

SYMBOLIC DISEASES AND “MINDBODY” CO-EMERGENCE. A CHALLENGE FOR PSYCHONEUROIMMUNOLOGY

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Physical diseases that appear to be symbolic somatic representations of patients' personal meanings or individual 'stories' continue to be reported in the medical literature. The identification of a symbolic disease requires a clinical focus upon a patient's highly individual and nuanced meanings largely rendered invisible by the usual methodologies of clinical and research medicine, which has no coherent model for understanding symbolic disease. Therefore, a model is proposed of *co-emergence* of physicality and subjectivity, body and mind, disease and meaning, disease and symbol, which does provide a coherent basis for understanding symbolic disease. The 'mindbody' co-emergence model avoids mind and body dualism, assumes unbroken con-

tinuity between internal body processes and external interpersonal meanings and influences, and asserts that disease-related 'internal' bodily changes and collateral external interpersonal and environmental fluxes are mutually contingent and crucial to the development of the disease. The co-emergence model is discussed specifically in relation to psychoneuroimmunology, but it has exciting clinical and research implications for the whole of medicine.

Key words: Co-emergence, psychoneuroimmunology, symbolic illness, disease paradigm(s), disease models, meaning, dualism, holism, wholism, mind/body

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INTRODUCTION

Symbolic Diseases (SDs) in the 20th Century

Over the last century there have been many reports of physical diseases that appear to be somatic representations of individual patients' personal meanings or "stories." In some, the somatic representation is highly symbolic.¹⁻¹⁵ Interest in SD phenomena peaked during the 1940-1970 period,⁹ particularly around the work of Alexander and the Chicago School,^{14,15} which, although predicated on the notion that all diseases were ultimately psychosomatic, focused on a number of "classic" psychosomatic diseases, such as duodenal ulcer¹⁶ and asthma.¹⁷ These classic diseases were seen as bodily representations of causal generic conflict states and defensive repertoires characteristic of each disease state, a position that was ultimately judged to be too reductionistic.¹⁸ Subsequently Engel's "biopsychosocial model"¹⁹ has been the most influential model for mind and body integration in medicine, but, in reality, it has served mainly to emphasize the multifactorial nature of illness, and many clinicians utilizing this model would shrink from the more radical notion of SD presented here,

for reasons that become clear in the discussions regarding psychoneuroimmunology (vide infra).

Mind/Body Relations and Psychoanalysis

The complex relations between psychic and somatic dimensions of personhood, and their relevance to disease, continue to be a focus in the psychoanalytic literature.²⁰⁻²² But the issue of disease as a carrier or repository of meaning or symbol is highly controversial because, whereas some psychoanalytic theorists see psychosomatic expression in the body as a phenomenon driven by a failure of psychic symbolization, others see it as a consequence and expression of psychic conflict not expressible or resolvable in other ways and therefore needing to be somatized.²¹ The co-emergence model offered here ultimately underpins all forms of psyche/soma differentiation, because it asserts the co-emergence of physicality and subjectivity from the beginning. The forms that subjectivity traces take in physical disease are likely to be very heterogeneous. Therefore, both symbol-free and symbol-laden diseases are conceptual possibilities; but the trigger for this paper is the symbol-laden variety.

Mind/Body Relations and Medicine

Medical interest in symbolic or meanings-laden disorders has faded for many reasons, including the excessive reductionism involved in the emphasis of Alexander;¹⁸ the increasing identification of (and distraction toward) pathophysiological mechanisms associated with the "classic" psychosomatic diseases; the recent modeling of psychosomatic disorders in terms of trauma, dissociation, developmental blocks, and neural activation bypassing cortical pathways and consciousness;⁹ a general cultural movement away from positivist notions of meaning to postmodern narrative-making; and a resistance to ideas of relationship

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between disease and meaning engendered by the enduring general and medical acceptance of dualistic concepts of mind and body relationships.^{2,5}

SDS AND MODERN NEUROSCIENCE

Brain-scanning techniques have caused an explosion of interest in neuroscience and research data, giving access to and highlighting the role of brain mechanisms in the mind-brain-body continuum, and with much consequent interest in the interactions of the brain with the “information transfer systems,” that is, the autonomic nervous (ANS), endocrine, and immune systems.^{23,24} But there are some real limitations to the types of information (vide infra) that can be transferred from the mind/brain to the body via these systems, making it difficult for SD to be either imagined or considered. In addition, in modern neuroscience, conceptualizations of the effect of meaning on the body tends to be reduced to the effects of emotions (associated with meaningful events) on the autonomic, endocrine, and immune effects,²⁴ rather than on other nonaffective symbolic information that identifies the kind of meaning given to events. The possibility of symbolic information being transferred through to the end-outputs in the body is not in this framework a serious possibility. Yet, in the examples given below, SDs seem to exhibit information that is both symbolic and affectively intense.

