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Between the Sciences: Psychosomatic Medicine as a Feminist Discipline

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Abstract

Psychosomatic medicine was an interdisciplinary medical field established in the late 1930s in response to growing dissatisfaction with the Cartesianism assumed in both general medicine and psychiatry. Seeking a method that could address the many health conditions that fell outside the scope of any particular specialization, advocates of this movement were doctors, psychiatrists, and psychoanalysts who insisted on treating the organism as a whole. Among these was Helen Flanders Dunbar, an enigmatic psychiatrist and philosopher who insisted that the success of medicine rested on its ability to apprehend the interrelationality of mind and body as an object in its own right.

This article shows that Dunbar's ambition to develop a practice of medicine that would more faithfully address the organism as whole, rather than fragment, evokes the larger issue of how we can know and study life *objectively.* Drawing on the works of feminist STS scholars Karen Barad and Donna Haraway, I show

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that Dunbar grappled with the situatedness of knowledge practices—and specifically, the relationship between object and method—as a central concern of her discipline. I argue that psychosomatic medicine is an example of feminist thought *as* science because its practice relies on holding alive questions about the nature of objectivity, truth, and the ontological entanglement of "what" and "how" we know.

> *There is no such thing as a purely psychic illness or a purely physical one, but only a living event taking place in a living organism which is itself alive only by virtue of the fact that in it psychic and somatic are united in a unity.*
>
> —Mohr, 1927, in Dunbar, 1935/1938, p. 428

Helen Flanders Dunbar and Psychosomatic Medicine

Helen Flanders Dunbar was an enigmatic psychiatrist, physician, philosopher, and theologian who founded the discipline of psychosomatic medicine in North America in the mid-1930s (Powell, 1977, p. 133). Originally formulated as an interdisciplinary medical field, psychosomatic medicine was established in response to growing dissatisfaction with the Cartesianism, or mind-body dualism, assumed in both general medicine and psychiatry. This unusual field, which continues today,[1] was then made up of a variety of physicians, psychiatrists, and psychoanalysts who insisted on the importance of viewing the patient *as a whole*. Opposed to the biomedical reductionism that defined much of medicine at the time, these practitioners argued that mind and body, or psychology and physiology, could not be separated in the event of illness. For them, the successful study and treatment of disease hinged on an awareness of the inter-implication of psychic and somatic factors—in other words, an appreciation of the fundamental indivisibility of organismic life (Powell, 1977).

Dunbar and her colleagues sought an approach that could address the many health conditions that fell outside the scope of any existing specialty. Simultaneously, this approach would be used to demonstrate

the complexity of commonplace conditions whose understanding, they argued, had been reduced or distorted by exclusively specialist study. They insisted that all illnesses involve complex interrelations of psychological and physiological factors—or what they termed *psychosomatic events* (Weiner, 2008; Lipowski, 1986).[2] Although definitions of the term *psychosomatic* varied between practitioners, it was broadly used to describe any health phenomenon that involved mental *and* physical symptoms or components. Unlike its popular usage today to describe psychogenic illness (physical disorders with clearly established emotional or psychological causes), their understanding encompassed a large variety of everyday conditions considered organic or biological in origin, such as angina, asthma, and eczema (Dunbar, 1935/1938).

This viewpoint is summed up in the opening statement of the inaugural issue of the journal *Psychosomatic Medicine*, founded by Dunbar. Authored by a group of eight practitioners of diverse backgrounds, the statement speaks of a growing movement within the health sciences toward recognizing the entanglement of mind and body in illness. Together, they sought a means of combining their efforts to reflect their shared intellectual commitment to a holistic view of the organism (Weiner, 2008; Lipowski, 1986):

> This journal is devoted not to the isolated problems of the diseased mind or the diseased body, but to the interrelationships between emotional life and bodily processes both normal and pathological…there is no logical distinction between "mind and body," mental and physical . . . divisions of medical disciplines into physiology, neurology, internal medicine, psychiatry and psychology may be convenient for academic administration, but biologically and philosophically these divisions have no validity. (Dunbar et al., 1939, 4)

These kinds of statements demonstrate the shift away from a Cartesian model of the organism and toward a more holistic or integrated bodily ontology. Moreover, they underscore the *infrastructural problems* within medicine that make such a change necessary in the first place.

Dunbar viewed specialism as a framework grounded in a *mistaken* idea of the organism as divisible into distinct parts, mind *and* body. She argued that we cannot clearly see or understand the problem of psychosomatic interrelationships because they arise "between the sciences" (1935/1938, p. xi)—that is, between separate domains of knowledge that address the organism piecemeal. She explains that

> we have reached a point where progress in the specialties themselves is being blocked by a lack of understanding of the relationship between them. Scientists commenting on the tremendous gain which has accrued to us during the last decades of specialization, are calling attention to the fact that many of the most vital of our problems lie between the sciences and cannot be even perceived without going beyond the confines of a specialty. One of the major problems of the "between fields" is the question of psychosomatic interrelationships. (1935/1938, p. xi)

