

THE SCIENCE OF INTENTIONS AND THE INTENTIONS OF SCIENCE

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ABSTRACT *Psychoanalysis is a special kind of science that needs to discover its systematic and scientific foundations on the grounds of its own being – the study of subjective life. In this essay, I describe how psychoanalysis is a ‘science of intentions’ and show how it can help us clarify the ‘intentions of science’ as we face a massive contemporary illusion: that we can understand our suffering through some version of biological determinism. Our methods of inquiry and our concerns and goals in psychoanalysis explicitly contrast with the assumptions and forms of investigation in biology, neuroscience, and physics. We cannot ground our work in studies of organic processes because we cannot ask or answer our questions through them.*

Key words: psychoanalysis, science, determinism

One of my most passionate wishes for the twenty-first century is for the further development of a human science of subjectivity, rooted in the ideas and practices of psychoanalysis and analytic therapies, which can stand toe to toe with biological explanations of human behaviours. The abandonment of such a science of subjectivity by many departments of psychiatry in the past decade or more is due more to political and economic conditions than to scientific or clinical findings. I am deeply concerned about the loss in our ability to study and hypothesize issues of human desire, intention, will, action and freedom in a scientific way. We need a systematic study of human subjective responses in order for psychology to enter into dialogue with biology, biochemistry and neuroscience in attempting to understand consciousness and unconsciousness in human actions.

In the absence of such a dialogue at the beginning of the twenty-first century, both popular and academic media have lapsed into an ideology of scientific materialism – a knee-jerk biological determinism – that does not serve us well in our attempts to ameliorate human suffering. This ideology endorses a false assumption that many human characteristics are fixed at birth, and it portends an era of detailed information about group and individual ‘genetic predispositions’ for many human traits from the undesirable to the sublime. This kind of thinking endows the ‘master molecule’ of the gene with almost autonomous power that replaces human intentions and desires. Everything from happiness to criminality, from aesthetics to addictions, from romance to religiosity has been dubbed ‘genetic’ in such accounts. To understand ourselves as organisms propagating our genes eliminates

the complexity of our own motives and dulls our ability to encounter people as moral agents.

Before I go into more detail about some clinical and scientific problems that stem from this kind of thinking, I'd like to define a few terms. By the term 'intention' I mean purpose, desire, or aim: what one consciously or unconsciously *wants, or wants to do*. By the word 'suffering' I mean specifically the anguish and discontent that are directly related to our emotional habits, impulses and unrealistic ideals. Here I distinguish suffering as a subjective state, different from objective pain and necessary adversity. Suffering, as I use it, is the unnecessary difficulty that we add to our experiences through evaluating, fantasizing, aggrandizing and diminishing both objective and subjective events.

In the following, I will speak about 'psychoanalysis' as a science of subjectivity and intention, by which I mean a study of subjective states that depends on the practice of psychodynamic psychotherapies, and on related scientific studies of personality, therapeutic change, and development. I consider the general field of psychoanalysis and analytical therapies to be composed of the following: a means to ameliorate human suffering through therapeutic treatment, a way of thinking about subjective life, and a set of testable hypotheses (contrary to Grunbaum, 1984) about such phenomena as defence mechanisms, attachment behaviours, motivations, core conflicts, therapeutic change, personality development, emotional memory, and more. Finally, when I speak of 'science' I mean systematized knowledge – the product of agreed objective methods of investigation – that becomes the basis for truth claims in whatever field of study.

Through our clinical work and scientific studies in the psychoanalytic therapies, we

discover the complex, conflicted and often unknown intentions that are at the very core of human suffering. I agree with psychoanalyst and theoretician Carlo Strenger when he says the following about psychoanalysis:

The assumption is that every aspect of human behavior is intelligible; i.e. behavior is seen as intentional action all the way down. Furthermore, it is assumed that by correctly understanding the meaning of actions, we help the patient to take full responsibility for who he is, and give him the freedom to change if he truly wants to. (Strenger, 1991, 62–3)

This responsibility is now considered almost a luxury for the wealthy few, rather than a necessity for helping people who are suffering in all kinds of life circumstances. In order to develop fully and make use of this science of subjectivity, we need to expand and articulate further our models of the human psyche through study and research that does not import whole-cloth the epistemological categories of the natural sciences. The sciences of numbers, objects, and processes – mathematics, physics, biochemistry, biology, genetics – necessarily distort our understanding of human desire, choice, agency and responsibility because the natural sciences are grounded in assumptions that mostly eliminate all categories of subjectivity.