The overall result is that ideas of SD,¹⁻¹⁴ signaled perhaps most famously and originally by Georg Groddeck¹¹ early in the 20th century, have little traction in modern medical practice,⁵ and very little mention in the recent scientific literature apart from the work of Broom,^{2,3,5} Chiozza,^{6,7} and McDougall.¹³ But the view systematically developed here is that the very existence of SD has profound implications for understanding physical disease, moving clinical preoccupations from mainly body toward considering mind, body, family, culture, and environment all in the same clinical time/space. The paper shows how current theoretical modeling, particularly that which underpins psychoneuroimmunology research, is inadequate to the task of understanding SD. It goes on to utilize a *co-emergence* concept, similar to that which has emerged in complexity theory, to explicate the reality that bodily and symbolic elements of human existence emerge together, and thus bodily disease and symbolic processes are “entangled.” Thus, if one “looks,” many physical diseases present with profound meanings, meanings that can be seen to have preceded the overt physical manifestations, and are an integral element of the presentation. The implications of this for medical practice are numerous and challenging.

SDs

Definitions

SDs are defined here as occurring when “the organ system involved, and/or the pathological process, and/or the clinical phenomenology, appears to be particularly congruent with, or appropriate to, the patient’s subjective meanings or ‘story,’ as ascertained from the patient’s language, life history, and behaviours.”⁴ Our contention is that SD require a nondualistic understanding of human personhood. The term “dualism” is used here

with respect to a widespread assumption in Western healthcare that physical diseases (in particular) can be worked with therapeutically without much attention paid to mind factors, that is, that mind and body are *in essence* or *functionally* separated in some way such that mind factors may be ignored. The phenomena of SD challenge this framework in a fundamental way.

Psychiatric Classification, Narrative Medicine, and Mind or Body Reductionism

Before presenting some brief examples (all have been discussed in detail previously^{2,5,11}) of SD, it is important at the outset to preempt misunderstanding and distraction from the central message of this paper by clarifying the relations of the discussion to some other well-established ways of thinking about disease and illness and their relations with subjectivity and experience.

First, this discussion does not focus upon the well-known *DSM-IV* and *ICD-10* diagnosis of Somatoform Disorders, nor does it engage with the current psychiatric discussions and controversies around how that diagnostic category should or should not be reorganized, or, as recently suggested, renamed as Complex Somatic Symptom Disorder.²⁵ This is because the co-emergent model presented here requires that subjectivity elements be considered in all diseases, and not just in special and limited groupings of disease traditionally captured by terms such as *functional*, *psychosomatic*, *somatization*, *conversion*, *somatoform*, or *complex somatic symptom* disorders, or indeed as *medically unexplained symptoms*.²⁶ By calling attention to SD we are highlighting the intimate relations between subjectivity and physicality, and that subjectivity is important in all disease, however vividly physical that disease may be, and that this deserves much more consideration than currently is the practice. To underpin this, a new model is needed.

Second, there have been other attempts to give subjectivity a proper place in medicine. For instance, distinctions have long been made between disease, illness, and suffering, emphasizing existential and culturally constructed elements of the experience of disease.^{27,28} *Narrative medicine* has emerged to capture how individual persons and cultures construct and talk about their illnesses, and how these constructions may influence treatment experience and outcomes.²⁹⁻³² Undoubtedly, these projects are valid perspectives on the relations of subjectivity to disease and therefore complementary to this paper, but they are not central to it. In the illustrative cases presented below, the symbolic dimension of personhood penetrates through to the actual physical disorder and is represented in it. In respect of the role of subjectivity, this is a substantial step further than any distinctions between illness and disease or any post hoc narrative constructions people may put on a disease that is seen to have no essential inherent symbolism.

Finally, this discussion is not about all disease being fundamentally psychological (a reductionism equivalent to the opposite error of considering all disease to be merely physical). Nor is it being asserted that all disease reaches obvious symbolic intensity, and that one must always be searching for the sym-

bolic in all disease. The presence of manifest or vivid symbolism is one way in which subjectivity manifests itself.

Illustrative Cases

Georg Groddeck^{5,11} reported a man with hemorrhagic retinitis who in childhood knocked the figure of Christ off a crucifix with a stone. His episodes of hemorrhage began years later when a blind man known in the town as a “blasphemer of God” came into the shop in which the patient worked. Subsequent exacerbations were clearly triggered by further crucifix-associated events, and, once understood, they ceased.

A woman⁵ developed very aggressive rheumatoid arthritis complicated by gold therapy-induced bone marrow failure. The disease arose in a context of a very enmeshed marital relationship and social context, about which she used the following language: “in a bind” “I can’t get moving,” “captured,” “tethered, enslaved,” and, indeed, “crippled” by living in a small back-water town. Therapy addressing these issues has led to an enduring remission (12 years thus far).