In Dunbar's vision, psychosomatic medicine promised to correct this issue by intervening into the very organization of medical knowledge and practice itself. She imagined a field that would act as an intermediary and synthesize existing bodies of research into a perspective offering a unified picture of the organism. To this end, Dunbar published *Emotions and Bodily Changes: A Survey of Literature on Psychosomatic Relationships 1910–1933* (1935), an encyclopedic compilation of medical research into the mind-body connection from the early twentieth century. This volume canvassed more than 2,300 studies spanning a vast array of fields from immunology and endocrinology to psychiatry and neuroanatomy, demonstrating that the study of mind-body interrelation was already widespread, and thus that it constituted an object of inquiry in need of methodical, scientific examination (Lipowski, 1986, p. 2). Aiming to "bring together all the fragments of knowledge we possess, pertinent to the problem of psychosomatic interrelationships" (Dunbar, 1935/1938, p. xii), this collection championed the need for a unified, collegial approach to the psychosomatic problem—one based on genuine dialogue and collaboration between the various branches of

medicine, psychiatry, and psychoanalysis.[3]

Feminist Science Studies

Dunbar's ambition to develop a practice of medicine that would more *faithfully* address the patient as whole, rather than part, evokes issues that are pertinent to feminist engagements with the body, biology, and science more generally. Dunbar's efforts to establish a science of the psychosomatic are defined by two distinctly feminist concerns. First, her work begins from a critique of Cartesianism in medicine—she advocates for models of life, or forms of knowledge, that take the indivisibility of mind and body as their starting point. Second, in trying to realize this goal clinically and scientifically, her project grapples with questions about the ontology of scientific practices. It is driven by a concern with understanding the relationship between "what" and "how" we know—or objects and methods of observation—to find a way to study and understand the organism in its wholeness.

Dunbar's commitment to overcoming the perceived separation of psyche from soma is consistent with a longstanding tradition in feminism of interrogating Cartesian dualism and its correlates (e.g., nature/nurture, matter/ideation, determinism/agency, and more recently, biology/culture). Scholars of corporeal feminism, material feminism, and now New Materialism have contested, problematized, and refigured these dichotomies to deepen our understanding of the entanglement of material and cultural life. Particularly, the works of thinkers such as Moira Gatens (1983), Judith Butler (1990), Elizabeth Grosz (1994), Vicki Kirby (1997, 2008), Elizabeth Wilson (2004, 2015), and Karen Barad (2007) have complicated the conventional view of the body as a fixed, given substance that merely receives cultural inscription. Rather than an immutable, material entity whose significance derives from its articulation by external, cultural forces, their various analyses of embodiment and biology insist on the indivisibility of mind and body, knowledge and life, and argue that the body is a lively material signature of social, cultural,

political, and historical forces.

Of particular relevance to this article is Elizabeth Wilson's work on the relationship between feminist theory and the biological sciences. In *Psychosomatic: Feminism and the Neurological Body* (2004), Wilson suggests that feminists can work productively with biological explanation and that, in fact, there is much to be learnt from tolerating its reductionism (2004, p. 14). Working with data from neurogastroenterology, psychopharmacology, and other areas, Wilson complicates the orthodox view that biology, affect, and culture are mutually exclusive domains by illustrating the constitutive relations between these apparently distinct aspects of life. Her analyses of case studies such as depression and hysteria persuasively demonstrate that no element of organismic life has ontological priority over any other: rather than an interaction of discrete parts, the relation of mind and body can be more accurately understood in terms of "a psychosomatic economy within which the identity of each element . . . is constituted as an effect of their economic structuration" (2004, p. 19).

Wilson's thought serves as a critical resource for recognizing the feminist import of Dunbar's work, as it clearly articulates the philosophical and empirical complication at the heart of psychosomatic medicine as a field: namely, psyche-soma interrelationality. For Wilson, biology does not precede or underlie any other aspect of human life; instead, the capacities and qualities routinely attributed to culture and sociality are shown to be "part of the natural repertoire of biological matter" (2004, p. 13). It is on this basis that Wilson argues we need to rethink biology's exclusion from feminist and other scholarly domains in the humanities, and instead consider how we can work *with* data foreign to our disciplinary moorings.

This issue of how to create a meaningful conversation between systems of knowledge or forms of evidence that are fundamentally different in kind is crucial to Dunbar's undertaking. The actual practice of psychosomatic medicine involves negotiating the relative, and sometimes competing, objectivities of different specialist knowledges. Dunbar's

attempt to repair the gaps between these divergent disciplines into a unified perspective inevitably raises the question of what objectivity even means in the context of medicine, given that each field produces its own unique truth of the organism. If knowledge is always situated, partial, and plural, how can we achieve a (single) holistic perspective? What would constitute a holistic, as opposed to a fragmented, approach to studying illness? Does holism suggest greater accuracy in knowledge that partiality? And can this whole ever be abstracted or located for the purposes of scientific study?

