Cartesian Dualism and Psychosomatics

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A jarring surprise greets the reader of 20th century psychosomatic literature who comes to it after having been immersed in 17th and 18th century materials. The mind–body dualism credited to Descartes is referred to with uncommon frequency and is usually said to have exercised an overwhelmingly negative influence on modern medicine. Roy R. Grinker, for example, bitterly blames Cartesian dualism for separating the "mind as subject from body as object and creating a dichotomy that even now blocks unitary concepts" (p. 69).¹

Many similar references in the literature exhibit the characteristic features of a shared mythology.²⁻⁴ Rather than presenting a nuanced and unfolding interpretation based on fresh readings of the primary historical texts, modern authors in the field of psychosomatics regularly repeat stock phrases and offer minor variations of identical interpretations. Descartes is depicted as a villain whose dualistic theory sharply separated mind from body, leaving an earlier holistic medicine in disarray.⁵ By contrast, modern psychosomatic theory is portrayed as an effort to restore organismic theory to the position it occupied in classical medicine.⁶

The existence in modern psychosomatic literature of ideas that strike a student of the 17th and 18th centuries as a "Cartesian mythology" raises several important questions. For if the true historical Descartes and the mythic Descartes differ substantially, what purpose—not necessarily conscious—does this mythological reconstruction serve for American psychosomaticists? Why are they so attracted to a particular, antiheroic version of medical history? What ideological and emotional needs does it serve? This brief essay cannot possibly answer all of these questions, but it can suggest a plausible approach to their resolution. First we must turn back to the 17th and 18th centuries and pursue the true historical Descartes.

THE HISTORICAL DESCARTES

To understand Descartes in his actual historical setting, we must first examine the specific contexts in which his influence would most likely have been felt: the theory of the passions and the understanding of the positive and negative effects of the patient’s state of mind on the course of illness. Long before Descartes, clear
precedents for a theoretical appreciation of the interaction of something very much like mind (psyche) with something very much like body (soma) had been established in medical theory. If Cartesian dualism had truly influenced medicine in Descartes' own day or soon thereafter, its influence would most likely have been felt in these specific areas of medical theory, where conventional wisdom already underscored psychosomatic relationships.

The doctrine of the passions in both classical and neoclassical medical theory maintained that a definite and recurrent relationship existed between experienced affective states—anger, fear, joy, love, etc.—and transitory physical states. Hippocrates had pointed out, for example, that fear turns one pale, while anger "summons" heat to the head. Galen maintained that the pulse is generally "altered by quarrels and alarms which suddenly disturb the mind" (p. 366). In the early 17th century, Thomas Wright, in his 1601 treatise The Passions of the Minde, claimed that passions are "movements" of the soul that alter the bodily humors. Perturbations and affections of the mind create changes in the body, as when in anger or fear men become either highly colored or pale and their eyes heavy in sorrow but lively in joy. Similarly, Robert Burton pointedly observed that "the mind most effectually works upon the body, producing by his passions and perturbations miraculous alterations" (p. 288). In like manner, Hannibal Albertini maintained that sudden and great fear affects the heart, producing "the varied, unequal and disordered beats of palpitation" (p. 54).

In all of these classical and neoclassical instances, whenever an affective state of "passion" was experienced by an individual, this "raw feel" correlated with some physical event in the body.

In a second area of classical and neoclassical medical theory—consideration of the influence exerted by the patient's state of mind on the course of his illness—mental states were also presumed to cause somatic effects. Hippocrates indicated that while one patient's confidence in his physician could be important in physical recovery, another patient's emotional agitation could lead to disastrous physical deterioration: "if the soul is burned up it consumes the body" (p. 161). Galen also called attention to these mind–body relationships: he recommended dramatic poetry and music because they have emotionally enlivening effects, which in turn had direct, positive consequences for the physical constitution. Thomas Wright felt it a commonplace that the patient's positive opinion of his physician was of great importance in recovery: the emotions of hope and pleasure cooperate with nature and strengthen her in the performance of corporeal actions and vital functions. By contrast, many men have lost their lives from the effects of sadness or fear. Robert Burton wrote that the perturbations of the mind could produce "cruel diseases and sometimes death itself" (p. 288).