In order to investigate human subjectivity in any comprehensive or adequate way, it must be understood on its own terms, accounting for meaning and purpose, and distinguished from biological processes and fixed characteristics. Using the methods of the human sciences, I believe that we can develop a systematic understanding of subjective states that could eventually clarify the nature of human suffering and address its complexities in terms of relationships and society. Under these circumstances, a dialogue with biology, biochemistry and

neuroscience could *then* become extremely fertile, especially in regard to such important topics as the nature of human consciousness and emotion. Without an adequate account of human subjectivity, on the other hand, we are likely to evolve more and more reductive scientific ideologies that interfere with our abilities to remain open-minded in scientific and clinical practices. I hope that my comments here will increase our interest in the future of such dialogue by recognizing the importance of the human sciences (such as psychology, linguistics, economics, anthropology, sociology, and history) and psychoanalysis as complementary to the natural sciences of life processes. Before I talk about the human sciences, a few personal remarks.

PROFESSIONAL AND PERSONAL CONTEXTS

Many patients now seeking analysis and psychotherapy with me come with vague theories of genetic or biological determinism, such as ‘I am depressed because I inherited depression from my mother’s family’ or ‘I have an addiction because my genetic history is loaded for substance dependency’ or ‘I have attention deficit disorder because of my genetic background’ and so on. These people feel hopeless because, after they have taken the appropriate medications, and comforted themselves with the company of their ancestors, they are still stuck with their suffering. This certainly can be helped by effective psychotherapy, but for those who never consider psychotherapy – and of course, most people don’t – these vaguely organic explanations only block any desire to understand the personal motives and meanings that shape much of their suffering.

In another professional context, I encounter even greater trouble engendered

by our *zeitgeist* of biological determinism. Over the past 12 years I have held clinical appointments in departments of psychiatry and have witnessed the ‘eradication’ of dynamic psychiatry. In this brief period of time, most psychiatric residents in the US have lost their connection to any psychological understanding of human suffering. The majority of psychiatric residents I now encounter, in lectures and workshops all over the country, know how to provide only the shortest term care, mostly through medication and some short-term therapies. They often lack even basic counselling skills, have no knowledge of personality dynamics, and have the most minimal understanding of human development, without even mentioning the unconscious dynamics of psychopathology and any methods of intensive psychotherapy. These residents want to help their patients. As human beings themselves, they often feel that something very fundamental is being overlooked.

As we have all been encouraged to explain more and more of our personal difficulties in terms of organic and biological processes, and less and less in terms of our own desires and actions, we providers of mental health services now risk obscuring the complexity of subjective life. If we respond to our patients’ and our own questions about why we suffer, without any insight into human motivations, conflicts, and desires, we may short-circuit the formation of certain questions of meaning and purpose. And if we explain human moods, emotional difficulties, and other shortcomings mostly, or most adequately, in terms of biochemical or other organic processes, we betray the thimbleful of social awareness of the role of unconscious human intentions that has only recently become a part of Western culture.

When I was in graduate school in developmental psychology in the late 1970s, just at

the time when I began my training to be a psychoanalyst, I studied the complexity of human desires in a seminar on motivation. In this and other seminars, I learned that human agency and language demand a non-reductive method of study. At that time, we believed that the freedom to think *abstractly* – even to theorize about one’s thoughts and moods – sets humans sufficiently apart from other organisms and animals to create a ‘psychology of the person’ that is rooted in intention, rather than reactivity or organic process. I was taught that it is dangerous to believe that humans are biologically *or* psychologically determined animals because an adequate theory of human action must account for intentions that go beyond determining forces. For example, when humans are condemned to horrific torture, some will continue to find a meaningful way to engage with their lives, as is illustrated in Viktor Frankl’s (1984) *Man’s Search for Meaning*. Even when diagnosed with a terminal illness, we are still free to see it as a personal adventure, as writer Anatole Broyard (1992) shows us in *Intoxicated by my Illness*. These freedoms are not the product of organic processes or biochemical reactions, but they are critically important in living a fulfilling life.