A woman⁵ was raped by a twin brother at age 15, the assault beginning with rough handling of her breasts and then forced vaginal penetration. Thirty-five years later depression ensued after her church minister embraced her, and she realized he was aroused. During therapy she began to bleed from the uterus, and a hysterectomy was performed. Soon after, she started to bleed from the bladder, at times when her male employers were being brusque or dominating. No bladder or kidney abnormalities were found. As the original rape event was approached in therapy she started to bleed from both breasts, and again investigation found no sinister lesions.

An elderly woman⁵ was referred by an internist for an immunological opinion regarding an extraordinary widespread inflammatory thickening of the skin (and given a diagnosis of “connective tissue disease”). It began when she fell over and injured herself in a shopping mall. In her initial description of this, she spontaneously and repeatedly said “I went into my shell.” After the injury she shut herself away for a year behind “my four walls,” and then spontaneously recovered when a friend insisted that “I come out of my shell.”

Psychoneuroimmunology (PNI) and Individual Meanings

We will focus the proposition, that the phenomenology of SD require a fundamental shift in our understanding of subjectivity and physicality relations, around the PNI model, which for several decades has been the accepted conceptual psychosomatic framework for understanding and researching inflammatory diseases.³³

The Scope of PNI

PNI emphasizes the interactions between the mind, brain, and immune system in health and disease³⁴ including the influence of emotionally negative as well as positive factors on immunity;³⁵⁻³⁷ the impact of stress on immune-related diseases;³⁸ the effects of behavioral interventions on immune

system parameters;³⁸ and, in the reverse direction, the effects of immune activity on neural and endocrine processes, behavior, and experience.³⁹

The SDs Challenge for PNI

SD pose major issues for PNI because, for their detection, they require attention to an individual patient’s very specific meanings. Although the research case is strong for the existence of very active and complex mind/brain/immune system interactions,^{34,40,41} the data generally available in PNI studies are several steps removed from the meaningful, emotionally significant, individual-specific, “story” elements seen in the SD cases cited above. PNI studies have focused on the “essentialized”⁴² and clinician-centered data of diagnosis, and on various derivative subjectivity constructs or abstractions such as anxiety, depression, stress, personality, wellness measures, or attachment styles. Accordingly, PNI studies have used group-oriented research methods such as cross-sectional and pre/postdesigns, standardized questionnaires, and highly controlled laboratory stress tests, based on data-averaging across probands, rather than focusing intensively on individuals and on the nuanced pathophysiological changes occurring in relation to highly specific meanings data and individual physical disease onset and exacerbation or remission.^{43,44}

Another issue is that other models, commonly used by PNI researchers, by their very nature exclude nuanced meanings data. For instance, although allowing for broad psychological constructs as well as neural, endocrine, and immune elements, both the “stress” model⁴⁵ and the “allostasis” (the body’s management of loadings and pressures) model^{46,47} are basically models of “forces” (objective, biological, mechanistic) rather than of “meanings” (subjective).

In addition, PNI has largely been construed in linear terms along the lines of the X-Y-Z model of Elliott and Eisdorfer⁴⁸ or the A-B-C-D model of Lane et al.²⁴ In the X-Y-Z model, X represents the stressor or triggering event, Y represents the mediating neuro-endocrino-immune mechanisms, and Z represents the disease manifestation. This linear modeling artificially divides X, Y, and Z from each other, and construes mind (X) as causing changes in the body (Z) via neuro-immunological pathways (Y). But from an SD perspective it seems unlikely, using this type of linear modelling, that the information-bearing capacities of the immune (or endocrine) systems (Y) can carry the symbolic information required for a disorder (Z) to be recognized as symbolic. It does remain possible that the peripheral nervous system, or some yet unrecognized information system, might act synchronously with the immune and endocrine systems to specify body site, etc, such that Z can be recognized as carrying the symbolic. Certainly there seems to be no evidence that PNI researchers are imagining symbolic information being transferred via these information systems. If that is the case how could they explain SD?

Finally, despite very strong empirical group-data evidence for associations between stress and immune function,^{35,36} PNI has had minimal impact on patient treatment. We suggest that the lack of a conceptual and research basis for addressing the fine biographical detail of individual patient “mindbody” scenarios blocks the clinical utility of PNI studies, maintaining a researcher-clinician gap, and

undermining pro-active “mindbody” approaches to clinical conditions.⁴⁹ The result is that despite much indicative PNI research data the biomedical paradigm remains dominant, and, perhaps against the best intentions of many, the practice of medicine remains dualistic, keeping the dimension of individual patient subjectivity removed from the clinical consultation. In short, clinicians find SDs more or less inconceivable. On the research side, there has been virtually no exploration of possible mechanisms for SD.^{2,4,5} We contend that PNI assumptions need refreshing so that the proper conceptual relations between physicality and subjectivity are restored, and the highly distinctive data of each patient’s individual experience and history can be understood as relevant to PNI mechanisms, and integrated into the clinical understanding and management of physical disease.