This brief and obviously limited survey should nevertheless
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clearly show that psychosomatic relationships were given a fair amount of attention in classical and neoclassical medical theory. Before Descartes, people seemed to have little trouble conceiving of the various ways in which the mind influenced the body in the onset, course, and cure of physical disease. Psychological states clearly affected somatic conditions. But what happened after Descartes, in the later 17th century and in the 18th century? Was the mind severed from the body and did Descartes sharply mark the end of one era and the beginning of a new, radically discontinuous one? To answer this question, we must turn to medical works written in the century or so after Descartes and look carefully for an appreciation of psychosomatic interactions.

In this search, it will be helpful to again consider the passions and the influence of mental states on the course of illness. I will cite representative late 17th and 18th century authors to illustrate continuing psychosomatic awareness in post-Cartesian medical literature.

Let us first consider a representative medical writer who selectively incorporated Cartesian ideas. In 1695, Friedrich Hoffmann,12 one of the most influential medical theorists of the late 17th century, presented himself in Fundamenta Medicinae as a medical mechanist, like Descartes. In all important respects, however, Hoffmann adhered to basic neoclassical traditions. Thus, regarding the passions and the transitory effect of emotional states on the body, Hoffmann noted that a disordered pulse “always follows untimely emotional activity” and that in anger “the heart trembles and palpitates, the face becomes now pale, now red, there is foaming at the mouth and difficulty in respiration” (p. 47).12 Considering the influence of the patient’s state of mind on the onset, course, and outcome of somatic disease, he noted that “unrestrained emotion may act as the cause of severe diseases” and that “nothing shortens life more than continuous grief and sadness” (p. 47).12 By contrast, “a tranquil mind is the best medicine to promote longevity” and “moderate joy is extremely useful in prolonging life” (p. 108).12 Because Hoffmann is typical of the period, we can conclude that understanding of psychosomatic theory had not changed much in the wake of Descartes.

Jerome Gaub, a widely respected professor of medicine at the University of Leiden, illustrates the same point. Gaub, even more explicitly than Hoffmann, acknowledged Cartesian dualism. By the mid-18th century, he had established a considerable reputation for his ideas about mind–body interaction. In 1763, he published his second essay on the subject, “De Regimine Mentis,” which described the variety of ways by which mind influences physical human body.13 Early in the essay, Gaub asks a rhetorical question (p. 132)13:

Are any of you unaware...of the extent to which a disturbed mind can effect the outward appearance of the body? Of the manner in which different affections, whatever their nature, lead to one kind of change or another in the face, eyes, forehead and the other outward parts, each one picturing itself abroad with its own peculiar characteristics, so that there is no need to wish for a little window in the breast to observe what the unquiet mind conceals beneath?

The anticipated answer, of course, was that no one in the late 18th century would be unaware of or surprised by these mind–body connections.

Elsewhere in the essay Gaub described the ways in which a patient’s emotional state influences his physical state. He claimed, for example, that inappropriate anger exacerbates a variety of already existing diseases and “subverts” the physician’s art. Undischarged sorrow is also dangerous, for if it is “for a long time repressed and fostered, the body no less than the mind is eaten up and destroyed” (p. 140).13 Hope, on the other hand, is extremely beneficial. It “not only arouses the mind but breathes strength into all the bodily powers as well” (p. 173).13 Patients’ hope and faith in the medical art allow the physician “to breathe new life into them with words alone” and to increase “the power of their remedies” (p. 174).13 Thus Gaub, an 18th century medical author explicitly loyal to Descartes and fully conversant with his formulation of mind–body dualism, continued to adhere firmly to the neoclassical notions of psychosomatic interaction.

Even medical authors who seemed oblivious...
to Descartes and his philosophy displayed the same continuing loyalty to the neoclassical tradition. William Heberden, one of the most brilliant clinicians at the end of the 18th century, took up the neoclassical psychosomatic themes and handled them with the astuteness typical of all of his medical work. Heberden suggested that asthma might be caused by "grief, anger, terror, joy" (pp. 67-68). And that headaches could be made worse by "anxiety and perturbation of spirits, noise, fatigue of mind or body" (p. 97). Of patients suffering for many years from chronic pain, Heberden stated (p. 150):

In most of these patients the pain could not be traced to any certain cause; but in several they have apparently arisen from terror, grief, and anxiety, and have unquestionably been recalled and exacerbated by some disturbance of mind.