Dunbar's attempts to design a methodology for this purpose animate broader philosophical questions about the ontology of scientific practices—the specific nature of our involvement or interference with scientific objects. This issue of *how* methods of observation are implicated in the phenomena we study has long been a subject within feminist science studies. Feminist theory has a robust tradition of interrogating the presumably neutral and self-evident nature of scientific knowledges and practices. Thinkers such as Donna Haraway (1989), Emily Martin (1991, 1994), and Evelyn Fox Keller (1995) have argued that the metaphors, images, and concepts adopted in the sciences to describe the body and illness are borrowed from cultural life and laden with social and political significance. Analyzing the discourses of immunology, genetics, and reproductive medicine, they show that, far from being removed from social life, scientific knowledge evidences the political and economic conditions of the day. Related to these epistemological critiques is a strand of feminist theory that further examines objectivity as an idea, value, and practice. The works of Sandra Harding (1991, 2015), Donna Haraway (1988), and more recently Karen Barad (2007) expose the political assumptions that underpin the privileging of the idea of impartial, universal knowledge. Importantly, these scholars present alternative theories and frameworks for how we can understand and practice science. Concepts such as situated knowledges, strong objectivity, and agential realism offer feminist accounts of objectivity that foreground the subjective involvement of the

investigator and context in the production of knowledge, and in doing so highlight the role that ethics plays in scientific inquiry.

In this article, I am specifically interested in ontological questions about the relationship between methods and objects of inquiry. For this reason, I focus on two key works: Donna Haraway's canonical essay "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" (1988), and Karen Barad's *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (2007). Both Haraway and Barad are motivated by questions about the ontology of science—how methods of studying and understanding the world are themselves phenomena (generative) *of* the world we discover. These theorists share a common concern with the politics and ethics of the inquirer's role in scientific practices and offer unique accounts of this relation. However, their respective contributions exemplify an important conceptual shift from an epistemological focus on language and the politics of representation to an exploration of the material or ontological conditions that underpin the use of these borrowed concepts and metaphors.

This article presents a close reading of Dunbar's key texts *Emotions and Bodily Changes* (1935) and *Psychosomatic Diagnosis* (1943) that critically considers her efforts to study "the organism as a whole" scientifically. Specifically, I examine the method Dunbar proposed for the holistic study of the organism—the creation of "stereoscopic pictures" (1938, p. xxi), an approach that involved combining the perspectives and findings of different health sciences into a single viewpoint.

Reading Dunbar's writings in conversation with Haraway and Barad, I argue that Dunbar's vision for psychosomatic medicine offers *an illustrative example of feminist theory in practice*. Dunbar's writings reveal what happens when feminist arguments (such as critiques of mind-body dualism or objectivity) are put to work empirically in scientific contexts. I suggest that psychosomatic medicine constitutes an example of feminist thought *as* science because its very practice relies on holding alive

questions about the nature of objectivity and the political-ethical entanglement of "what" and "how" we know.

As a side note, I have chosen not to adopt the vocabulary of terms outlined by the journal editors in the introduction to this special issue. While there may be shared understandings of the distinctions between Science/science, Biology/biology, Matter/matter, The Body/bodies, and Nature/nature within feminist science studies, it is precisely the difficulty of making such distinctions that this piece interrogates. As the following analysis demonstrates, it is not possible or straightforward to cleanly separate, for instance, Biology (the discipline) from biology (the "stuff" of organisms), because these are always co-constituted in the practice of science. This "phenomenon," to borrow Barad's term, makes slippages between Matter and matter, Nature and nature, difficult to avoid and is also where the key analytic opportunity lies in thinking with psychosomatic medicine. Throughout this piece, I explore how Dunbar's work challenges our confidence in these distinctions.

A Brief Historical Background

Historically, psychosomatic medicine emerged in the context of an intellectual climate and thought style defined by a concern with identifying isolatable causes of disease. It was largely established "as a reformist movement against biomedical reductionism" (Lipowski, 1986, p. 5), a counterpoint to the prevailing microbiological view made orthodox by the works of Louis Pasteur and Robert Koch. Herbert Weiner explains that "single causes for every disease were now sought. The explanation of symptoms and signs was to be correlated with local, anatomical terms" (2008, p. 490). This trend in associating diseases with isolated causes, known as "the etiological standpoint" (Carter, 2003, p. 1), dramatically altered understandings of pathogenesis in the scientific and public imaginations. Indeed, its adoption in the early twentieth century was so widespread that the ideas of "pathology" and "cause" (especially microorganisms) came to be automatically associated.[4] During this

period, medicine was largely dominated by an image of the body as a defended, autonomous entity divisible into causally related elements or components.[5]

Against this backdrop, Dunbar's proposal offered an alternative to the dualistic logic that governed both general medicine and psychiatry, namely their emphasis on either mind *or* body as the cause and site of illness. Rather than concentrating on "the isolated problems of the diseased mind or the diseased body" (Dunbar et al., 1939, p. 4)—an atomic, aggregated bodily ontology—psychosomatic medicine was founded on the principle that the organism is a unity. It was this object, mind-body unity, that Dunbar sought to establish as the foundation of psychosomatic inquiry—an insight which she hoped would become conventional within medical thought.

