

THEORIES OF THE MIND: SCIENCE OR LITERATURE?¹

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It is no news that distinctions between fact and fiction are disappearing a little bit every day, and before the century is out, they may be gone for good. Libraries and best-seller lists still have separate sections for the two categories, but they may be among the last holdouts. Princeton provides a course by John McPhee on the literature of fact, and Hayden White in *Tropics of Discourse* speaks of »the fictions of factual representation« (1978). In a recent interview, Stephen Hawking, the Cambridge cosmologist, was asked if he was a regular reader of science fiction. He answered, »I read a fair amount of science fiction in my teens. Now I write it, only I like to think it is science fact.«

If distinctions between fact and fiction are rapidly becoming more arbitrary, similar worries surround the difference between theory and make-believe. Facts, it would seem, are rarely transparent; theory is never entirely data-driven; and observations are almost always theoryladen. Theories, of course, claim to be about something real, but aside from that important proviso, there is often little else to distinguish them from fiction. In some respects, to complicate the picture, the terms of fiction make more precise reference to the real world than do the terms of science, just the opposite of our traditional beliefs. Whereas we used to think that »theoretical terms within a science can refer to real world events with sufficient precision that the propositions in which such terms are featured can be subjected to empirical assessment« (Gergen and Gergen 1986: 23), we now realize that unambiguous reference is not all that easy to establish.

I can make the point in slightly different language by looking at the role played by metaphor in building a theory. What Boyd (1979) has called theory-constitutive metaphors are essential elements in the development of modern science. Scientists use such metaphors for »expressing theoretical claims for which no adequate literal paraphrase is known« (1979: 360). The well-chosen figure of speech serves the purpose of alerting us to breaks in nature that we had not noticed before. Boyd uses

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the term »epistemic access« to describe how metaphor opens our eyes to the way the world is put together. Quine and Ullian (1970) make the similar claim that language »extends the senses«, and Kepler, many centuries earlier, declared that truth must be sought by using »the thread of analogy« which leads through »the labyrinth of the mysteries of nature« (quoted in Vickers 1984. 149). Felicitous metaphors, providing better access than halting description to the phenomena in question, lead to better experiments, generating more useful observations which, in turn, help to redefine, amend, or correct the metaphor.

If all goes well. But too often we remain rooted in the original metaphor, which is, after all, a species of fiction. We may never reach the stage of validation, either because the so-called facts are out of reach or because of disagreements over questions of reference. The more fanciful the metaphor, the more likely that it cannot be pinned down by a real-world observation. Thus we find that science in its earlier stages may actually delight in being fictional because fiction gives wings to our thoughts. But the more fictitious its early stages, the harder it may be to come back to reality.

When are the facts most often out of reach. What the Gergens have called »the problem of the vanishing object« becomes especially critical when we focus on theories of the mind. Whereas early explanations of behavior invoked the heart, the pineal gland, or other, more-or-less accessible body parts as the seat of the soul and the source of emotions and thought, we have tended, over the years, to leave the body behind and search for explanations in the stuff of the mind. And this stuff is notoriously hard to specify or examine – hence the appeal of metaphor. Our present emphasis on the stuff of the mind may, in fact, be the direct consequence of past dissections. During the eighteenth century, Dr. Benjamin Rush actually performed autopsies on patients who had died of grief and discovered »congestion of, and inflammation of, the heart, with a rupture of its auricles and ventricles« (1812: 318). Diagnosis of a »broken heart« was thereby directly confirmed. But as subsequent investigations cast doubt on this observation, we began to look elsewhere for the causes of behavior. As our knowledge of anatomy has become more precise, we have tended to cast doubt on the role of the heart, the liver, or the spleen in generating feelings.

We begin to see how early theories of behavior, precisely because of their concrete language, could be directly disconfirmed by dissection and autopsy. But once we move our search to the region of the mind, we find that access to the facts becomes much more difficult; as a result, disconfirmation is largely out of reach and metaphor begins to flourish in abundance. What Schafer has called the »mover of the mental apparatus« (1976: 102-20) no longer exists in any particular place, and theories take refuge in such things as the »forces of the mind«, which cannot be measured. »We seek«, writes Freud, »not merely to describe and clarify phe-

nomena, but to understand them as signs of an interplay of forces of the mind, as a manifestation of purposeful intentions working concurrently or in mutual opposition« (1916: 67).

These »forces« did not remain abstract for long; as the fictional genre of early theory began to supersede direct observation, a series of new characters appeared to take center stage. Whether they grew out of attempts to explain specific clinical happenings or because of more literary considerations, such as plot requirements and the desire to continue the story without needless repetition, is hard to say. Whatever the reason, the language became noticeably more concrete and personified. Thus Freud would write (in 1928) of the ego's submitting to a tyrannical superego in these terms: »The superego has become sadistic, and the ego becomes masochistic – that is to say, at bottom, passive in a feminine way. A great need for punishment develops in the ego, which in part offers itself as a victim to Fate, and in part finds satisfaction in ill-treatment by the super-ego (that is, in the sense of guilt)« (1928: 185). At other times, the ego becomes dominant (as in the famous metaphor), »like a man on horseback, who has to hold in check the superior strength of the horse.... Often a rider, if he is not to be parted from his horse, is obliged to guide it where it wants to go; so in the same way the ego is in the habit of transforming the id's will into action as if it were its own« (1923: 25).