As to cure, Heberden's seasoned wisdom and shrewd common sense extended to an appreciation of the patient's positive state of mind as an aid to recovery. Something so simple as replacing dirty linen with clean could "diffuse" over patients "a sense of ease and comfort" (p. 5) and thus help in the healing process.

In short, Heberden, like Hoffmann and Gaub before him, seemed to show all the sensitivity to psychosomatic interactions that neoclassical theorists had previously demonstrated. His medical commentaries provide additional evidence that no significant change had taken place in the understanding of mind-body relationships as a result of Descartes' formulation of dualism. Whether they acknowledged Cartesian ideas implicitly or explicitly, and even if they seemed completely oblivious to Descartes' philosophy, post-Cartesian medical writers understood psychosomatic interactions quite as well as pre-Cartesian authors and wrote about them just as often.

The mythic image of a villainous Descartes, who in a stroke destroyed holistic medical theory, clearly disintegrates in the light of historical enquiry.

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passions, our bodies also give external manifestations of our internal affective states. In joy, for example, the color of the body becomes "more vivid and more ruddy" and the parts of the face become moderately distended so as to take on "a more cheerful and lively expression" (p. 382). In other passions, too, Descartes cites at length somatic expressions of affective states long reported by classical and neoclassical authors.

Embedded within this seemingly familiar account of the passions and their somatic manifestations is, however, a philosophically radical position. For Descartes introduces a sharp and rigorous distinction between the soul and the material body with which it interacts never before proposed. Early in the treatise, he states that the soul thinks, desires, initiates action, and experiences the passions, and the body with all its solid and fluid parts is a mere machine, an automaton that performs even the most complex functions with no intervention of the immaterial soul. When we experience a feeling, it is an immaterial event. Each feeling of passion is the soul's immaterial reaction to some material movement in the blood or spirits of the bodily machine. In short, the "raw feel" of anger, joy, or even love, must of necessity be a consequence, and not a cause, of material, somatic, and expressive action.

The significance of Descartes' radical step can be clarified by carefully comparing the Cartesian position on the passions to pre-Cartesian, neoclassical positions. Consider, for example, Thomas Wright's brief comment that "passions engender humors and humors breed passions" (p. 5), and Thomas Fienus' nearly contemporary and more detailed statement (pp. 356–358): The imagination is fitted by nature to move the appetite and excite the emotions, as is obvious, since by thinking happy things we rejoice, by thinking of sad things we fear and are sad, and all emotions follow previous thought. But the emotions are greatly alterative with respect to the body. Therefore, through them the imagination is able to transform the body...the appetite excites the motive power, and through the emotions the humors and spirits are borne upwards, downwards, within and without. Since the imagination produces change by means of the emotions and the emotions produce change by means of the natural movement of the heart and by means of the movement of the humors and spirits, the imagination does also.

What is apparent in both Wright's pithy comment and Fienus' careful dialectic is the implicit neoclassical belief that passions or emotions are active causal agents of bodily change. For Fienus, the complete sequence includes imagination initiating the appetite and appetite triggering the emotions, but both Fienus and Wright certainly agree that passions or emotions "move" the heart, humors, and spirits of the body. When a person feels the passions, his body in one way or another is already moving concurrently. This much of the neoclassical theory Descartes incorporates. But Descartes denies as forcefully as Wright and Fienus assert the other crucial features—that the emotions or passions are in some sense immaterial agents which causally initiate.

From another angle, the neoclassical theory of the passions seems clearly to rest on the notion, traceable ultimately to Plato, that the soul is divided into several sometimes warring parts. The higher rational part of the soul exerts some hierarchic dominance over the lower appetitive portion, but the soul is not always at peace. Passions break out from below and must be submitted to strict rational supervision and control. Imagination can stir up the appetite, and appetite the passions. The lower parts of the soul require constant surveillance. As Fienus explains, when this sequence begins in the immaterial soul, great turbulence in the material body can soon follow.