While *Emotions and Bodily Changes* (1935) is known for launching the psychosomatic movement in North America, there were several schools of thought within the field (Powell, 1977, p. 133). Early pioneers argued for competing interpretations of the mind-body interrelation, and with these, different modes of investigation and therapy. Powell explains that the American movement was divided into three schools, each vying for its own account of psychosomatic phenomena and methodological approach. These include the psychoanalytic perspective represented by Franz Alexander, which emphasized psychogenic accounts of illness and the isolation of emotional causes; the psychophysiological school, which focused principally on physical mechanisms, organic processes, and pathologic lesions (exemplified by neurologist Harold Wolff's work on stress and disease); and the psychobiological view championed by psychiatrist Adolf Meyer, otherwise known as the correlational organismic approach, which advocated for a holistic understanding of the organism (Powell, 1977, p. 136; Lipowski, 1986, p. 5). Describing these branches, Powell writes that "the first focused on the *mind*, the second on the *body*, and the third on the *patient as a whole"* (1977, p. 136, emphasis in original).

Dunbar's work closely aligned with Meyer's psychobiology and its

foundation in organismal theory, which "dealt with wholes, correlations and constellations—never with cause" (Powell, 1977, p. 140). The appeal of Meyer's approach was that it moved away from psychogenesis and physiogenesis as explanations of psychosomatic events. For Dunbar, both these concepts are underpinned by the logic of a linear, causal relation between distinct parts of the organism—parts which she insists cannot be separated in such a mechanistic fashion. In *Psychosomatic Diagnosis*, she writes:

> [The] organismal concept changes our focus both from that of anatomical pathology and from that of the functionalists who, in searching for the origin of a given illness, assume that they must choose between physiogenesis and psychogenesis. In order to understand disease processes we must give up the "either/or" type of thinking and shift our emphasis to "both/and.." (1943, p. 6)

Dunbar's resistance to a reductive view of life, be it psychological or physiological, is a theme threaded through her varied and extensive education. The unusual diversity of her training demonstrates an early appreciation of the complex, multifaceted nature of human life, and thus an interest in circumventing disciplinary boundaries and exploring opportunities for cross-disciplinary scholarship. Between 1923 and 1930, Dunbar completed major studies in religion, philosophy, psychiatry, and medicine, often overlapping these very different degrees, whose subject matter she viewed as complementary (Powell, 1978, p. 145). In 1924, she completed an MA in philosophy at Columbia University, and began a bachelor's degree at the Union Theological Seminary in New York, where she finished with high honors in 1927 (1978, p. 146). Alongside these explorations of religion and philosophy, Dunbar undertook medical training at Yale University, and by 1930 had been awarded both a doctorate in philosophy and a medical doctorate (Stokes, 1980, p. 211). Furthermore, in this latter period of study, Dunbar traveled abroad to work as a hospitant in general and psycho-neurological hospitals in Vienna under the guidance of psychoanalyst Felix Deutsch, and on weekends traveled to Zurich to interview renowned psychiatrist and

psychotherapist Carl Jung (1980, p. 211; Powell, 1978, pp. 146–147).

This remarkable education translated into a career concerned with bridging and redefining fields that had traditionally been kept separate. In her professional life, Dunbar made ongoing attempts to generate dialogue between the spheres of medicine, psychiatry, and religion (Stokes, 1980, p. 211). From 1931 to 1949, she worked in medicine and psychiatry at the Presbyterian Hospital and Vanderbilt Clinic in New York, taught at both Columbia University's College of Physicians and Surgeons and the New York Psychoanalytic Institute (1942 to 1947), and engaged in private practice (Stokes, 1980, p. 211). In addition, she devoted time and energy to bringing clergy and physicians together in caring for the sick (Hart, 1996, p. 47).[6] Thus Dunbar embodied the very problem that she devoted much of her life to studying: working "between fields" put her in a unique position to observe the problems created by disciplinary specificity itself.[7]

Between the Sciences

Its emphasis on mind-body interrelation in illness marked psychosomatic medicine as a highly unusual discipline. In taking the *whole* organism as an object in its own right—the systemic entanglement of psychic/emotional and somatic phenomena—it contradicted and openly contested traditional forms of disciplinarity within medicine (Weiner, 2008, p. 486). As such, psychosomatic medicine occupied a confused position with respect to existing medical fields, an ambiguity captured in its description as "both a special field and an integral part of every medical specialty" (Dunbar et al., 1939, p. 5). In the "Introductory Statement" published in the first issue of the journal *Psychosomatic Medicine* (founded by Dunbar in 1939), Dunbar and her fellow editors explain:

> Psychosomatic medicine is not restricted to any specific field of pathology. Medical specialties such as internal medicine, pediatrics, dermatology, ophthalmology, etc., may be so restricted. Psychosomatic medicine, however, is not a medical specialty of this kind; it designates a method of approach to the

> problems of etiology and therapy rather than a delimitation of the area. (1939, p. 3)

This quotation captures a key dilemma that Dunbar and other similar practitioners faced—the difficulty of being clearly identified with or located in a circumscribed field. Literally a discipline "between fields" (Dunbar, 1935/1938, p. xi), psychosomatic medicine defined itself in terms of a uniquely integrative approach which operated outside the conceptual and empirical constraints of specialized medicine. In this sense, it functioned as a kind of meta-medical field, a practice that illuminated the blind spots of the medical system while being situated within them.