PSYCHONEUROIMMUNOLOGY AND THE SUBJECTIVE WORLD

The Orthodox Framework

Within the predominantly dualistic Western medical framework the body, conceptually, is a living biomechanistic entity. Where the dualism is “hard,” the mind component somehow *associates* with this entity. Where the dualism is “soft,” the mind *emerges* from the biomechanistic entity, and is commonly conferred the status of epiphenomenon, or held as a semantic category of “mind” until the more fundamental neurophysiological underpinnings or brain processes are identified.^{50,51} Cognitive neuroscience has strong mechanistic aspirations.²⁴ Its focus tends to be the mapping of brain function, affect, and autonomic activity against rather broad mental state categories such as motivation, interest levels, or prescribed activities such as task-related decision-making.⁵² These emphases have influenced PNI research with its focus on brain-to-immune system interactions. But there has been a relative ignoring of the very complex interactions of persons with social and physical environments, and particularly, the rich individual-specific “stories,” complex meanings, and use of symbols so characteristic of *personhood*,^{2,4,5} and which surely constitute persons as much as do internal biomechanistic processes.⁵³⁻⁵⁷ The overall outcome has been a reductionist PNI model, which gives priority to internal biomechanistic processes and diverts clinicians away from the role of the symbolic realm in disease and illness.

Subjectivity Keeps Returning

But it seems that subjectivity forces its presence. Even at a theoretical immunobiological level, it has been difficult to avoid subjectivity constructs. For example, immunobiology uses concepts like immune “self/nonself” discrimination, despite there being no basis for concepts of “foreignness,” “inside,” “outside,” or “self” within a reduced neuroimmune system⁵⁸ *separated* from the psychosocial environment. “Self-ness” (which has both bodily and subjective dimensions) as a concept only has meaning in the totality of the relationships between the organism and its context rather than within the operationally closed physiological environment.⁵⁹⁻⁶¹ Of course, once one starts to posit subjectivity as clinically important (as evidenced by SD), everything gets a lot harder to conceptualize, and there is always a tendency to the reductive dualism that is simply a consequence of exclusion of the hard-to-measure subjectivity elements.

Physical and Subjective Dimensions of Personhood Should Not Be Separated

The supposed duality of body and mind is a duality of perspective, a consequence of “gazing”⁶²⁻⁶⁴ upon two dimensions of personhood: *physicality* and *subjectivity*. The physical dimension, the body, is a self-organizing and self-generating system of physical components (organ systems, organs, cells, etc), which operates in concert to maintain both a coherent structure, and a set of relationships with the biophysical environment. Study of these physical components and their changing relations reveals what happens *internally*, when the body as a whole changes its relationship to its environment, that is, changes its “behavior.” The internal structural changes (eg, neural firing, immune activity, etc) that correlate with particular behaviors are not the behaviors, nor do they explain them, because what is called human behavior is enacted, recognized or perceived *between* a whole body and its context.^{55,65-67} Coordinated operation of bodily components is necessary for particular behaviors to arise, but behavior is the observed changing relationship between the body and environment rather than merely the operation of those internal bodily components.⁶⁴

As behaviors happen, the network of components within the behaving body changes its structural and physiological interconnections and, as a consequence, the domain of future possible behaviors for that body changes too. For example, athletic training, which involves many subjective and symbolic aspects, entails increased muscular strength, aerobic capacity, and coordination, with a correlating improvement in sporting performance. Thus, bodies are *historical* systems where the moment-by-moment structure and physiology is a consequence of previous structures and physiology, and of previous relationships to its environment (ie, its past behavior—in the example given, athletic training). Repetitive behaviors are associated with the reinforcing of particular structural and physiological pathways within the body to facilitate those behaviors in future—the bodily structure adapts and entrains itself to be prepared for a set of behaviors that have been “useful” in the past.^{53,56,64} Certainly, the structural and physiological changes seen in immunological responses strongly reflect exposure to factors “external” to the body.^{35,37-39} Whatever examples one might use, it seems to make no sense to gaze merely at internal changes within the body and ignore the data arising between the person-body and the environment, because in reality there is a flowing continuity and integration between internal and external, organism and environment, individual and the “other,” body and mind, and, notably for this paper, the immune system and the symbolic.

Because of this flowing continuity and integration between these functional dimensions, the symbolic realm of language and image is by implication highly linked to internal structure and physiology. Returning to SDs, the “stories” crucial to them entail meanings emerging in a person’s experience of and with the world. Thus, SD demand a PNI model with an encompassing view of personhood, in which human behavior and symbolic processes, along with important shifts in bodily structural and physiological mechanisms, are all crucial elements. Medical dualism must be abandoned, but the question remains how can the

“mindbody” be conceptualized in a way that includes patient stories in the clinical enterprise?