Descartes was very aware of these neoclassical theories and explicitly rejected them. He acknowledges that the rational soul may not always be able to control fully the passions, but that is only because the great mechanical "commotion" in the spirits at such times can temporarily overwhelm efforts of the will. The "strife" of the turbulent material spirits concentrates at the pineal gland, the locus where the conscious and willful soul primarily interacts with the body (pp. 352–353): [There] it is only in the repugnance which exists between the movements which the body by its
animal spirits, and the soul by its will tend to excite in the gland at the same time, that all the strife which we are in the habit of conceiving to exist between the inferior part of the soul...and the superior...consists...[T]here is here no strife, excepting that the small gland which exists in the middle of the brain, being capable of being thrust to one side by the soul, and to the other by the animal spirits...it often happens that these two impulses are contrary, and that the stronger prevents the other from taking effect.

Thus, the soul has no "parts" that, like persons in a power struggle, strive to overcome one another. The real struggle of the unitary rational soul is to know how most effectively to beat back the tidal waves of animal spirits that sometimes come washing against the pineal gland. But just as dogs can be trained to stand still at the sound of a gunshot, so too can men with even the feeblest of souls "acquire a very absolute dominion over all their passions if sufficient industry is applied in training and guiding them" (p. 356). This is the case precisely because there is no immaterial soul so weak that it cannot in principle eventually acquire an "absolute power" over its materially based passions.

In the midst of rejecting this internally divided, strife-torn soul of neoclassical theory, Descartes underscores the sharp separation between thinking, feeling, perceiving, and experiencing immaterial substance and brute, impassive matter. While would-be "passions" remain in the body, they are merely movements of material animal spirits; they become the "raw feels" of emotive experience only when the soul perceives these movements. As Descartes said, (p. 353):

[All the strife which we are in the habit of conceiving to exist between the inferior part of the soul which we call the sensuous, and the superior which is rational reduces to the impinging of animal spirits upon the unitary soul: For there is within us but one soul, and this soul has not in itself any diversity of parts; the same part that is subject to sense impressions is rational, and all the soul's appetites are acts of will.

For Descartes, in other words, passion and emotion are no longer earlier stages in an immaterial causal sequence that latterly causes movement in the body. Appetite is removed to the singular soul, while the experience of passion and emotion is self-consistently treated as a later reaction of the unified immaterial soul to the prior physical motions of the material animal spirits.

In short, the true historical Descartes claimed not a severing of mind from body, but a close interaction aimed at exposing the deep somatic underpinning of perceptual and affective states. Far from denying mind-body interactions, Descartes can be said in two senses to have facilitated them: he specified a particular location—the pineal gland—where mind and body regularly and readily interact, and he provided a logical basis for the extensive interaction of affective states with somatic material by explaining that most aspects of all affective states are primarily somatic. Because the interior experience of "passion" indicates the prior activity of matter, it is of small logical consequence to expect matter to react further upon matter. Thus, in a philosophically deeper and more rigorous way than usual, Descartes could still explain how "passions" may exert truly dramatic effects on the body and remain consistent to his beliefs.

It was very likely because of the convolutions and complexities of his views that most of Descartes' medical contemporaries and successors understood very little of his real philosophical novelty. Philosophy had already become rather separate from medicine, and writers known primarily as philosophers—Locke, Malebranche, Leibniz—were best able to pursue Cartesian questions with the requisite metaphysical sophistication. As I indicated above, medical spokesmen seemed largely oblivious to Descartes' philosophical exertions. Even Gaub and other post-Cartesian medical writers of the 17th and 18th centuries who considered themselves true Cartesians either missed much of what Descartes aimed to achieve or simply ignored his more subtle philosophical efforts. For them, it was sufficient to identify Descartes with a reformulated dualism and then return to the medical tradition that antedated Descartes, flowed around him, and continued largely uninterrupted for many years afterwards. Reference to Descartes
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might simply legitimize what the medical writer had wanted to assert anyway.

Real change in medical theory came in the 19th century. Only at that late date were neoclassical conceptions abandoned and broadly replaced by views based on anatomical localism, cellular pathology, biochemical mechanism, and microbiological etiology—each fragmenting the notion of organismic totality implicit in humoral and posthumoral physiology. Specialization further fragmented medicine into separate and compartmentalized organs and systems. Moreover, the advances of biomedical diagnostic technology cumulatively distanced doctors from patients, who were seen more and more frequently as objects to be scientifically probed rather than as people with whom the physician could interact. The culmination of these influences at the turn of the 20th century was the effective separation of mind from body in much of medical theory. In the majority of fields, somatic changes became the almost exclusive focus of biomedical attention, and affective states, if they were noticed at all, were carefully circumscribed in their possible influence on the physical state of the organism. Scientific and technological advances and professional development succeeded where metaphysical innovation had failed.