The problem that psychosomatic interrelationships present for medicine, then, is a problem of vision—in particular, what can be seen or gets obscured by individual disciplinary lenses. For Dunbar, dealing with this issue meant rethinking the very infrastructure of medicine itself:

> Many of the most vital of our problems lie between the sciences and *cannot be even perceived* without going beyond the confines of a specialty. One of the major problems of the "between fields" is the question of psychosomatic interrelationships. (1935/1938, p. xi, emphasis added)

Here, Dunbar states that psychosomatic phenomena are *imperceptible* to the specialist-trained observer—that they literally cannot be seen from a position that assumes the separation of mind and body. Yet, as she points out in *Emotions and Bodily Changes*, the need to address psychosomatic phenomena stems from growing evidence obtained in the specialties of limitations in our understanding of illness.

Intriguingly, Dunbar's project is based in a conflicted relationship with specialization, which she explains both prohibits *and* enables a holistic view of the organism. On the one hand, psychosomatic medicine offers a critique of and departure from an aggregated or partial approach—an attempt to disprove and do away with a Cartesian concept of life. On the other hand, it is a discipline born of and reliant on the work being carried out in specialized fields for its unique perspective and

approach (especially in devising new interdisciplinary methods). Caught in this bind, psychosomatic medicine foregrounds the question of disciplinarity. In its uncertain identity and position within the health sciences, it grapples with the issue of what constitutes a scientific field or is proper to a discipline of knowledge.

Partial Perspective/Objective Vision

The politics of location is a central issue for Dunbar, not only in terms of her movement between various professional roles (physician, psychiatrist, theologian, philosopher), but for her critique of specialism. Dunbar works to *locate* the knowledge claims of specialist approaches consistently by drawing attention to the Cartesianism underpinning the idea that the organism is divisible into discrete parts, psyche and soma. By highlighting the ideas and assumptions implicit in specific biomedical approaches, she calls their objectivity and neutrality into question. In doing so, Dunbar argues that specialized medicine is grounded in a particular embodiment and subjectivity: its objectivity is established and perpetuated on the foundation of a mind-body split and the accompanying ontological assumption that the study of organismic life can be similarly divided into these component parts.

On this point, Dunbar's work finds resonance with feminist critiques of scientific knowledge production. In particular, Haraway's essay "Situated Knowledges" (1988) offers a critique of objectivity that argues for an understanding of all knowledge as grounded in the viewpoint of an embodied and locatable subject.[8] This feminist reading of science exposes the gendered politics implicit in the classical conception of scientific knowledge as objective, universal truth. Contesting the orthodox view of science as a masterful relation between a knowing subject and a passive object, she argues that this model rests on an assumption of the observer's autonomy from her object. Haraway takes issue with the perception of objective knowledge as impartial, disembodied, ahistorical, and apolitical: for her, the notion that scientific

work can be detached from its contexts—or that it remains essentially untouched or uncontaminated by the identities of its investigators—presumes that scientific claims are immune to the specific circumstances from which they emerge. This model of knowledge, Haraway asserts, infers the existence of an observer who is free of any (compromising) connection to the world being investigated.

Affirming Dunbar's point that every specialist gaze is situated and trained to recognize a particular object, Haraway argues that all observation is partial. Far from overcoming the limits and contingencies of individual subject positions, objectivity speaks of an historically-locatable identity. As Peta Hinton explains, "The impact of Haraway's argument in 'Situated Knowledges' arrives with her reworking of the transcendent status of objectivity as *already* partial, already embodied specificity" (2014, p. 103, emphasis in original). Haraway writes that

> objectivity turns out to be about particular and specific embodiment and definitely not about the false vision promising transcendence of all limits and responsibility. The moral is simple: only partial perspective promises objective vision. (1988, pp. 582–583)

Thus, at one level, Dunbar's work is driven by a similar imperative to Haraway's—to recognize the partiality of scientific observation, the politics implicit in our modes of inquiry, and their real-world implications. Dunbar's critique of medical specialism is based in the argument that all looking or scientific study occurs from a situated standpoint—she insists that we need to account for what specialists cannot easily see by dint of their very training. In this sense, Dunbar's work can be read as an instance of what Haraway calls "feminist objectivity"—an "embodied objectivity" (1988, p. 581) that recognizes the context-dependent and plural nature of truth, and as such, "initiates, rather than closes off, the problem of responsibility for the generativity of all vision practices" (pp. 582–583).

However, at another level, the idea of objectivity implicit in Dunbar's effort to study the organism as a whole is incongruent with

Haraway's concept. In fact, Dunbar's commitment to holism *as opposed to* partiality seems to align more with the notion of universal, transcendent knowledge that Haraway works to displace. Dunbar interprets specialist knowledge as providing an incomplete picture of the organism; for her, it can only ever offer a partial view dissected from a bigger picture. Instead, she seeks a *more accurate* apprehension of the organism—a task that means overcoming or circumventing the situated, restricted nature of individual disciplinary perspectives.