In the late 1970s, we psychodynamic types thought that cognitive-behaviourism was *the* reductionism to oppose. We did not see what was coming around the biochemical corner. A mere 20 years later, most American journalists would concur with English journalist Brian Appleyard (1998, 15) who, in a study of the ethical issues inherent in applying genetic methods to humans, states as a fact that ‘Almost every aspect of human life has a large and frequently decisive genetic component.’ Even though he is a critic, he, like most other popularizers of science, is a true believer in genetic ideology. Organic explanations of

human life have very quickly come to overshadow the nascent understanding of ourselves as complex intentional actors, the sort who can both create theories of DNA and debate their validity.

Twenty years ago, in graduate school, I learned that there is no way to explain human experience without including the ideas of agency, action and intentionality. Even the human infant depends on intentional action rather than an adaptation to an environment. The infant cannot, of course, think for itself and yet it cannot live without thinking; so someone else must think for it. The infant cannot foresee its own needs and provide for them; so someone else must use foresight. Human beings develop inherently personal relationships that include intention, meaning, and reflection from the very beginning. Although our temperament and biology may affect how sensitive we are to certain interactions with others, our relationships and their meanings also affect how relevant these biological factors may be.

There is a hidden distortion in applying organic theories to explain human actions in any kind of comprehensive way. Philosopher John MacMurray (1961, 46) says it like this: ‘To affirm the organic conception of the personal field is implicitly to deny the possibility of action . . . If organic theory overlooks human freedom, organic practice must suppress it.’ As we shall see, biological determinism makes human behaviour unintelligible as intentional action, and transforms the goal of psychodynamic therapies – greater subjective freedom through increased awareness – into gibberish.

From my many years practising dynamic therapies, I am certain that much human suffering comes from grandiose and unrealistic expectations and ideals, blind repetitions of past emotional patterns,

impulses based on unconscious conflicts, and obsessions with conscious and unconscious desires and fears. This suffering is composed largely of emotional and perceptual habits that were initially shaped in our earliest relational and family life in which we were powerless to protect ourselves by any means other than moulding our subjective awareness into something that was liveable. Unless we become conscious of our emotional habits, and their attendant trigger points and images, we are doomed to treat various aspects of the present or future as if they were the past. 'Neurosis,' Jung once wrote, 'is a protracted crisis degenerated into a habit, the daily catastrophe ready for use' (Jung, 1973, 333).

For all of these reasons, I passionately believe that psychoanalysis should develop its identity and methods as a human science within psychology, remaining true to the multilevelled intentional and relational character of human subjectivity.

THE HUMAN SCIENCES

When I first encountered the philosophy of science, also in the late 1970s, through the well-known work of TS Kuhn from the Massachusetts Institute of Technology and Princeton University, I was enlightened by the notion of scientific 'paradigms' or exemplary models that are used as if they were reality. Kuhn showed that the natural sciences, such as physics and chemistry, have grown through revolutionary shifts in these paradigms, rather than through linear accumulation of new knowledge or information. From time to time, scientists discover and investigate anomalies in the exemplary model, and these anomalies eventually lead to a whole new worldview that topples the old paradigm and allows scientists to see data in a new way. Kuhn's

theory appealed to psychological clinicians because we believed that we were helping our patients shift their paradigms of reality by examining the anomalies in their worldviews. But Kuhn strongly objected to applying his structural theory of the natural sciences to any understanding of the human sciences of psychology, anthropology, sociology, linguistics, economics or history.

The original line drawn in the nineteenth century between the natural sciences and the human sciences was as follows: the natural sciences explain events mathematically and organically in terms of the laws of nature, while the human sciences explain events in terms of human intentions. This distinction came from the German philosopher Wilhelm Dilthey, who died in 1911. He claimed that the goal of the natural sciences is the discovery of causal principles and generalized physical laws, whereas the goal of the human sciences is to understand the purpose and meaning of human action. Because of this difference, the natural sciences are inadequate for the study of human intentionality and experience at its most complex levels, argued Dilthey.

Throughout most of this century, philosophers of science have debated the question of whether there are true differences between the natural and human sciences and if there are, what they are. Is it the subject matter, the attitude of the scientist, or the method of study that makes the two endeavours seem so different? There now appears to be some consensus among philosophers of science that all sciences are interpretative at base. This means that all of the assumptions and methods of science occur in particular contexts of meaning and are not necessarily generalizable from one to another. We can no longer claim that the simple facts of *reality* are discovered, even by natural scientists, because no fact exists outside of

some context of shared assumptions. Rather than discovering objective facts that are beyond interpretation, scientists are now understood to pursue their particular subject matter within a community of thinkers who share a worldview or way of seeing something. So what are the distinctions between the natural and human sciences that can still be defended as valid?