A few decades into the 20th century, the new field of psychosomatic medicine arose to reassert mind–body interactions. In the 1920s and 1930s, most pioneers of the new field drew their intellectual inspiration from psychoanalysis and, thus, often restated classic psychosomatic relationships in psychoanalytic terms. As the field grew in the 1940s through the 1960s, new conceptual approaches became possible. Yet as psychosomatic medicine developed, a recurrent phenomenon was evident: leading psychosomatic theorists regularly paused to attack Descartes and the “destructive” effect of his mind–body dualism. A mythical history of medicine, with a villainous Descartes playing a critical and destructive role, was furthered. The question raised at the outset of this essay now, after our historical excursion, returns with still stronger force: why did leading psychosomatic theorists behave this way? At this juncture we are in a better position to guess why.

One of the most striking features of the attacks on Descartes in modern psychosomatic literature is that they usually occur in the midst of assertions about complex organismic wholeness. The human being is often said to be a systemic biological totality, in which “mind” and “body” are merely partial and imperfect expressions of different aspects of organic unity. Grinker, for example, suggests that “mind and body are two foci of an identical process” (p. 69). Moreover, the “idea that a unique personality type or a specific intrapsychic conflict is essential to the development of a specific disease can no longer be entertained” (p. 71). Instead, Grinker asserts one ought to bear constantly in mind that the real object of study should be “general relationships between stress stimuli and biological processes,” (p. 71), in which biological processes could but do not necessarily have to include “conscious emotional arousal” (p. 74). It is in this context of dissecting alternative approaches to psychosomatic theory and of asserting the organismic biological grounding of his own views that Grinker specifically rebukes Descartes.

Reiser takes essentially the same stance in an astute essay, “Changing Theoretical Concepts in Psychosomatic Medicine.” The main thrust of Reiser’s essay is an argument for a sophisticated version of organismic psychobiological theory in which somatopsychic relationships received as much emphasis as psychosomatic ones. His general case is most effectively made with a specific example (p. 487):

Mirsky identified the physiological (genetically determined) condition necessary, but not sufficient, for the development of duodenal ulcer; that is, the hypersecretion of pepsinogen into the blood. He postulated that this inborn trait, through its influence on the mother–infant relationship, would also play a central role in personality development and in determining the type of social–conflict situation that would later be pathogenic for the individual in adult
life. This, then, is a circular rather than a linear theory, i.e., it suggests somatopsychosomatic sequences rather than linear psychosomatic ones. It is supported by empirical data...in which independently studied psychological data were used to predict...which, of a large number of potential ulcer patients (as determined by pepsinogen level), would actually develop the disease under the psychosocial stress of basic military training.

Reiser's point, of course, is that simple psychosomatic causal sequences are no longer sufficient and a more interactive organismic view is required. Yet for all his obvious sophistication and technical command, Reiser cannot resist taking a poke at "our bondage to Cartesian dualism" (p. 487).3 As in Grinker, this largely gratuitous sideswipe at Descartes serves primarily to remind us that we should approach psychosomatic relationships from a holistic biological viewpoint.

Reiser does more, however, than merely echo a common refrain of modern psychosomaticists. He also provides an important clue about what may be going on at a deeper level. The clue is contained in this illuminating passage (p. 479)3:

Regardless of our ultimate conviction that mind and body constitute a true functional unity, the fact remains that as observers, investigators, and theorists, we are obliged (whether we like it or not) to deal with data from two separate realms, one pertaining to mind and the other to body. Simultaneous and parallel psychological and physiological study of a patient in an intense anxiety state produces of necessity two separate and distinct sets of descriptive data, measurements, and formulations. There is no way to unify the two by translation into a common language, or by reference to a shared conceptual framework, nor are there as yet bridging concepts that could serve, as Bertalanffy suggests, as intermediate templates, isomorphic with both realms. For all practical purposes, then, we deal with mind and body as separate realms; virtually all of our psychophysiological and psychosomatic data consist in essence of covariance data, demonstrating coincidence of events occurring in the two realms within specified time intervals at a frequency beyond chance.