Underpinning this view is the assumption that the narrow perspectivalism of specialist work can be *corrected*. In other words, Dunbar believes that there is an *error* in our ways of studying the organism, and that the division of the patient into separate components is a misrepresentation of the organism's *actual* nature. This is evident at points where she locates mind-body dualism in our perception and study of the organism, rather than the organism itself:

> If…there be any dichotomy lurking in the term "psychosomatic" it is this projected one, inherent not in the organism observed, but in the mind of the observer and in our methods of observation. The term "psychosomatic" is descriptive rather of the observer in his endeavor to apprehend than of the organism observed. Psychic and somatic represent merely two angles of observation. Our understanding of disease rests on pictures taken from these two angles viewed simultaneously, united stereoscopically. (1935/1938, p. xix)

Dunbar distinguishes between the conceptualization of the organism by different specialties (a divided entity) and the organism as it pre-exists these scientific representations (a natural unity). Here, she sees the separation of psyche and soma as an intellectual distinction that originates in human thought and culture, rather than nature.

This idea is supported at other points where Dunbar states that such a viewpoint is symptomatic only of the means by which knowledge of life is obtained and organized. She writes that

> although the organism is a unity we see it as having psychic and

> somatic aspects. For the understanding and management of these aspects we have developed fundamentally different methodologies. We have been unable to approach them simultaneously or in the same terms. (pp. xvii–xix)

These types of assertions suggest that there is an object—in this case, the organism as a "unity"—that exists independently of medical inquiry and can be accessed via a range of human-authored methods. Dunbar infers that subject and object are discrete entities that enter into relation, or encounter one other, in the event of scientific investigation. Thus her position is underscored by a subject-object split, a conventional objectivism that safeguards the possibility of a uniquely psychosomatic approach.

For Dunbar, the promise of psychosomatic medicine is that *the organism may be apprehended in its wholeness with objectivity*; or, rather, that it is possible to study mind-body interrelation from a vantage that corrects or supplements the bias and myopia of the specialist gaze. This aspiration for objectivity *instead of* partiality (whole instead of part), as opposed to Haraway's sense of objectivity *through* partiality (situated knowledges), exposes a paradox in Dunbar's thinking. What does objectivity mean for Dunbar? Is she committed to the idea of disembodied, universal knowledge—a view from which to neutrally or comprehensively see the whole organism? How is a holistic perspective different from, or more objective than, a partial one? If every point of view is situated and partial, isn't the very idea of a "holistic perspective" an oxymoron?

Method: The Ontology of Scientific Practices

The quandary that defines Dunbar's project is her quest to locate a perspective that offers a stable and reliable view of the whole. Yet, as she also points out, the organism as a whole is not *locatable* in the traditional sense: each attempt to objectify it, whether from a psychological or physiological viewpoint, abstracts or skews the object under study. At the

heart of this dilemma is the question of method: How are ways of knowing life are implicated in the phenomena we study? Do objects pre-exist our attempts to know them scientifically (e.g., anatomically, neurologically, psychologically)? Are they discrete entities with given properties and qualities? Or are the relations between subjects and objects more entangled and contextually emergent?

These questions are explicitly taken up by Karen Barad, whose writings on quantum physics challenge the orthodox assumption that objective knowledge is grounded in a subject-object separation. In *Meeting the Universe Halfway* (2007), Barad draws on the work of quantum physicist Niels Bohr to present an alternative account of the ontology of scientific practices—one predicated on the entanglement of subject and object, matter and discourse, which "takes the material nature of practices seriously" (p. 56). Importantly, Barad's call for a deeper understanding of inquiry's ontological dimensions responds to the realist position that impartial knowledge is guaranteed by the division of observer and object: that is, the subject's externality to, and difference from, the object in question. She explains:

> The ontology of the world is a matter of discovery for the traditional realist. The assumed one-to-one correspondence between scientific theories and reality is used to bolster the further assumption that scientific entities are unmarked by their discoverers: nature is taken to be revealed by, yet independent of, theoretical and experimental practices, that is, transparently given. (p. 41)

In contrast, Barad argues that scientific practices are themselves phenomena *of* the world about which science is curious. Beginning from the position that "we are a part of that nature that we seek to understand" (p. 67), she asserts that practices of knowledge cannot logically be separated from, or elevated above, the objects they "discover." Indeed, her account maintains that objects do not straightforwardly pre-exist our attempts to understand them; they are not bounded entities with "determinate properties that are independent of our experimental

investigations" (p. 106). Rather, subjects and objects, discourse and matter, are entanglements performatively *enacted* in specific experiments or moments of observation. This reading of objectivity is one that emphasizes the "wholeness" of any scientific event through which method and object are crystallized—which Barad terms "phenomena" (p. 118). This wholeness refers to the fundamentally indivisible nature of experiments—to the ontological involvement of "what" and "how" we know in the specific materializations that every experiment brings about. "*Descriptively*, there is a *single* situation, no part of which can be abstracted out…the object cannot be ascribed an 'independent reality in the ordinary physical sense'" (Hooker in Barad, 2007, p. 118, emphasis in original).