In 1989, I heard Kuhn lecture on his own long-term conclusions about this issue and I find myself very much in agreement with him. He claimed that the main difference between these two kinds of science is practical, in terms of what practitioners normally *do*, not how or what they study. What natural scientists do, given their hermeneutic base, 'is not ordinarily hermeneutic. Rather, they put to use the paradigm received from their teachers in an . . . enterprise that attempts to solve puzzles like those of improving and extending the match between theory and experiment at the advancing forefront of the field.' On the other hand, human scientists rarely work with such received knowledge. Their sciences 'appear to be hermeneutic, interpretative, through and through. Very little of what goes on in them at all resembles the normal puzzle-solving research of the natural sciences. Their aim is . . . to understand behavior, not to discover the laws, if any, that govern it' (Hiley, Bohman and Shusterman, 1991, 22–3). Asking himself whether the human sciences could eventually find paradigms that would support normal puzzle-solving research, Kuhn said he was 'totally uncertain', stating that some aspects of economics and psychology already seem to use models that could be generalized in developing a puzzled-solving science. On the other hand, when the unit of study is a social or psychological system (or psychotherapeutic relationship, I would add), Kuhn wondered

if there would be any real gain in abstracting principles that might lead to puzzle-solving rather than continuing to engage in a thoroughly hermeneutic enterprise.

In my view, psychoanalysis, as a science of subjective experience, is short-circuited and distorted if we attempt to ground it in the causal laws of the natural sciences whether they derive from relativity theory, chaos theory, or biochemistry. Yet, I believe that psychoanalysis should be systematized and researched as a science of human intentions with its own consensual forms and methods, and its own means of reliability, validity and prediction.

Many psychological investigations that have emerged in dialogue with psychoanalysis are already exemplary models of such a hermeneutic human science of subjectivity with strong records of reliability, validity and prediction. Those that come easily to mind are research programmes in the following: Loevinger's (1976) ego development theory, affect theory and regulation, infant-mother observation, attachment theory, defence mechanisms research, psychodynamic psychotherapy outcome studies, some dream studies, and the core-conflict studies of psychotherapy. All of these have contributed important new understandings and expanded old ones, while they have used complex hermeneutic methods to investigate human emotions and intentions.

Of course, it is also fruitful to draw on certain findings in the natural sciences. Many of these are useful as heuristics and analogies. For example, the recent neuroscientific findings on emotional memory from studies by Gerard Edelman (1989) and Joseph LeDoux (1996), which can be interpreted as supporting and expanding psychoanalytic ideas such as repetition compulsion, impulsive enactments of unconscious memory, and so on. On the

other hand, if we try to ground our theories in natural science paradigms – whether they are described as causes, teleologies, genetic tendencies or organic processes – we will warp our views of intentional life and also tend to do very bad science. In the words of contemporary philosopher Charles Taylor (1985, 1), natural science explanations of our subjective experiences ‘end up in wordy elaborations of the obvious, or they fail altogether to address the interesting questions, or their practitioners end up squandering their talents and ingenuity in the attempt to show that they can after all recapture the insights of ordinary life in their manifestly reductive explanatory languages.’

BIOLOGICAL DETERMINISM

Biological determinism, as it has been imported into the language and methods of psychodynamic psychotherapy is one such example of bad science. The typical way that this kind of thinking enters our explanations is through what Harvard geneticist Richard Lewontin (1992) calls the ‘empty bucket metaphor’. This metaphor depicts human beings as empty buckets of different sizes, waiting to be filled with the water of experience. If the environment provides all of the necessary resources, then every bucket is filled to its capacity. Still – the metaphor implies – there will be differences in our abilities, capacities, and limitations because there are differences in how much water each bucket can hold. These differences are natural and inherent in the different sizes of the buckets from the start.

Lewontin claims that a major error is committed through the use of this metaphor because ‘A change in environment . . . can change abilities by many orders of magnitude . . . [and] the differences between

individuals are abolished by cultural and mechanical inventions.’ For example:

Although there may be biologically based average differences in physique and strength between a random group of men and random group of women (and these are less than usually supposed), these differences rapidly become irrelevant and disappear from practical view in a world of electrically driven hoists, power steering, and electronic controls. (Lewontin, 1992, 29–30)

Environmental variation and genetic variation are not independent causal pathways; in fact, the interaction between the two is indissoluble.