Moving to contemporary theories of the mind, we find the same questionable narrative flair. Consider the following explanation of acrophobia by Kohut: »The irrational fear of heights . . . is due to the mobilization of the infantile grandiose belief in one's ability to fly. To be specific: the unmodified grandiose self urges the ego to jump into the void in order to soar or sail through space. The reality ego, however, reacts with anxiety to those portions of its own realm which tend to obey the life-threatening demand« (1971: 145n.). Where is the ego, and how can it come out of the skull long enough to »jump into the void?« What part of it »reacts with anxiety?« Who is present to witness the reaction? The ego of 1971 is every bit as mystical as the ego first proposed by Freud in 1923. Continued use of this term in clinical settings has done very little to sharpen its usage or to clarify its referent.

Or consider the following aside on analytic listening: »During periods of unopposed evenly hovering attention, however, i.e., when the analyst's basic observational attitude is not disturbed, the deeper layers of the analyst's psyche are open to the stimuli which emanate from the patient's communications while the intellectual activities of the higher layers of cognition are temporarily – but selectively! – suspended« (Kohut 1971: 274). Where can we look to find these »deeper layers«, and what test will determine whether they are open or closed? Similar questions could be asked about the »higher layers«. And finally, what process coordinates the two parts of the psyche? Knowledge of these inner workings has not advanced much farther with Freud's successors than with Freud himself.

What has happened to the language? Where Benjamin Rush could dissect the cadavers of patients who had died of grief, looking for signs of congestion and inflammation in the cardiac auricles, the new theory of the unconscious has been literally unfalsifiable. Because we are denied access to what is being described (consider such phrases as the »seething cauldron« of the unconscious or the »instinctual representatives« which »seek to discharge their cathexis«), we have no way to correct the original description. What may be sensed as wildly extravagant or dramatically enthralling or clearly impossible nevertheless remains in force because it cannot be disproved. What was originally conceived as a model of the mind has become (in the minds of many) the standard explanation for how the mind works. This kind of metaphorical take-over draws its power both from the evocative quality of the images presented and from the fact that we have no direct access to the stuff of the mind. If we did, the image of »seething cauldron« would begin to seem as old-fashioned as the image of »broken heart«.

As descriptors and metaphors become uncoupled and cut off from their referents, they also tend to become reified and the objects of magical thinking. Good examples of this process can be found during the Renaissance when alchemy was slowly giving way to modern science, and when metaphor was getting a notoriously bad press. Boyle attacked the language of the occult tradition for its »obscure, ambiguous . . . aenigmatical way expressing what they pretend to teach . . . of playing with names at pleasure . . . so they will oftentimes give one thing many names« (quoted in Vickers 1984: 114). Metaphor was particularly vulnerable to reification; it was not seen as a provisional means of representing a particular happening but as representing its very essence. »The word is not merely like a quality of the thing it designates, such as its color or weight; it is, or exactly represents, its essence or substance« (Walker, quoted in Vickers: 119).

It would seem to follow that as language is cut off from its referent, the way is opened for the descriptor's treatment as a substitute for what it is describing. If the metaphor cannot be falsified by direct contact with its referent, then the way is cleared for that metaphor to be taken literally. Instead of being one possible account of the stuff of the mind – a model or hypothesis – the theory in fashion becomes the final description. The temptation to accept it as final becomes particularly hard to resist when the metaphor promises more than it delivers; that is, when couched in language that pretends to refer when it is merely operating heuristically, or when embedded in a fictional story so compelling that the reader has suspended all disbelief and waits breathlessly for the next installment.

Cultural Influences

I am arguing that theories of the mind are particularly susceptible to fictional influence and metaphorical take-over because the stuff of the mind is largely out of reach; thus, there are no reality constraints on our use of language. Next, I want to argue that because the data are largely invisible, the theory can take any number of different forms but is particularly susceptible to two major sources of influence: the prevailing *Zeitgeist* – both its scientific and literary components – and the personal history of the theorist. Consider first the scientific influence. For a particularly clear example of the way in which cultural context can influence theory, it is informative to examine theories of the two hemispheres of the brain, and compare them to differences in the cultural *Zeitgeist* during the nineteenth century.

In Germany, united for the first time under the Prussian bureaucracy, most scientists described the brain as a set of functionally distinct departments; English medical writers, confronted with the psychiatric consequences of a class-based society, worried how the rational cortex could control lower, more primitive elements of the central nervous system. It was only in France, especially in the uncertain early years of the Third Republic, that anti-Catholic liberal scientists were determined to show that civilization and rationality resided necessarily on the Left while decadence and mysticism were on the Right. (Pauley 1988:422)

For a more detailed example of the same kind of influence, consider how the new science of archeology, in the last part of the nineteenth century, came to have such a significant influence on the form and content of Freud's theory of the mind. Let me begin by quoting from a recent book by Malcolm Bowie:

Archeology was for Freud the supreme combination of art and science and exerted a special fascination upon him throughout his career. And that career, we need hardly remind ourselves, spanned a golden age of archeological discovery: Schliemann was unearthing his many-layered Troy at Hissarlik during Freud's school and university years; Evans was exploring and then excavating Knossos during the period of Freud's self-analysis and of his collaborative friendship with Breuer and Fliess; Freud was writing *The Ego and the Id* in the year Carnarvon and Carter discovered the tomb of Tutankhamen, and *The Future of an Illusion* and *Civilization and its Discontents* during Woolley's excavation of Sumerian Ur. Freud was an avid reader of archeological memoirs and a spendthrift collector of antiquities. In a letter of 1931 to Stefan Zweig, he strove to cor-

rect Zweig's recently published portrait of him in the following terms: »Despite my much vaunted frugality I have sacrificed a great deal for my collection of Greek, Roman and Egyptian antiquities, have actually read more archeology than psychology, and . . . before the war and once after its end I felt compelled to spend every year at least several days or a week in Rome. (1987: 18)

Not only was archeology in the air throughout this period, but it was also much more than a metaphor. It became a guiding model which strongly influenced Freud's belief in the persistent power of memory and his conception of the timeless unconscious. We are all familiar with the parallels he found between doing psychoanalysis and uncovering ruins. Not only did he try to use current fragments of memory to reconstruct earlier happenings, but he saw a parallel between the age of a fragment and its state of preservation. One of the earliest expressions of this metaphor appears in his »Fragment of an Analysis«:

In the face of the incompleteness of my analytic results, I had no choice but to follow the example of those discoverers whose good fortune is to bring to the light of day after their long burial the priceless though mutilated relics of antiquity. I have restored what is missing, taking the best models known to me from other analyses; but, like a conscientious archeologist, I have not omitted to mention in each case where the authentic parts end and my constructions begin. (1905: 12)

And in a similar vein, toward the end of his life:

But just as the archeologist builds up the walls of the buildings from the foundations that have remained standing, determines the number and position of the columns from depressions in the floor and reconstructs the mural decorations and paintings from the remarks found in the debris, so does the analyst proceed when he draws his inferences from the fragments of memories, from the associations and from the behavior of the subject of the analysis. (1937: 259)

Part of the appeal of the archeologist's discoveries lay in their remarkable preservation. Under certain conditions (consider King Tut), time seemed to have stopped; everything was just as it had been thousands of years before Christ. The parallels with the timeless unconscious seem obvious, and Freud treated the analogy as fact, pretty much in the absence of evidence. »In mental life«, he wrote, »nothing which has once been formed can perish . . . everything is somehow preserved and . . . in suitable circumstances (when, for instance, regression goes back far enough) it can once more be brought to light« (quoted in Bowie 1987: 22).

Not only was everything preserved; the facts were transparent and needed no interpretation. When King Tut was uncovered, its significance was clear and obvious. The discovery was headline news, and its meaning was transparent. *Saxa loquuntur*; Freud was fond of saying: stones speak. I think it was the archeological metaphor that led directly to Freud's impatience with the need for evidence and his belief that observation was everything. Out of this impatience grew our present case-study tradition which relies largely on anecdote and argument by authority. If facts are transparent, there is no need for interpretation, no need for peer review of the evidence, no need for any kind of archival collection or data base. Knowing what was actually said during a session will change nothing in the way we think about the clinical happening, so why bother with the details?

Psychoanalysis was not only similar to archeology – it went archeology one better. »Whereas the archeologist's material may be incomplete, or broken beyond repair, the psychoanalyst's is indestructible. This theme, which has cautious beginnings (the lesson of Freud's antiquities as taught to the Rat Man was merely that 'what was unconscious was relatively unchangeable'), was to develop into a guiding principle of clinical observation« (Bowie 1987: 22). The analyst not only uses the same model, but actually »works under more favorable conditions than the archeologist« because while the latter may be faced with the destruction of significant objects, for the analyst, »all of the essentials are preserved; even things that seem completely forgotten are present somehow and somewhere, and have merely been buried and made inaccessible to the subject« (Freud 1937: 260).

If facts are transparent and meaning is obvious, then there is no room for individual interpretation or influence. The archeological model, because of its appeal to hard fact, can be said to have protected Freud from any charge of suggestion. If he could claim that his method allowed him to make contact with the actual past, then he could defend himself against the charge of supplying some of the answers to his questions. It is worth noting that Freud's most ambitious attempts at reconstruction, described in the Wolf Man case, took place at a time when he was defending his theory against competing formulations. »The primary significance of the [Wolf Man case]«, writes Strachey in his introduction, »at the time of its publication was clearly the support it provided for his criticisms of Adler and more especially of Jung. Here was conclusive evidence to refute any denial of infantile sexuality« (Freud 1918: 5, editor's note).

Thus the archeological metaphor is not only a useful model of the mind; it also carries enormous rhetorical clout because of being endowed with an appeal to certainty that is hard to resist. If all memories are skulls and mummies, then we are back to psychic bedrock at long last. The metaphor is so persuasive that we lose sight of the fact that it is largely fictitious. And what is more, as Bowie has pointed out, the archeological

model carries the strong suggestion that psychoanalysis is theory-free and that observation is king. This suggestion is largely fiction, but fiction so well-disguised that we fail to realize that we are in the hands of a master storyteller and subject to his every whim.