The dimensions of personhood referred to as subjectivity, experience, mind, and meaning, or “stories,” are schematized in the symbolic modes of language and image, and thus have nominal, abstract, and explanatory elements. Language and image constructions are signifying systems by which humans coordinate their living together, and are learned and shared by those operating within the extended human “space.” For example, the notion of “myself” (and ultimately “my story”) arises from the experience of living in and through one’s own particular physical body, and its relation to an environment that includes other humans. It is dependent upon dividing the individual from the environment, that is, dividing “self” from “other,” and explaining and making sense of experiences of “myself” in relation to the world and others.^{54,63,65,66} It so happens, and indeed follows from this, that very specific relational *myself/other* experiences such as love and rejection, are central to the kinds of stories underpinning SD.

“Mind” and “body” as separate entities are a result of language use. These terms are “objectifying” categorical devices used to refer to observed and experienced dimensions of personhood. But there is constant reciprocity of all dimensions. Changes in physical structure (the *internal* aspect) associated with bodily behavior (the *external* aspect) alter the way persons attend to, experience, and interpret the external aspect. These attentional and experiential changes, in turn, feedback into the structural networks of bodies, and ultimately modify the trajectory of future behaviors and explanations. Thus, “mind” and “body” are historically conditioned dimensions mutually reflecting and influencing one another’s expression. Both refer to an aspect of the relationship maintained between a person and his or her context—“body” referring to maintenance within a biophysical context, and “mind” referring to maintenance within an experiential, linguistic, and symbolic context of explanation and meaning-making.

Personhood not only emerges from the mutually interpenetrative dimensions of physicality and subjectivity, but necessarily exists in cooperative domains of relationships with other people (family, work, leisure, society, culture, etc). What persons observe in others, and in themselves, are constellations of bodily displays, behaviors, and language, that make sense through shared (and historically acquired) explanatory frameworks. In this sense, personhood is a biopsychosocial repository and exhibition of meaningful behaviors, displays, and communicative signals that have salience and utility for an individual exhibiting them, or for the group with which that individual is identified. This is the context and venue generating the experiences, meanings, and stories of SD and, we suggest, all disease.

Furthermore, living in language is a learned behavior, and is conditioned by the “mindbody” history of the entity exhibiting that behavior. This means that the “minding” processes of a person are contingent upon the history of that person’s bodily development. This implies, for example, that prelingual bodily experiences must therefore permeate a person’s postlingual psychological development.

The Implications for PNI

The consequence for PNI is that it must embrace the internal and the external, the pathophysiological, and the “story,” the historical, and the present. If PNI is brought into this broad, multidimensional, integrated, internal, and external perspective it becomes logical to expect that seminal patterns of behavior, thought, and feeling, and the intimately related bodily mechanisms (immune responses and inflammation) and structure, will at times coalesce into diseases that can be recognized as SD, somatically representative of a person’s life experience and relationships. As stated above, all diseases emerge in persons and therefore emerge in a context of subjectivity, experience, meaning, and story, but this does not mean that all diseases need be carry subjectivity in the same way; thus, not all diseases must be manifestly symbolic. The suggested refreshed form of PNI would not reduce all disease to story or meaning, but conceive of the latter playing their role along with the other multiple factors (environmental, genetic, infective, etc). SDs are one vivid example of various ways in which meaning (or subjectivity) and disease may permeate each other (vide infra).

The Implications for Clinicians

The process of recognizing either a physical disease diagnosis, involving a *pattern of symptoms, signs, and technological study results*, or an SD, involving a disease projecting a *pattern of meanings*, is enacted in the clinical “time/space” between the person and the clinician. A concept of PNI that embraces the whole of personhood envisages a clinician who engages in a whole person approach to illness, who includes both the “internal” and “external” as crucial dimensions of illness, and who holds the diagnosis (body) and the meanings (mind) dimensions together in the same clinical time/space. It is in this context that SD, entailing a marked congruence between the physical pattern of the bodily illness and the patient’s “story,” are discerned.

The question persists: can PNI be refreshed to the point of easily accommodating these SD phenomena? What other models are available to assist this accommodation?

CURRENT MODELS OF SOMATIC REPRESENTATION OF SUBJECTIVITY

Psychosomatics as Psychological Defense

There are two major strands in the psychoanalytic conceptualization of somatic expression of subjectivity. First, the psychoanalytic notion of defence has exerted a powerful influence upon psychosomatic theory. A feeling, thought, or desire may be quite unacceptable to a person at a *conscious* level, and thus defences are developed to prevent either conscious awareness and/or direct interpersonal expression of them. As a corollary, an alternative route is taken by the person to express them. If that alternative route is a symbolic bodily representation, the result will be an SD.