For Dunbar, the object of psychosomatic medicine and methods for studying it remain indissolubly linked as problems. In *Psychosomatic Diagnosis*, she asks: "If there is no such thing as purely psychic illness or purely physical illness, the question arises how then are we to study illness? Our methods are directed to one or the other" (1943, p. 6). That is, if the object of psychosomatic medicine has no stable scientific frame of reference, by what *practical* means can it be investigated?

In response to this dilemma, Dunbar proposes the creation of "stereoscopic pictures," which involve studying "simultaneous sequences in psychic and somatic spheres, or observation from these two angles" (1935/1938, p. xxi). Drawing on the visual logic of the stereoscope, these pictures offer a means of bringing together and synthesizing the partial perspectives of specialist fields into a single, integrated viewpoint. The stereoscope, a mid-nineteenth-century invention, is an optical instrument that allows the observer to view "two pictures (usually photographs) of an object, taken from slightly different points of view . . . [as] a single image giving the impression of solidity or relief, as in ordinary vision of the object itself" (OED, 2017). As a tool, it captures the ethos of the psychosomatic approach—to combine, or establish a meaningful conversation between, different specialist techniques and forms of data.

For Dunbar, stereoscopic pictures offer a view of the whole

organism by repairing the perceptual disparity between specialist methods whose difference in perspective is a *difference in kind.* As an instrument, they were used to manage or reconcile the relative and somewhat incongruous bodies of knowledge produced from different medical viewpoints. Although stereoscopic pictures could take many different forms, they were all based on the idea of observing physiological and psychological events *simultaneously*. They include: (1) instruments for continuous recording, such as the electroencephalogram (EEG) and plethysmograph (for measuring alterations in volume in the body or one of its parts); (2) the practice of simultaneously recording several physiological functions, rather than one (1935/1938, pp. xxiv–xxv); and (3) the psychosomatic history—as "a method of history-taking…which includes a history outline, together with a method of correlating observations of the emotional and physiological aspects of the course of illness while the patient is under treatment in the hospital" (1943/1948, pp. 692–693). In addition to these specific techniques, Dunbar also refers more broadly to "cooperation between physiologists and medical psychologists" (1935/1938, p. xxiv) as essential to these approaches.

These methods raise the issue of whether the synthesis or combination of specialist techniques equates to a holistic perspective. Dunbar insists that "what we need to study is the *disturbance of the total equilibrium* of the organism, a factor which cannot be arrived at by way of adding up measurements of discrete and partial functions" (1943/1948, p. 19, emphasis in original). Yet what constitutes a stereoscopic picture if not the addition of discrete, aggregated measurements? How do they work to overcome or circumvent the partiality of specialist viewpoints and the fragmented, Cartesian ontology these perspectives assume?

This confusion between the study of part and whole is echoed in the Dunbar's characterization of the organism, which oscillates between two main concepts: "whole" and "unity." Despite being used interchangeably, these terms have quite different implications for the development of a methodology. For instance, Dunbar used phrases such as "the patient as a whole" (1935/1938, p. xix), "the organism-

environment as a whole" (p. 428), "the organism in its environment" (1943, p. 5), and "the indivisible living organism" (1935/1938, p. xix). These suggest a deeply contextual view of life—one that cannot be reduced to psychological *or* physiological mechanisms. However, Dunbar also frequently described the organism as a "unity" or totality (1935/1938, p. xix). By contrast, these terms evoke a sense of the organism as a sum or aggregation of separate, interactive parts and functions. According to this additive logic, psychosomatic medicine works by presenting a more *comprehensive* picture of the organism's health—an overview of how its various aspects intersect and interrelate.

There remains an unresolved tension between Dunbar's philosophical and scientific commitments—on the one hand, to organismal theory and the psychobiological concept of "the organism as a whole"; on the other hand, to studying and defining this object empirically. The difficulty of marrying these positions is evident in Dunbar's suggestion that "the organism as a whole" is an "observation-independent reality" (Barad 2007, p. 97) that can be rendered visible if we adopt the right methods. Yet the idea of capturing the wholeness of organismic life—the complexities of what it means to be a person—appears at odds with the positivist logic of scientific study. Scientific practices, even in the unique forms that Dunbar imagines them, work by abstracting or rendering visible an object by cutting it apart from the world. The organism, even when conceived as indivisible and ecologically-entrenched, is nevertheless removed and differentiated from its wider context—which also includes the context of the experiment.

Following Barad's analysis, we might instead consider the wholeness of the scientific experiment itself. Dunbar's bind demonstrates that each attempt to know the organism enacts and materializes it according to the perspective of a particular observer. That is, the organism as whole doesn't exist prior to any instance of measurement, or outside a perspective that is trained to look for it. Rather, it emerges through specific acts of knowing, or subject-object arrangements. Like the term *anatomy*, whose etymology literally means "to cut up" (*ana* "up"

+ *temnien* "to cut"), medicine's object emerges in and *as* the variety of constitutive "cuts" it makes. Historically, Western medical understandings of the body have been rooted in practices of dissection. This is reflected in the fact that the word *anatomy* refers simultaneously to the body's physical structure (object) and the techniques or approaches through which these structures are rendered intelligible (method). It is in this sense that the organism is indivisible: it can never be divorced from an act of looking because every object anticipates and evidences a method of inquiry.