So much for the influence of one part of the *Zeitgeist* on Freud's theory of the mind. It seems more than likely that psychoanalysis would look quite different if Freud had lived only fifty years earlier, before any of the great excavations had taken place. Although I will be going on to say something about the influence of his personal history and family constellation on his theory, I want first to remind you that the influence of the *Zeitgeist* on theory has always been strong; in any number of instances, the language of explanation has been borrowed from the culture of the time. Early theories, as we have seen, drew on developing knowledge of anatomy and seated emotions in the heart and other bodily organs. By the late nineteenth century, the stuff of the mind was being conceived (by Freud) in terms of the mechanical, energy-conserving metaphors of the industrial revolution. In the late twentieth century, we have moved on to the computer and artificial intelligence for the source of our language (consider parallel and serial processing, and Gardner's theory of mental modules; see Gardner [1983]). The influence of contemporary culture, while not surprising, still remains quite troublesome because this tendency suggests that the source of any particular mind-theory is more fortuitous than anything else, and that the choice of metaphor does not necessarily indicate any specific insight into the workings of the mind.

Personal Influences

If theories of the mind are as much fiction as fact, it is not surprising that one important source of make-believe would be the personal history of the scientist. The psychobiographical study of leading theorists of the mind is a field only just now coming into its own, and to date, I would argue, it promises more than it has delivered. The promise, even if significant, remains hard to validate. While it stands to reason that the personal history of the theorist should influence the structure of his creation, it has not been all that easy to establish clear links between biographical details and the form and content of finished theory.

The hypothesis is best stated by Stolorow and Atwood: »It is our contention that the subjective world of the theorist is inevitably translated into his metapsychological conceptions and hypotheses concerning human nature, limiting the generality of his theoretical constructions and lending them a coloration expressive of his personal existence as an individual« (1979:17). While a reasonable expectation, one would think, the connections between the life and works of such theorists as Freud, Jung, Rank, and Wilhelm Reich are not all that convincing. The pattern

matches discovered by Stolorow and Atwood are plausible but not particularly compelling, and the link between biography and theory is certainly not inevitable.

Nevertheless, some details are quite striking. »Many of Freud's most unsettling ideas«, writes Gay, »drew on acknowledged, or covert, autobiographical sources. He exploited himself freely as a witness and made himself into the most informative of his patients« (1988:90). We know that Freud was the son of a young mother (aged 21) and a father twenty years older; that he was the first-born son of this marriage; and that the next-oldest child, Julius, was born 11 months later and died when Freud was 19 months old. Something of the special feelings that go with being the first-born can be sensed in the following confession on a return visit to his birthplace in 1931: »Deep within me, covered over, there still lives that happy child from Freiberg, the first-born son of a youthful mother, who had received the first indelible impressions from this air, from this soil« (quoted in Gay *ibid.*: 9).

The family constellation of older father, younger mother, and (for a time) only child seems made to order for an Oedipal interpretation. We know the importance of the Oedipal triangle in Freud's clinical theory, and it is tempting to argue that had he been born into a different family constellation, this hypothesis might not have been given the emphasis it received. Quite a different theory might have resulted if Freud's parents had been separated early in his life (the case with Jung, for example, whose mother was hospitalized soon after he was born).

The circumstances of Freud's early life must have sensitized him to the possibilities for Oedipal rivalry; did he give them a significance which goes beyond the norm? When we shift from the discovery to its application, however, the influence of personal events becomes harder to follow. »What must matter to the student of psychoanalysis [writes Gay] is ultimately not whether Freud had (or imagined) an Oedipus complex, but whether his claim that it is the complex through which *everyone must pass* can be substantiated by independent observation or ingenious experiments« (*ibid.*: 90 [*italics mine*]). And while it may be true, as Gay argues, that »Freud did not regard his own experiences as automatically valid for all humanity« (*ibid.*), their evidential standing rather quickly changed from hypotheses to axioms (see Spence 1987). As Gay admits in a later passage, »[T]he private provenance of his convictions would not inhibit Freud from developing a theory . . . about the ubiquitous family drama with its ever-varied yet largely predictable plot of wishes, gratifications, frustrations, and losses, many of them unconscious« (1988: 908)

A specific private event may sensitize a theorist to certain aspects of experience and place him in a better position to make sense out of certain life events. Such an event may also bring with it a certain feeling of inevitability which is translated into theoretical rigidity. Since it happened,

it must have happened; if it happened to me, it must happen to Everyman. We can hypothesize a troubling link between biographical detail and theoretical dogma. In other words, it can be argued that those parts of the theory that the author feels most reluctant to change – even in the face of disconfirming facts – are the parts that spring directly from some childhood source.

A related question can also be put: Does biographical over-determination play a part in narrative persuasion? In other words, could it be that the parts of the theory carrying the most influence – from either a rhetorical or scientific point of view – are those which stem directly from the thinker's childhood? Consider the far-reaching appeal of the Oedipal tragedy – does it rest entirely on the Greek myth, or is it given some special urgency by Freud's personal experience, which finds its optimal expression in particular parts of the theory? Raising questions of this kind brings us closer to seeing how early experience may not only compel a certain view of the world but give wings to its expression and cause others to be persuaded of its truth.