Psychosomatics as Failure to Symbolize

In contrast, a second conceptualization, such as the model proposed by Bucci,^{68,69} arises from developmental, psychological, and linguistic theory. In this model, the issue is not primarily one of defence against unacceptable feelings. For a variety of

reasons, a person may not have developed an adequate capacity for expression of feelings, urges, and thoughts in the *symbolic nonverbal* (imagery) dimension, or in the *symbolic verbal* (language) dimension, and thus an alternative option is taken to express such intensities through the *subsymbolic* dimension, that is, the body. This model emphasizes dissociation and impaired development more than concepts of defense, although does not necessarily exclude defensiveness as an associated mechanism.

The psychoanalytic defense model and the Bucci model share some core assumptions. One is that “the truth will out,” that there is a drive to express, implying, in addition, a drive to communicate, or reveal, or to be known by an “other” in the extra-personal context. Both imply a “pressure” metaphor—the pressure rises and eventually there must be some release. Another implicit idea is that of a “natural” tendency to develop and heal. A person has feelings, ideas, and urges that need expression but must not be expressed directly, or which cannot be satisfactorily expressed and/or resolved via symbolic nonverbal and verbal dimensions, and thus the body becomes a necessary alternative signaling system.

Although helpful at the psychotherapy end of clinical practice, neither model gives any clues as to how SD come about in terms of pathophysiology. In addition, the psychoanalytic and Bucci models, and, certainly, the XYZ or ABCD models referred to earlier, all assume degrees of linearity, from mind to body, or from mind/brain through the immune system to manifest disease. Again, the problem is expecting Y to carry the symbolic information that is apparent in Z.

SUBJECTIVITY AND PHYSICAL DISEASE

Diversity of Clinical Presentation

There are many ways in which meaning and physicality can be entwined in disease expression. For example, alexithymic patients, who seem to have little capacity to symbolize in thought and speech,^{13,68-70} may have few options for affective expression apart from bodily disturbance and concrete behaviors. In some patients, an illness may be a representation of affective intensities (eg, anger, fear) which normally serve as signaling systems for the organism, but in certain instances verbal expression of these might lead to punishment or humiliation, or may be unmanageable in some primordial sense (eg, the person did not develop enough regulatory capacity as an infant⁷¹). These intensities may be diverted to bodily expression.

A married woman develops both urticaria and an exacerbation of inflammatory bowel disease each year in spring as she becomes aware that yet another year had passed and her husband is going to continue to withhold intimacies—and her frustration rises. Her disappointment and anger cannot be either acknowledged by her (until she enters therapy), or expressed to her husband. She defends against it by expressing it in the body, and bringing her body to doctors.²

In some diseases meanings might be construed as *adjunctive*:

A woman, Mrs. J, with extremely severe asthma, was admitted to hospital with life-threatening episodes every 3-4 weeks over several years, usually requiring respirator sup-

port. One of the authors (BB) was repeatedly asked to reassess her from an allergy perspective. Biomedical approaches failed to improve her severity pattern. Ten years later BB (who had left the hospital and lost all contact with her) was asked to consult on Mrs J's grandson. BB enquired about Mrs J, expecting that she had died. Astonishingly, Mrs J had recovered completely from her asthma within two weeks of the last of her eight children leaving home, and had remained entirely well for 10 years.

In this case the asthma was not *known* to be carrying symbolic information, but there is an apparent adjunctive meaning of her asthma related to childcare burdens.

Meanings might be imputed to disease presentations by story-seeking clinicians,⁵ but the SD we are discussing here are cases where the disease/meaning relationship develops before any clinical intervention:

A woman^{2,5} developed the precancerous condition oral leukoplakia (and, later, oral cancer requiring seven surgical interventions/reconstructions) at age 33. After 22 years of disease she entered therapy, and, in the first session, it emerged that her *dentist* father had died by suicide when the patient was age 6 and *when he was 33*. At age 12, the patient had been told by her alcoholic mother that she, the daughter, had caused the father's death because she had refused to sit on his knee! There was a profound shame at having “caused” his death. Brief therapy led to a rapid and, thus far, 15-year remission.

The emergence in this woman of the oral precancerous and cancerous condition beginning at age 33 matches both the father's occupation and his age of death. The symbolism arose over time prior to therapy in a relational context. The tapestry of death by suicide, the accusing mother, the blame, guilt, projection, and introjection, and the dentistry and oral disease, is recognized but not created or imposed on the story by the psychotherapist. Treatment directed at the underlying “story” led to remission of a hitherto intractable condition.

Symbolic Disorders, Meanings Pervasion, and the Need for Another Model

SD represent a vivid meanings *pervasion* of physical disease and it is these that remain a challenge for PNI researchers, because, although “stress” modeling can be deployed to explain non-SD, it does not work for SD, where the meaning is somehow inherent to the bodily manifestation. Thus, they require another way of conceptualizing the relationships between “story” and physical disease manifestation. We suggest that a *co-emergence* model will comfortably allow meanings pervasion, the challenge of SD.