In a book written for the general public entitled *Biology as Ideology* (1992), Lewontin defines biological determinism as three main ideas:

- that humans differ in fundamental abilities because of innate differences;
- that those innate differences are biologically inherited; and
- that human nature, therefore, guarantees the formation of a hierarchical society.

He then carefully reveals the profound flaws in the largest twin and population studies that make claims for major genetic tendencies in human behaviour. These studies discover no causal laws (because their methods are correlational and statistical) but they claim to separate genetic and environmental influences for traits such as happiness and schizophrenia. Lewontin shows how their methods and conclusions are misleading, stating that ‘[T]here is at present simply no convincing measure of the role of genes in influencing human behavioral variation.’ But we (scientists and public) have developed a problematic confusion ‘between inherited and unchangeable’ (Lewontin, 1992, 33) in our beliefs about these studies.

Reviewing these beliefs, Lewontin asks why so many successful, intelligent scientists support the massively expensive project of sequencing the human genome when the results will have little practical consequence for human welfare. Advocates of this project argue that the results will improve our ability to treat and even eliminate various threatening diseases, but the immense and immeasurable variation between normal individuals in the functioning of DNA makes generalization impossible. This fact raises the question of *whose* genome is going to provide the sequence for the catalogue of ‘the normal person’. A medical model that aspires to account for all human variation means a medical dictate of normality that has dangerous implications for society. So far, no actual therapies have been devised for the diseases whose genetic conditions *have* been identified. This is largely because we cannot deduce a causal story of disease from defective genes, nor generate a therapy. We can do little more than test for the presence of the offensive gene.

So why do so many intelligent scientists argue for the benefits of sequencing the human genome? Lewontin answers that they are ‘so completely devoted to the ideology of unitary causes that they believe in the efficacy of the research and do not ask themselves more complicated questions’ (Lewontin, 1992, 51). He also adds, ‘No prominent molecular biologist of my acquaintance is without a financial stake in the biotechnology business’ (Lewontin, 1992, 74).

The complexity of human desire, both conscious and unconscious, has played a decisive role in our current version of scientific materialism and the story of the mighty gene. But this is not the first time that a theory of inherited traits has played a powerful role in persuading people that the

roots of human misery are ‘in the blood’ rather than in our intentions and actions. English journalist Brian Appleyard (1998) traces the history of this notion from Plato (who advocated an improved species as a necessary aspect of an ideal society), to the Christian Inquisition (whose priests believed that faith and heresy were ‘in the blood’), and finally to the modern Nazi Final Solution – the extermination of those people considered to be ‘genetically inferior’.

When we shift our focus from the intentional freedom of the person to determining causes of human behaviour and actions, we automatically lose track of moral reasoning and responsibility because these are not accounted for in the paradigms of determining causes. In recent history, Marxism and Nazism were both based on radical scientific reductionism. The Marxist would claim that all truth could be boiled down to a scientific analysis of history, specifically the means of production. The Nazi would claim that the best development of human society would be the scientific use of eugenics – the genetic improvement of a race or breed. Without a science of human intention that fundamentally and convincingly argues the other side of reductionist tendencies in the natural sciences, we are at risk of falling into unchecked desires for omnipotent control of our environment or ourselves through whatever form of scientific determinism we might temporarily embrace.

THE SCIENCE OF INTENTIONS

Psychoanalysis has the capacity – as a framework for studying human desires and intentions – to develop a systematic understanding of even the most unsavoury human desires, including the desire for power. From a psychoanalytic point of view, we would

say that the ideology of biological determinism arises from infantile longings for omnipotence, and the grandiose belief that we can bring our own instinctual life, maybe even death itself, wholly under our own control. In place of acknowledging and accepting at least some human limitations such as illnesses, weaknesses, and fallibility, the biological ideologue claims to have the power to overcome all human limits.