Whatever the role of the personal past in an evolving theory of the mind, it seems clear that all theorists commit some form of the personal fallacy: what seems true for the thinker must (they think) be true of all persons. Having noted how theories of the mind, because they are cut off from the stuff they describe, are particularly susceptible to extraneous influence, we now realize that there is another side to the problem. The conviction stemming from personal experience may so impress the theorist that he sees no reason to check his facts against the data. Early in his career, Freud made the statement that if the reader was not inclined to agree with his formulation, then additional data would scarcely change his mind (1912: 114). And even though Gay argues for his open-minded stance, claiming that Freud »tested his notions against the experiences of his patients and, later, against the psychoanalytic literature; he spent years working over, refining, revising, his generalizations« (1988: 90), the Oedipal complex rather quickly assumed the status of a universal finding in a formulation not too different from its earliest one. The combination of ambiguous evidence and a committed theorist, who is writing out of a significant and not completely remembered life experience, makes for a theory that does not lend itself easily to revision. If favorite rhetorical devices have been added to the mix, it becomes all the more difficult to revise and rewrite. I now turn to some of these devices.

Narrative Persuasion – What Keeps the Story Afloat?

We have seen that theories of the mind, because their referents are largely unseen, are particularly susceptible to narrative mischief. This problem becomes particularly acute when we turn to theories of infantile de-

velopment for the obvious reason that we are dealing, in the early stages of a life, with a mind that has no language and therefore cannot tell us whether our theories are right or wrong. I want to briefly sketch one well-known theory of this kind and then go on to examine the underlying root metaphors which seem to support its narrative structure.

The theory in question is the one associated with Margaret Mahler, and it describes what has been called the psychological birth of the human infant. This birth begins with an autistic phase from about one to six months during which time »the infant spends most of his day in a half-sleeping, half-waking state: he wakes principally when hunger or other need tensions . . . cause him to cry, and sinks or falls asleep again when he is satisfied . . .« (Mahler, Pine, and Bergman 1975: 41). He next moves into a symbiotic phase in which he »begins dimly to perceive need satisfaction as coming from some need-satisfying partobject – albeit still from within the orbit of the omnipotent symbiotic dual unity« of the mother and child (ibid.: 46). »The essential feature of symbiosis is hallucinatory or delusional . . . omnipotent fusion with the representation of the mother and, in particular, the delusion of a common boundary between two physically separate individuals« (ibid.: 45).

Next comes what is called the period of differentiation, which is divided into three subphases: hatching, practicing, and rapprochement. In the first, or hatching, subphase, »we came to recognize . . . a certain new look of alertness, persistence and goal-directedness. We have taken this look to be a behavioral manifestation of ‘hatching’ . . . [although] it is difficult to define with specific criteria« (ibid.: 54). In the rapprochement subphase, the observers were struck by two forms of behavior – shadowing and darting away. These activities »indicate both his wish for reunion with the love object and his fear of re-engulfment by it. One can continually observe in the toddler a ‘warding off’ pattern directed against impingement upon his recently achieved autonomy.... At the very height of mastery, toward the end of the practicing period, it had already begun to dawn on the junior toddler that the world is *not* his oyster, that he must cope with it more or less ‘on his own’« (ibid.: 78).

During this phase, the mother changes in a significant way. »At around 15 months, we noticed an important change in the quality of the child’s relationship to his mother. During the practicing period . . . mother was ‘home base’ to which the child returned often in times of need – need for food, need for comforting, or need for ‘refueling’ when tired or bored.... Somewhere around 15 months, mother was no longer just ‘home base.’ She seemed to be turning into a person with whom the toddler wished to share his ever-widening discoveries of the world« (ibid.: 90).

I have just summarized a widely cited theory of early development. What gives it its special appeal? Part of the power of this theory comes from such specific metaphors as hatching, shadowing, rapprochement, home base, and refueling; although these figures of speech clearly go

beyond the data, they do so in appealing ways. But I doubt if this language alone would be enough. Mahler's theory draws its particular strength from two underlying root metaphors: the myth of the young hero and the myth of the New World discoverer.

The myth of the hero has a long tradition in American fiction; it is one of our most cherished stories, and the genre is peopled with our most popular heroes. Beginning with Huck Finn, we move on to Henry Fleming in *The Red Badge of Courage*, Billy Budd, Eugene Gant in *Look Homeward, Angel*, and end up with Holden Caulfield in *Catcher in the Rye*. Leaving home at a young age to learn the lessons of the world, each of these heroes finds his own method of making each trip away a little longer, returning to home base less and less often. Keep Mahler's formulation in mind while reading this analysis of *The Red Badge of Courage*:

Crane's main theme is the discovery of self, that unconscious self, which, when identified with the inexhaustible energies of the group, enables man to understand the deep forces that have shaped man's destiny. The progressive movement of the hero, as in all myth, IS that of separation, initiation, and return . . . he is transformed through a series of rites and revelations into a hero. (Hart 1962: 264)

Mahler's toddler leaves his mother in progressively longer voyages of discovery, voyages which are clearly necessary for defining his character through repeated separations which result in what might be called the birth of the hero. This particular version of the psychological birth of the infant is rooted in a very American story which resonates with any number of past presences, both real and make-believe. This story, or myth, places special emphasis on individuality, separation, and learning from experience. We hear overtones of John Dewey and the frontier spirit; the story seems to capture, in microcosm, the coming of age of an American male.