CO-EMERGENCE DEFINED

The notion of co-emergence is largely identified with the development of complexity science over the latter half of the twentieth century.⁷²⁻⁷⁵ It has had impact on diverse disciplines. For example, in the social sciences Sumara and Davis,⁷⁶ referring to a study of group learning and creativity, assert that structurally coupled complex systems *co-emerge*, and that each system

emerges in *relation* to the other systems; that is, “humans are simultaneously biological and cultural beings, which means that physical and ideational networks are enfolded in and unfold from one another.”⁷⁶ In a very different field, the evolutionary theorists Deacon and Thompson⁷⁷ refer to “the emergence . . . of meaning (purpose, intention, desire, function, semiosis) from matter.” Specifically, they state that: “. . . ‘nondual emergence’ or ‘dynamic co-emergence’ signifies that there is no ontological duality between parts and wholes, substances and emergent phenomena. All emergence is the co-emergence of newly co-defined parts and wholes, in which there is a global-to-local structuring influence that is irreducible to atomistic parts.” Recently psychoanalysts have been using co-emergence concepts to (re)model older concepts of differentiation of subjectivity in the infant.^{78,79} Silver⁷⁸ says “there is a shift in focus from a visual metaphor of power relations to a co-eventing, co-emerging, and co-affecting of partial selves in a process of ‘jointness-in-separation’ . . .” Importantly (for the purposes of this paper), the biocognitive psychologist Martinez⁸⁰ extends co-emergence beyond intraorganism dimensions of physicality and subjectivity to include the organism’s environment or contiguous context. In his model of biocognitive epistemology⁸⁰ he asserts “an organism and its contiguous context are inseparable and reciprocal in the process of development” and that “cognition, biology, and historical culture are inseparable elements of co-emergent causality.”

All of these utilizations of the co-emergence concept reflect a desire to make coherent the processes by which we can grasp the nature of the “whole,” while understanding its differentiation into complex systems, and furthermore the evident mutual, reciprocal, and intimate origins of the differentiated systems. Our purpose in this paper is similar. The concept of mindbody co-emergence used here refers to something we regard as self-evident: that human physicality (and its progressive expression as *body*, from fertilized ovum to mature adult) and subjectivity (and its progressive expression from intrauterine experience to language, mind, and symbolic capacities) are both powerful potentials from the beginning; they emerge together, and in intimate relation with each other, toward their ultimate elaborated dimensions and forms, but always together. This has special relevance to SDs and needs further discussion.

Mind and Body Co-emergence

Persons are not just bodies, they are “subject-bodies.”⁸¹ The focus shifts from bodies and minds to persons who have multidimensionality and multipotentiality (both physical and subjective) *from the beginning*. The embryo, the fetus, and the neonate, emerge within a world of meanings transacted in many relational frameworks: interpersonally with all proximate and significant “others,” and more subtly with the community, the culture, the nation, and the species. The person emerges in a veritable swamp of interacting physical, relational, and social influences and elements. At no stage is there such thing as a body independent of these influences. The influences may be direct or indirect, but are never absent. The bodily and the subjective aspects of personhood co-emerge, co-constructing, and conditioning one another, within an organism that is unitary. All subjective phenomena, whether they be feelings, emotions, thoughts, imagery, or personal problem stories laden with symbolism (manifesting

later as symbolic disorders), have deep roots extending back to the person’s beginnings, and co-emerging with the body. What happens to the person-as-body happens to the person-as-subject and vice versa.⁸²⁻⁸⁴ In this concept of co-emergence of the dimensions of body and subjectivity, the dualistic, compartmentalized, linear-causal model is replaced with the person in which the body and subjectivity are integral, mirror one another, and can be seen as the other side of one another.⁵ Furthermore, in a bottom-up and developmental sense the story of *this* patient with *this* disorder began at the beginning.

Co-emergence Modeling and SD

Models are just models. It is not that the psychoanalytic, Bucci, XYZ/ABCD and co-emergent models are mutually exclusive—all have utility, and in their own way express something of the nature of the organism. But the problem is that PNI, as conventionally used, has been mostly aligned with linear XYZ-like modeling rather than co-emergent modeling, the effect being a profound limiting of PNI’s capacity to make sense of the relationships between disease and meaning, essentially because clinicians, working essentially from XYZ assumptions, cannot see how the symbolic realm can be projected to the body. A co-emergent model of disease actively entertains the mutual involvement of physicality and subjectivity, and it makes no sense to keep using language inimical to this. For example, the traditional terms “functional” and “organic,” a legacy of dualistic separation of mind and body, have no place in co-emergent modeling.

To put it another way, PNI, when using an XYZ analysis, is a descriptor term for the interactions of the brain/immune system/endocrine system *as studied from a dividing observer perspective that assumes discontinuities*. The mediating neuroimmune pathways (the “NI” in PNI modelling, the “Y” in XYZ modeling) *seen by an observer as a discrete and separated entity* cannot carry highly symbolic “story” information on their own. Yet the idea that meaning may or may not be in Y, a “part” of the system, is faulty arising from the observers’ dualistic and atomistic assumptions, and it is contrary to a more plausible co-emergent model where meanings arise in the behavior of the whole (ie, the behavior of the person not the behavior of parts of her body). It is also wrong to think that X, Y, and Z should be *reconnected*. They are actually observed manifestations of a unitary system, that is, never disconnected. They are simply observations of the system made from different perspectives or through different lenses or filters. Just as body and subjectivity are co-emergent and co-constructing at the beginning, so they remain.