The early founders of psychoanalysis established their science on the basis of an irreducible principle of humanity: that neurotic, psychotic and psychosomatic symptoms – the demons of the past and the bad genes of the present – could be understood as intelligible actions that had psychological motives or purposes. The basic working assumption of any psychoanalyst is that there is meaning to be found on every level of a person's actions, from momentary impulses and slips of the tongue to dreams and inhibitions. As Strenger has described it, the analyst or analytic therapist is always 'listening for *subjectively determined, idiosyncratic patterns in the patient's ways of acting, feeling, and thinking*' (1991, 78, italics in original). This kind of listening allows less conscious and unconscious intentions to be formulated from the clues that the patient presents. The goal is to bring out hidden subjective and affective patterns into the light of informed reflection so that we can become accountable and responsible for them.

Those of us who practise psychodynamic therapies share in an ethic about human suffering: that one is the creator of oneself and that whatever one does, one becomes heir to those intentions. To free ourselves from destructive emotional habits or change our irrational fears or reduce our discontent, we must come to know our own desires and motives, especially those that we repeatedly project into others. I borrow some words

from contemporary psychoanalyst Roy Schafer who describes the course of a psychoanalysis in the following way:

The analysand progressively recognizes, accepts, revises, refines, and lives in terms of the idea of the self as agent. This is to say that, in one way or another and more and more, the analysand sees himself or herself as being the person who essentially has been doing the things from which he or she was apparently suffering upon entering analysis . . . (Schafer, 1978, 180)

It should be sufficiently clear that this ethic stands as a stark contrast to the ideology of biological determinism and the bad gene.

Over the next few decades I hope that we mental health professionals can work together to shape a human science of subjective meanings that can come into dialogue with the sciences of biological predispositions and genetic inheritance. I hope that we can, much more than we have in the past decade, steer clear of reductive materialist ideologies that critically undermine human responsibility for suffering. I hope that we can define and develop our young psychoanalytic science of intentions more systematically. Practitioners of psychodynamic therapies, no matter what their particular orientations are, share fundamental beliefs and methods: we are all committed to understanding human beings as intentional persons, even when they do not understand themselves in this way. We are committed to acknowledging that human experience is filled with discontents, conflicts, and failures because of the ways in which we are all largely unconscious of many of our motives. Claiming this common ground of concern, we in the field of psychodynamic therapies need to stop our feuding and gather our strength to develop better scientific practices. We will certainly need the help of academic scientists in doing this.

In this next decade the best of psychoanalytic science must be formulated in such a way that it can be shared with the general public, while research programs are established to investigate both the workings of our therapeutic methods and the assumptions that we make about human personality. Some of these studies are already under way, as I mentioned above. Fully expanded and researched as a science of human intentions, psychoanalysis could assist all people in living more responsibly and cooperatively as a unitary species within families, groups, and societies through recognizing the nature of our limitations and responsibilities. This is my passionate wish.

REFERENCES

- Appleyard B (1998) *Brave New Worlds: Staying Human in the Genetic Future*. New York: Viking.
- Broyard A (1992) *Intoxicated by my Illness: and other writings on life after death*. New York: C Potter.
- Edelman G (1989) *The Remembered Present: A Biological Theory of Consciousness*. New York: Basic Books.
- Frankl V (1984) *Man's Search for Meaning: An Introduction to Logotherapy*. New York: Simon & Schuster.
- Grünbaum A (1984) *The Foundations of Psychoanalysis: A Philosophical Critique*. Berkeley: University of Chicago Press.
- Hiley D, Bohman J, Shusterman R (eds) (1991) *The Interpretive Turn: Philosophy, Science, Culture*. Ithaca NY: Cornell University Press.
- Jung CG (1973) *Letters, 1906–1950*. Trans. RFC Hull. Princeton NJ: Princeton University Press.
- LeDoux J (1996) *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*. New York: Simon & Schuster.
- Lewontin R (1992) *Biology as Ideology: the Doctrine of DNA*. New York: HarperCollins.
- Loevinger J (1976) *Ego Development: Conceptions and Theories*, San Francisco CA: Jossey-Bass.
- MacMurray J (1961, reprinted 1979) *The Form of the Personal. Vol 2. Persons in Relation*. Atlantic Highlands NJ: Humanities Press.
- Schafer R (1978) *Language and Insight*. New Haven CT: Yale University Press.
- Strenger C (1991) *Between hermeneutics and science: an essay on the epistemology of psychoanalysis*. Psychological Issues, monograph 59. Madison CN: International Universities Press.
- Taylor C (1985) *Human Agency and Language*. Cambridge: Cambridge University Press.