The Good Bad Boy [writes Leslie Feidler] is, of course, America's vision of itself, crude and unruly in his beginnings, but endowed by his creator with an instinctive sense of what is right. Sexually as pure as any milky maiden, he is a roughneck all the same, at once potent and submissive, made to be reformed by the right woman.... In our national imagination, two freckle-faced boys, arm in arm, fishing poles over their shoulders, walk toward the river.... They are on the lam, we know, from Aunt Polly and Aunt Sally and the widow Douglas and Miss Watson, from golden-haired Becky Thatcher, too – from all the reduplicated female symbols of »sivilization«.

Not only does [Twain] disavow physical passion, refusing the Don Juan role traditional for European writers; but he downgrades

even the Faustian role incumbent on American authors. In him, the diabolic outcast becomes the »little devil«, not only comical but cute, a child who will outgrow his mischief, or an imperfect adult male, who needs the »dusting off« of marriage to a good woman.

The myth which Twain creates is a myth of childhood, rural, sexless, yet blessed in its natural Eden by the promise of innocent love, and troubled by the shadow of bloody death. (Fiedler 1966: 271-73).

Coming back to Mahler's theory, we begin to understand part of its appeal and its ability to create in us the sense that this is how things really are. Every child, we are told, behaves like a young Henry Fleming or Huck Finn; every infant is born with a natural desire to leave his mother and make his mark on the dining room, the living room, the pantry, or the bedroom. His wanderlust carries him into what Mahler has called his »ever-widening discoveries of the world«. Venture far enough and you return a hero, loved by your mother and proud of yourself. Individuality is not only sanctioned – it is the American way, the road to becoming a man and conquering the world.

Mahler's description brings us to a related root metaphor: Columbus and the discovery of America. The clue is provided by Kaplan in her layman's version of Mahler's theory:

On his third voyage to the New World, Columbus suddenly withdrew. He fled back to Hispaniola. He returned to home base. It is said that as he confronted the downward-flowing turbulence of the Orinoco he was overcome with the sense that he must be mounting toward the Garden of Eden.... He reckoned that he must have arrived at the foot of the Holy Mountain, the paradise with its forbidden secrets....

And like Columbus, we also pause at the borders of our new worlds. We hesitate. We return to base. We draw up new maps. We try to reconcile the old geometry with the new calculus that is still only a vision. We chart our journeys with fluttering heartbeats and quivering apprehensions. (Kaplan 1978: 246-47)

We see that discovery is tinged with both excitement and fear; the nursery becomes the mouth of the Orinoco, and the early years of childhood are not merely the training ground for a hero – they are heroic in themselves. The child's fear when he strays too far becomes the equivalent of Columbus's terror at getting too close to Eden; when he sets out again on a longer journey, we cheer because he has looked this terror in the face and stared it down. Given such accomplishments before age two, what can we expect when he turns 21?

Given much less emphasis in Mahler's theory – all but ignored – is the Becky Thatcher view of the world with its virtues of staying put, of cling-

ing, of remaining by the mother's side. Even though these are also frequent behaviors of the young girl-child, they are little discussed. When we realize that these virtues, more often associated with a feminine coming of age, are minimized in Mahler's theory, we begin to see more clearly the importance of the myth of the male hero, and the importance to it of this particular narrative underpinning.

The Mahler narrative also does something else – it peoples the world with little men who are thinking adult thoughts. She speaks of omnipotence, persistence, and goal-directedness, but these are hardly infantile traits. Does a child »wish for reunion with his love-object«? – I very much doubt it. Does he relish his new-found autonomy? No, that's the mother speaking. Mahler's theory takes the baby talk out of childhood and tempts us into believing that even though the toddler cannot speak, he is thinking grown-up thoughts and engaging in grown-up actions. Pushing the toddler into adulthood – and getting rid of all those wet diapers – may be another reason for Mahler's appeal.

How Theory Obstructs Progress

As we begin to find ways in which root metaphors shape the form and content of a particular theory, we begin to sense another kind of danger. As the theory is dominated by a particular view of the world, it begins to stand in the way of the data, obstructing research progress on a number of counts. First of all, the theory interferes with observation. So long as we are inspired by the myth of the hero, for example, we find it all but impossible to take note of what is really going on in the playroom. Instead of providing »epistemic access« to the clinical happenings of the nursery in all of their seemingly irrational complexity, the myth-ridden theory tends to blind us to the unexpected, to smooth over the facts that do not fit our scenario, allowing us to invent other facts which do. A persuasive theory, in short, can make us »see« what is not there at all.