In a co-emergent system, it is expected that meanings will be reflected or represented in some way at all levels. It is true though, that some elements in the whole are more observable than others, and therefore more communicative (from the perspective of the observer). Internal autoimmune (Y) processes are not automatically communications, especially to someone who has no technological capacity to detect them. But, then, unless one is both a willing observer and attending carefully, communications at X (language meanings) and Z (somatic SD) levels may remain undetected as well. In the case (cited above) of the woman with oral leukoplakia, the X level information is a remembered experience of being blamed for her father’s death. At the Y level the information may be various immune system

changes reflecting this experience. At the Z level the information is observed as white plaques in the mouth, and a story emerging between the patient and the clinician of a dentist father and shame at having "caused" his death.

But this clumsy XYZ modeling still strains to divide. In the end, detecting meaning is a "global" thing. What is this woman with leukoplakia and cancer saying exactly? What are the meanings emerging in her talk (X)? What is happening in her life (X)? What is going on inside the body (Y)? What can we see when we examine the body (Z)? What does it all add up to? What do the patient and the clinician, together (X), think is going on? Simply, physicality and subjectivity (including highly specific meaning) must occupy the same clinical time/space together and be accorded similar respect and value.

THE IMPORTANCE OF SDs

SDs are vivid pointers to the role of subjectivity in physical disease, and open up clinical horizons not currently allowed by biomedical models. SDs suggest that meaning (and its antecedent, *experience*) and the body are co-pervasive. Thus meanings, in their gradual development and maturation, are co-continuous and co-constructive with the soma and its physiology from the beginning. More directly, SDs imply that organs develop in a swamp of communal meanings, and, in the reverse direction, meanings that develop are highly influenced by our structure and its functioning. The metaphorical structure of language, influenced so much by bodily functioning, is one example of this.^{82,84} Meaning is generated between persons, within communities and culture, is conveyed in multiple human dimensions including language and body, is dependent on brain and peripheral nervous system as well as other body systems for its full array, and pervades and influences the whole of a person's reality both internally and externally. Meaning and disease, in this framework, are inevitable "bed-fellows." Linked within the concept of co-emergence they point to the possibility for a role (large or small) for mind and meaning in any disease. Some persons will represent their meanings and "stories" clearly in language, some in behavior, some in the body, and some (maybe most) in multiple ways.

The fact that modern PNI theorists do not speak of SD is likely to be due to a combination of residual dualistic assumptions, a preoccupation with body (Y) processes, and limiting the focus on general or abstract categories of subjectivity (eg, depression, anxiety, personality) rather than on the patient's unique meanings. Together, these result in SD being continually invisible. But PNI can accommodate SDs if it shifts its theory to a thoroughly nondualistic view of persons.

Clinical and Research Implications of a "Refreshed" Psychoneuroimmunology

Working from a co-emergent perspective requires a special set of attitudes, behaviors, and skills.⁵ The clinician assumes mutuality between physical and subjective dimensions. The patient is invited to tell both meanings and diagnosis "stories." The patient and the clinician recognize meanings together because they were born within similar swamps of meanings. There must be some clinical capacity for hearing crucial meanings, for engagement

with other intersubjective issues and dynamics, for positive relational encounter with the patient, and for engaging with the subjective dimensions (of patients' diseases) that are revealed as these capacities are exercised. Many physicians do some of these things out of "native" capacity, but it is time that there was a modeling of mind and body relations that enables and legitimizes a practice of medicine that includes the whole person. We believe the co-emergence model does this.

It appears that a co-emergent framework commonly allows recovery from chronic illnesses unresponsive to biomedical treatments.^{2,5,85} This needs research exploration. In the current healthcare environment most chronic physical diseases are treated "biomedically" with drugs and other technologies, and virtually no attention is paid to subjectivity elements in respect of their possible active contribution to the course of the disease. Randomized outcome studies of diseases in which the biomedical treatment groups are compared with groups in which biomedical treatments are actively integrated into a co-emergent framework are an obvious place to start. But alternative research designs that consider the day-by-day dynamic fluctuations of disease activity in relation to subjectivity and meanings factors in individuals are likely to be required.⁴³⁸⁶ Positive results would lead to many new research questions, including what are the generic attitudes and trainable skills for a co-emergent clinical approach? Is it that in using a co-emergent framework, which is closer to reality, latent therapeutic and healing potentialities are freed up? Does the orthodox dualist framework lock patients into limited potential for recovery?

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