Conclusion

Dunbar's attempt to develop a uniquely psychosomatic methodology animates more questions than it answers. Indeed, it is precisely in its equivocation and lack of resolve that it elaborates distinctly feminist concerns about the relationship between mind and body, the nature of objectivity, and the ontology of scientific practices. In Dunbar's work, the issues of what constitutes psychology or physiology and how these aspects of life are enwoven in the event of illness are utterly entangled with questions about the ontological status of the modes of investigation that call these phenomena forth. The fact that Dunbar's attempt to study and define the psychosomatic leads her to interrogate the relationship between disciplinarity and the truth of the organism's being complicates any simple sense of an ontological gap between life and knowledge of life, even as it installs these divisions elsewhere. Importantly, it is this very notion of separation—between mind and body, object and investigation, patient and practitioner—that the field of psychosomatic medicine grapples with conceptually, empirically, and therapeutically.

Through psychosomatic medicine, Dunbar critically engages the idea of scientific objectivity, exploring the ontological entanglement of object and method (and its political and ethical dimensions) as a central concern. For this reason, it presents a compelling example of feminist thought *in practice*: that is, how the insights of feminist theory can be

used not simply to interrogate science, but to develop novel approaches to scientific work that reflect critically on our own involvement in knowledge creation.

Notes

[1] The field of psychosomatic medicine continues today through professional associations and journals that foster interdisciplinary cooperation among scientists and practitioners. These include the American Psychosomatic Society, which publishes Psychosomatic Medicine, and the European Association of Psychosomatic Medicine, which publishes the Journal of Psychosomatic Research. However, this article focuses on the early history of the field and the work of Dunbar in particular.

[2] The term *psychosomatic* comes from the Greek *psykhe*, meaning "mind," and *soma*, meaning "body." It is typically used to describe illnesses or physical disorders that have emotional or psychological causes, or which involve both mind and body. As such, its usage often implies a distinction between real, organic conditions that have a demonstrable biological basis and those whose symptoms are considered psychic in origin. For a fascinating discussion of this distinction, see Wilson (2004).

[3] In this paper, I have not discussed unequal experiences of bodies created by the power structures of the medical establishment (i.e., the effects of racism, heterosexism, class privilege, ableism, etc.). This is because these themes rarely appear explicitly in Dunbar's writings or those of other psychosomatic practitioners. However, this does not mean that psychosomatic medicine was an apolitical project. Dunbar's vision for this field was first and foremost to revolutionize the practice of medicine—away from a fragmented approach and toward a collegial, interdisciplinary dialogue. Dunbar believed that this fundamental change in perspective (from part to whole) would render a vast array of undiagnosed illnesses and health phenomena visible and intelligible (e.g., chronic illness). In pursuit of this holistic perspective, she also advocated the "need for a closer relationship between the social sciences and medicine" (1935/1938, p. xxxv). The issue of power, then—of who determines what gets seen and legitimated as illness, and what symptoms, conditions, bodies, and subjectivities fall through the cracks "between the sciences"—lies at the very heart of Dunbar's work, and

psychosomatic medicine more broadly.

[4] See Carter (2003) for more on the etiological standpoint. See Jamieson (2010) for further discussion of how Pasteur and Koch's studies contributed to this discourse and historical moment. See Tomes (1999) for an historical account of the rise of germ theory and normalization of modern understandings of disease and contagion.

[5] This idea of the body as a "defended self" can be traced to the field of immunology, which came to fruition following the work of Pasteur and Koch on microorganisms and disease. The use of battle imagery to describe the relationships between organisms and their environments has been critiqued by feminist scholars such as Haraway (1989) and Martin (1990, 1994). For an overview of these and other critiques of immunological discourse, see Jamieson (2015).

[6] See Hart (1996) for more on Dunbar's interest in integrating religion and health care. See Powell (1978) for more on Dunbar's career and achievements, and Powell (1974) for her work on religion.

[7] Despite her many remarkable accomplishments, Dunbar remains a fairly shadowed figure in the histories of psychosomatic medicine, general medicine, and psychiatry. Broadly speaking, her work has not been widely recognized or engaged (Hart, 1996, p. 47), and she holds a reputation for being "among the century's most cited yet unread medical authors" (Powell, 1977, p. 134). Powell argues that even during her career, colleagues within psychosomatic medicine often misinterpreted her contributions, which has led to the work's misrepresentation in accounts of the discipline (1977, p. 138).

[8] The notion that scientific knowledge is situated is not unique to Haraway's analysis. See also Harding's The Science Question in Feminism (1986), Keller's Reflections on Gender and Science (1984), and Nancy Hartsock's "The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism" (1983).

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Bio

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