The inevitable conclusion to this shrewd observation seems to be that because of the difficulties inherent to describing mind states and body states simultaneously and in the same language, we are left to assert the biological unity of the total organism yet must behave as if we are dealing with mind–body duality. That is, modern psychosomaticists believe in an ontological or conceptual holism but function with an operational or behavioral dualism. Why do psychosomatic theorists find themselves in this dilemma? Why have they so regularly been caught between behavior and assertion, action and belief? These questions are very difficult, and here I can only begin the search for satisfactory answers. I will, however, offer some preliminary speculations.

Let us begin by considering the complex institutional circumstances in which American psychosomatic theorists have often found themselves since the 1930s. For quite some time, the majority of identifiable psychosomaticists were trained at least partially in psychiatry and specifically in psychoanalysis. Moreover, they usually worked in professional settings with strong links to psychiatry. As Wittkower reported in 1960, "the bulk of the research carried out in the field of psychosomatic medicine...is carried out by psychiatrists...and prominent among psychiatric contributions...are those by psychoanalysts" (p. 311).28 Psychosomaticists have often functioned in psychiatric-liaison groups as consultants to colleagues in internal medicine and other somatically oriented disciplines; they were frequently called upon to help manage difficult patients, to teach, and to perform psychological evaluations.29-31 Colleagues in internal medicine were biomedical reductionists committed to a restrictively biological view of the organism.4 Partly out of their own beliefs and partly to accommodate themselves to their colleagues, psychosomaticists asserted their commitment to the fundamental biological underpinning of all organic phenomena, including the peculiar phenomena exhibited in affective states.30-32 Yet to retain their professional niche, they continued to deal especially with affective phenomena. Lipowski described the general situation vividly (p. 156)33:

The consultant should be prepared to tolerate fluctuations in his colleagues' interest in his
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role and contribution. He may be ignored, especially at the beginning, or asked questions on purely medical matters. If he can hold his ground in these testing situations and display sound knowledge of general medicine, his services as a psychiatrist may then be sought with increasing frequency and sense of purpose.

American psychosomaticists have thus found themselves declaring belief in ultimate biological realities but effectively operating in a special domain of mind, which calls for a language and a style very different from those of the domain of body.

This complex and recurrent professional reality has created, it seems safe to say, considerable psychological tension for American psychosomaticists. They have been required to work in institutional settings as, in effect, dualists, and they have suffered from much dissonance between already confused beliefs and institutionally molded behavior. Considerable tension has resulted, and one of the common resolutions for tension of this form and magnitude is simplification of the conflict and projection of one symbolic pole of the simplified conflict onto an external object. American psychosomaticists appear to have done this by making that external object "Cartesian dualism." Descartes and his dualism became especially safe targets for disdain in the wake of John Dewey's well-publicized "rebellion against dualism," and Descartes could be faulted not only because he acted dualistically (as did the psychosomaticists themselves) but also because he said that he believed in dualism in principle. He carefully differentiated between "mind" and "body" in both substance and action. Thus ended the enquiry into Descartes' beliefs. Descartes' actual, subtle reflections on mind–body dualism and his forceful insistence on dualistic interactionism were expunged from what became a cartoon of his philosophical position. Descartes was removed from his true historical context and made into a convenient symbol of villainous intrusion into medical history. It was Descartes who allegedly despoiled previously existing holistic medical theory. Rather than looking at themselves and their own complex, confusing, and conflict-laden circumstances, American psychosomaticists wagged their critical fingers at a distant and distorted Descartes.

Finally, the Cartesian myth served another psychological purpose. By explicitly identifying and condemning Descartes' allegedly dramatic historical role, psychosomaticists implicitly asserted their belief in the transforming power of philosophical innovation. Descartes' dualistic formulation had, after all, purportedly changed the course of medical history. His ideas were not ignored—they became instantly influential. Should not, then, holistic, biopsychosocial intellectual alternatives to current dualistic, reductionist orthodoxies also be rapidly influential? The myth of a villainous Descartes, in other words, expressed a wish-fulfilling fantasy. Descartes was condemned for doing what psychosomatic theorists wished they could accomplish themselves: change medicine with a few strokes of a pen.

Thus, Cartesian dualism has been critically important to certain psychosomaticists as both foil and fantasy. The true historical Descartes is no less interesting than his mythic counterpart; he is merely less useful.


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