A fictitious theory also obstructs because it traps us into testing irrelevancies. In a recent paper on the conditions under which theory obstructs research progress, Greenwald and his collaborators (1986) argue that we should focus more on approving and disapproving of theories rather than on proving or disproving them. Any theory, they point out, can be patched up to fit the facts; disproof is no longer the crucial test it was once assumed to be. Approval and disapproval, on the other hand, take us into the questions of fact and fiction that are central to this discussion. What has been here primarily a literary, deconstructive analysis of Mahler's theory has pointed up some disturbing parallels with the myth of the young hero in American fiction; a critical review of Freud's archeological metaphor has uncovered some troubling links to the scientific *Zeitgeist* of the nineteenth century. Discovery of such connections

makes it clear, first of all, that theories are never culture-free. More important, such discoveries give us the grounds for approving or disapproving of a given theory and deciding whether it should serve as the vehicle of our investigations or should be abandoned in favor of something better.

We may find, overall, that a deconstructive analysis is a useful first step to any long-term research program, and it may be somewhat easier to reject a theory on the grounds of narrative contamination than on the grounds of evidence. As already noted, disconfirmation is easier said than done because it slides all too easily into theory-preservation.

When the researcher [writes Creenwald et al.] becomes an ego-involved theory advocate, [a] falsification-seeking strategy is converted to a theory-confirming strategy . . . at which point the philosophical impossibility of disproving a theory provides effective license to preserve the theory, come what may. The theory-confirming researcher allows the rule-of-correspondence link between theory and operations to be loose and variable. It is then this link between theory and procedure that becomes exposed to the confirmation-disconfirmation test, rather than the theory itself. In this theory-confirming context, survival of theories is governed more by political selection criteria than by empirical ones. It is not surprising, then, that a process deserving of Kuhn's label, *revolution*, may be needed to replace a well-established theory. (1986: 227)

In other words, it is always possible either to find evidence for ways in which the toddler uses the mother for refueling or to account for exceptions to this general rule. Behavior is so varied that we can find support for almost any proposition if we look far and wide enough. But the data will never tell us that our theory is phallogocentric and sentimentally tied to a rich lode of American folklore, and that, for this reason, it needs to be viewed with suspicion. Here is where the literary historian or deconstructionist can help most. Study sections of the future might do well to include at least one DH among their members – with DH standing for »Designated Hermeneut«.

The Narrative Solution

We have conventionally viewed theories of the mind as if they were provisional descriptions of what is happening presumably inside the head, hypothetical at the start but subject to greater refinement as the facts become clear. But even though we still believe in theories, I think we should take a harder look at their standing with respect to the two poles of fact and fiction. As I have tried to show, theories of the mind are parti-

cularly vulnerable to three kinds of influence: the prevailing Zeitgeist and current technology; the personal history of the theorist; and, last but not least, the reigning narrative metaphor. The third is particularly hard to detect because the root metaphor may become visible only many years later, and may be highly influential. Given our difficulty in gaining access to the stuff of the mind – and, in so doing, in improving the fit between metaphor and referent – we are vulnerable to any kind of trendy, persuasive narrative. And because we have no direct access to the facts in question, we have no systematic means of choosing among possible theories.

But as we become aware of their narrative loading and of the way in which their resonance with the Zeitgeist gives them easy access to our approval, we can also better defend against them. If we think of theories of the mind as representative fictions which should be discussed in narrative and rhetorical terms, we may be better positioned to separate their emotional appeal from their scientific usefulness. This stance would allow us to maintain distance from the theory, to look critically at its language as separate from its content, and to become more aware of which root metaphors are present – and which are absent. If we apply this attitude to Freud's work, we might say that the *Standard Edition*, with its extraordinary mixture of insight, observation, metaphor, and rhetorical flourish, can be more easily described as a mixture of genres than as a testable set of propositions. If we accept the fact that Freud's theory is cast in Bruner's narrative mode (see Bruner 1986), we can take pleasure in reading about the »seething cauldron« of the unconscious, the Censor at the gates of consciousness, and all the other baroque and romantic details of what is called the »Standard Edition«. We can also see more clearly its continuity with earlier stories. Where the trope of a »broken heart« was an early but somewhat primitive attempt to capture the pain of mourning and loss, Freud's *Mourning and Melancholia* is clearly the epic attempt of a seasoned artist to describe the grief process and its vicissitudes.

And we can also see that testing psychoanalytic theory in the laboratory is probably a mistaken enterprise; it takes to testing about as well as *Moby Dick*. To read Freud as a literal account of the »mental apparatus« is to indulge in an exercise of misplaced concreteness. To learn to read him in a narrative mode (and preferably in the original German), on the other hand, is to recapture the richness of the metaphor and its story-telling potential. Such a hermeneutic reading would ask not what is inside the head but how can certain types of mental happenings be put into words, and how can this text – Freud's writings – be best understood? What meanings are revealed by his explorations, and how do they inform our experience?

A concentrated hermeneutic reading, moreover, would help us to understand the theory's ability to survive. Some theories of the mind have

a fascination and staying power that is out of all proportion to their relation to the data or to their capacity to explain. As is well known, not all theories come to grief when the evidence goes against them. It has been the fashion to assume that a theory still with us must be telling part of the truth, must be somehow in touch with the facts: narrative truth, perhaps, but not always theoretical truth. Staying power, I would argue, has more to do with narrative smoothing, with rhetorical appeal, with a certain trendiness, and these qualities will never be detected by an analysis of variance. Once a theory has been uncoupled from the facts and taken on a life of its own, its fate becomes a question more of literature than science.

