood experiences was conducted in the 90s by the Center for Disease Control and Prevention, revealing a host of significant vulnerabilities for later psychiatric and physical illnesses. Among these are, "substance abuse, *borderline and antisocial personality*, or eating, *dissociative*, affective, *somatoform*, cardiovascular, metabolic, immunologic, and sexual disorders" (Bessel A. van der Kolk, 2005; emphasis added).

The links between a history of traumatic experiences and mental and physical illness may be varied. One approach suggests that chronic sympathetic activation, that is, of the "flight/fright/freeze" response, is responsible for a variety of the effects observed (Bessel A. van der Kolk, 2014). However, the reasons for this chronic arousal, and an inability to relax, may be mediated by further social dynamics. Ordinarily, being around other people can bestow a sense of security that alleviates distress and allows the parasympathetic nervous system to return the body to a restful state. However, traumatic social encounters may change a person's response to the presence of other people, leaving them in a chronic state of alertness and internal dysregulation (Bessel A. van der Kolk, 2005).

A famous framework used in this context is John Bowlby's (1907 – 1990) theory of attachment. Rooted in the belief that humans posses an innate drive and behavioural repertoire for bonding and seeking proximity with others, the theory of attachment outlines different ways in which this system can become disorganized (Romeo et al., 2017). Mary Ainsworth (1913 – 1999) assessed the different tendencies of children using the "strange situation test," which involved temporarily separating a mother from her child. Most children responded in a "normative" or "secure" way, showing some distress after their mother left, and relief upon their reunion. Another

group of children, termed "anxious-resistant," showed increased distress on separation and were difficult to soothe afterwards, sometimes trying to punish their mother's absence. A third group, termed "anxious-avoidant," showed apparent indifference throughout the experiment and avoided seeking contact with their mother (Fraley, 2018). A final group exhibited inconsistent or uncategorizable reactions, for example, anxiously approaching their mother before turning about face or simply falling to the floor. This group was later termed "unresolved" or "disorganized," and their behaviour was thought to reflect a conflict between a desire to be comforted and a fear of their caregiver (Agrawal et al., 2004).

These attachment styles were soon studied in adult populations, and four similar categories were created: (1) Secure, representing a confident, trusting approach to relationships. (2) Anxious-preoccupied, an extension of the anxious-resistant type, with high levels of separation anxiety. (3) Avoidant-dismissive, an extension of the anxious-avoidant type, which shows detachment or indifference. (4) Disorganized-fearful, which corresponds to the "unresolved" group and combines the anxious and avoidant/fearful aspects of the previous two groups (Fraley, 2018).

The three "insecure" attachment styles appear to be vulnerability factors for a variety of psychiatric and physical illnesses, in a manner similar to adverse childhood experiences (Bessel A. van der Kolk, 2005). The first application of attachment theory to the study of chronic pain was by Mikail et al. (1994). Mikail et al. conceptualized pain as interacting with help-seeking behaviours, trust in peers and medical staff, and anxiety or hostility in social interactions. For example, a stressor for a securely attached person may be quickly alleviated by successfully seeking social support, and they may be more immediate and trusting in seeking treatment for illnesses. On the other hand, an avoidant-dismissive type may delay seeking treatment, minimize or suppress their distress, or neglect to seek support from their friends or family. An anxious-

preoccupied type may have problems asking for help out of fear of social rejection, or may elicit irritation or punishing responses from doctors and peers due to hypochondriasis, a tendency to catastrophize, or a difficulty in being calmed. Finally, fearful-disorganized individuals may avoid doctors or peers completely out of fear of persecution (Mikail et al., 1994).

Van der Kolk further suggests that early insecure relationships may result in difficulties in emotional regulation, as the combination of overwhelmingly stressful experiences and an inability to be aided by one's caretakers results in an underdeveloped system for processing and contextualizing distress. This may result in a variety of manifestations such as chronic stress, dissociation, somatization, and potentially alexithymia (Bessel A. van der Kolk, 2005).

Alexithymia is a term which means literally, "a lack of words for emotion" (López-Muñoz & Pérez-Fernández, 2020). Alexithymic people have difficulty in identifying and verbalizing their inner feelings. One of the most striking explanations for this is mentioned by van der Kolk, who suggests that alexithymia can arise from a numbing of visceral and somatic sensations (Bessel A. van der Kolk, 2014). William James famously posited that the perception of emotions comes from perceiving the internal states of the body (Barrett et al., 2007). If this is so, then numbing these sensations from would in effect spare a person from experiencing negative emotions — or any emotions. The numbing or incomprehensibility of emotions and sensations may come from disorganized early attachment, in which an individual is not able to use the verbal and nonverbal signals of their caretaker in order to learn about and categorize their own sensations and feelings (Bessel A. van der Kolk, 2005). Whether and how this may cause somatization remains unclear. Perhaps it may drive a somatic interpretation of distress, since the individual has difficulty using psychological language; or, it may just share a common cause with somatic symptoms, namely the suppression or dissociation from emotion.

In fibromyalgia, a greater share of patients have insecure attachment styles compared to healthy controls, and they have higher mean levels of attachment avoidance and anxiety (the dimensional variants of the two main insecure types). In particular, avoidance was more common in patients with fibromyalgia than attachment anxiety, and was often accompanied by poorer mentalization and social cognition as well as alexithymia (Oracz, 2014). Oracz found that mentalization, the ability to understand mental states, was not impaired in an interpersonal context, but was selectively worsened in the patients' cognitions about themselves. Fibromyalgia is also associated with higher levels of childhood emotional abuse (Bayram & Erol, 2014). This pattern of effects is similar for other types of chronic pain, although anxious attachment might be more relevant than avoidant attachment for the majority of conditions (Romeo et al., 2017).

In the case of hysteria, Briquet's syndrome, or borderline personality, the connection becomes exaggerated. Agrawal et al. report that between 50% and 80% of those with borderline personality exhibit the "unresolved" or disorganized-fearful attachment style. As well, borderline personality is heavily associated with childhood trauma and neglect – in fact, some theorists suggest that problems of attachment may be the essential core of the disorder (Agrawal et al., 2004). The various somatic, dissociative, and psychotic symptoms could be thought of as manifestations of overwhelming distress that cannot, due to fear of caretakers and peers, receive adequate expression or soothing.

The role of trauma and attachment in illness extends beyond somatoform and chronic pain syndromes, however its application to these may be particularly interesting. They may lead to somatization through chronic stress, emotional dysregulation, or alexithymia; or, as explored in the other sections, through cognitive interpretation or dissociation. We also see that the link

remains strong between the modern approximations of hysteria and a history of trauma, which was observed at the end of the 18<sup>th</sup> century by Janet, Freud, and Breuer.

### 8. Conclusion

The history of psychosomatic disorders presents an interesting study of clashing ideologies: The supernatural and the scientific, dualistic and non-dualistic approaches to the mind and the body, and the splintering of scientific and medical fields, each studying similar disorders with different interpretations and treatments. The numerous classifications and re-classifications of the original diagnosis of hysteria show the difficulty of parcelling out the manifestations of distress into clean, distinct diagnostic categories. This may also be due to the lack of interest in mechanisms: both the somatoform disorders and the functional somatic disorders are often considered in a clinical context without a clear of idea of where the symptoms come from. Themes of dissociation, emotional suppression, and attachment or affective style seem to be interesting paths in investigating the psychophysiological as well as psychosocial factors at play in the various ways in which distress in expressed in the body.

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