We need to be especially on guard against theories of the mind that are geared to the latest terminology because their very trendiness tricks us into thinking that now, at last, we know how things work. In a recent paper, Sampson (1981) has pointed to the way in which current models of the mind draw their inspiration from the technological aspects of our culture, which stress technical mastery and active control over nature. »We err«, he writes, »by routinely assuming the forms of empirical-analytic science (the technical interest) as our implicit framework for understanding human life and behavior« (1981: 741). These preferences become even more suspicious when we see them as largely arbitrary. If we have no direct knowledge of the stuff of the mind, then we must find terms from some other domain, and the choice of domain may tell us more about our value system than about the object being described. While theories of the mind may be a mixture of fact and fiction, the ultimate irony is this: they may be more truthful about our value system than about the stuff of the mind. What the theory is ostensibly about may be the ultimate fiction.

NOTE

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REFERENCES

- BOWIE, MALCOLM (1987): *Freud, Proust and Lacan: Theory as Fiction* (Cambridge: Cambridge University Press).
- BOYD, RICHARD (1979): »Metaphor and Theory Change: What Is Metaphor« in *Metaphor and Thought*, edited by A. Ortony, 356-408 (Cambridge: Cambridge University Press).
- BRUNER, JEROME (1986): *Actual Minds, Possible Worlds* (Cambridge, MA: Harvard University Press).
- FIEDLER, LESLIE A. (1966): *Love and Death in the American Novel* (New York: Stein and Day).
- FREUD, SIGMUND (1905): »Fragment of an Analysis of a Case of Hysteria«, in *Standard Edition*, edited by James Strachey, 7: 1-22 (London: Hogarth Press).

- FREUD, SIGMUND (1912): »Recommendations to Physicians Practicing Psychoanalysis«, in *Standard Edition*, edited By James Strachey, 12: 109-20 (London: Hogarth Press).
- FREUD, SIGMUND (1916): »Introductory Lectures on Psychoanalysis«, in *Standard Edition*, edited by James Strachey, 15: 1-239 (London: Hogarth Press).
- FREUD, SIGMUND (1918): »From the History of an Infantile Neurosis«, in *Standard Edition* edited by James Strachey, 17: 1-122 (London: Hogarth Press).
- FREUD, SIGMUND (1923): »The Ego and the Id«, in *Standard Edition*, edited by James Strachey, 19: 3-66 (London: Hogarth Press).
- FREUD, SIGMUND (1928): »Dostoevsky and Parricide«, in *Standard Edition*, edited by James Strachey, 21: 175-96 (London: Hogarth Press).
- FREUD, SIGMUND (1937): »Constructions in Analysis«, in *Standard Edition*, edited by James Strachey, 23: 255-70 (London: Hogarth Press). Gardner, Howard
- FREUD, SIGMUND (1983) *Frames of Mind* (New York: Basic Books).
- GAY, PETER (1988): *Freud: A Life for Our Time* (New York: Norton).
- GERGEN, KENNETH, and MARY GERGEN 1986 »Narrative Form and the Construction of Psychological Science«, in *Narrative Psychology*, edited by T. R. Sarbin (New York: Praeger).
- GREENWALD, ANTHONY C., MICHAEL R. LEIPPE, ANTHONY R. PRATKANIS, AND MICHAEL H. BAUMGARDNER (1986): »Under What Conditions Does Theory Obstruct Research Progress?«, *Psychological Review* 93: 216-29.
- HART, J.E. (1962): »The Red Badge of Courage as Myth and Symbol«, in *The Red Badge of Courage*, edited by S. Bradley et al., (New York: Norton).
- KAPLAN, LOUISE J. (1978): *Oneness and Separateness: From Infant to Individual* (New York: Simon and Schuster) .
- KOHUT, HEINZ (1971): *The Analysis of the Self* (New York: International Universities Press).
- MAHLER, MARGARET, FRED PINE, and ANNIE BERGMAN (1975): *The Psychological Birth of the Human Infant* (New York: Basic Books).
- PAULEY, PHILIP (1988): »Review of Anne Harrington's *Medicine, Mind, and the Double Brain*«, *Science* 239:422.
- QUINE, WILLARD V. O., and JOSEPH S. ULLIAN (1970): *The Web of Belief*, 2nd ed. (New York: Random House).
- RUSH, BENJAMIN (1812): *Medical Inquiries and Observations Upon the Diseases of the Mind* (Philadelphia: Kinker and Richardson).
- SAMPSON, EDWARD E. (1981): »Cognitive Psychology as Ideology«, *American Psychologist* 36: 730-43.
- SCHAFER, ROY (1976): *A New Language for Psychoanalysis* (New Haven: Yale University Press).
- SPENCE, DONALD P. (1987): *The Freudian Metaphor* (New York: Norton).
- STOLOROW, ROBERT D., and GEORGE E. ATWOOD (1979): *Faces in the Cloud* (New York: Jason Aronson).
- VICKERS, BRIAN, ed. (1984): *Occult and Scientific Mentalities in the Renaissance* (New York: Cambridge University Press).
- WHITE, HAYDEN (1978): *Tropics of Discourse* (Baltimore: Johns Hopkins University Press).