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Freud, Stern and McGilchrist: Developmental and Cultural Implications of Their Work

Abstract:

“Human beings have two fundamentally different ways of thinking about and engaging with the world.” Some variant of this proposition is shared by many thinkers across time. This paper focuses on the core similarities and the subtle (but significant) differences between Freud’s theory of primary and secondary processes, Karl Stern’s theory of the scientific and poetic modes of knowledge and Iain McGilchrist’s account of the differences between left and right-hemispheric competences, values and ways of “being-in-the-world”. It asks whether (or to what extent) the collective tendency to privilege one “way of knowing” over another promotes or inhibits optimal human development and cultural change and transformation.

Keywords:

psychoanalysis, modes of knowing, hemispheric dominance, modernity, postmodernism

Two Ways of Knowing the World?

In October of 2009, Iain McGilchrist, an eminent psychiatrist and literary scholar, published a remarkable book entitled *The Master and His Emissary*. The book is 608 pages long, and divided into two parts, but its thesis can be summarized as follows. The right and left cerebral hemispheres almost invariably work in unison. But they possess different qualities, competences, and embrace – or better yet, embody – very different values. The right hemisphere processes information in ways that are intuitive, non-verbal, holistic and context-sensitive,

and values empathy and altruism. The left hemisphere favors language, logic and abstract thinking, and lacks these aforementioned prosocial traits. As a result, the right and left cerebral hemispheres employ fundamentally different ways of knowing reality, or of “being-in-the-world”. In optimal circumstances, says McGilchrist, this duality at the heart of human existence is not readily apparent. But injury, atrophy or dysfunction in the right hemisphere lends itself to diverse forms of psychopathology, ranging from autism and OCD to schizoid and schizophrenic disturbances. Moreover, left-hemispheric dominance, which is now the norm in Western society, tends to create and intensify various forms of alienation from ourselves, from one another and from the natural world, resulting in widespread social pathologies that are currently raging out of control, and which threaten to destroy our planet. The natural state of affairs, says McGilchrist, is for the right hemisphere to be dominant, or “the master”, and for the left-hemisphere to be its servant or “emissary”. Unfortunately, ever since the Reformation, Western civilization has favored increased reliance on left-hemispheric attitudes and aptitudes, enabling the servant to gain the upper hand, becoming the master, effectively inverting the natural order. This same trend is evident in the postmodern insistence on the primacy of language, which effectively negates or ignores pre-linguistic or non-verbal ways of apprehending reality, and of knowing and communicating with others.¹

Needless to say, McGilchrist has many prominent critics. The noted philosopher A.C. Grayling expressed admiration for McGilchrist’s erudition, imagination and style, but commented that the findings of contemporary neuroscience are not yet “fine grained” enough to support such sweeping generalizations about Western history and culture.² In a far less charitable assessment, a reviewer at *The Economist* sniffed that part two of *The Master and His Emissary*, which explores these cultural and historical trends in depth, is completely “unmoored” from real neuroscience.³ That being so, I must emphasize that it is not my purpose to defend McGilchrist here. Personally, I find many of his arguments persuasive. But I will refrain from evaluating the merits of his book in the interests of contextualizing his contribution to the history of ideas, by comparing and contrasting his efforts to kindred contributions from earlier thinkers.

One of the most notable, and certainly the most recent, is psychologist Louis Sass, whose book *Madness and Modernism* is a ground-breaking treatise in phenomenological psychology and psychiatry. Like McGilchrist, Sass is extremely well versed in the neuro-psychiatric literature on hemispheric dominance and dysfunction, and its relationship to schizoid and schizophrenic experience and behavior. And like McGilchrist, Sass draws freely and extensively on literary works – chiefly novels and plays – to illustrate the cultural trends he calls attention to. Another point of resemblance between Sass and McGilchrist is that they both regard Descartes as a profoundly schizoid thinker. By their account, Descartes, the father of modern rationalism, suffered from feelings of depersonalization and derealization akin to those experienced by schizophrenic patients, and then wove the thought processes prompted by these bizarre experiences into the fabric of his philosophy of radical doubt.⁴

The fact that both Sass and McGilchrist are versed in psychiatry and neuroscience, and draw extensively on literature and phenomenological philosophy, invites comparisons between them and a third, largely forgotten figure named Karl Stern. Born to an assimilated Jewish couple in a small town in Bavaria in 1906, Stern studied neurology and psychiatry with Kurt Goldstein and Walther Spielmeier in Frankfurt, Munich and

1) Iain McGilchrist, *The Master and His Emissary: The Divided Brain and the Making of the Modern World* (New Haven: Yale University Press, 2009).

2) See A.C. Grayling, “In Two Minds,” *Literary Review*, no. 372 (December 2009).

3) See “The Human Brain: Right and Left,” *The Economist*, November 26, 2009.

4) Louis Sass, *Madness and Modernism: Insanity in Light of Modern Art, Literature and Thought* (Cambridge: Harvard University Press, 1994).

Berlin between 1929–1935. When Spielmeyer died, Stern fled to London to escape the Nazis, where a fellowship from the Rockefeller Foundation enabled him to work at The National Hospital for Nervous Diseases at Queen’s Square. As medical historian Frank Stahnisch points out, at this point in his career, Stern was already at the pinnacle of training and research in neurology in the Anglo-Saxon world.⁵ But he did not stop there. In 1939, he settled in Montreal, where he worked alongside Wilder Penfield for two years, before being hired by Ewan Cameron to lead McGill University’s geriatric psychiatry unit – the first in Canada, I am told. At McGill, he befriended another world-famous neurologist, Miguel Prados, who worked alongside Ramon y Cajal.⁶

Stern published dozens of papers on neurology in prestigious medical journals. And before his death in 1975, Stern also authored several books, including a psychiatrically themed novel entitled *Through Dooms of Love*, published in 1960.⁷ That being said, his most famous book was undoubtedly his first, entitled *The Pillar of Fire*, published in 1951. *The Pillar of Fire* is a memoir that chronicles his early life and education, his adolescent identity crises, his medical training, his growing doubts and misgivings about Kraepelinian psychiatry, the creeping Nazification of Germany, his political perplexities and spiritual anguish, his passionate love of music, and his eventual conversion to Roman Catholicism in Montreal in 1943.⁸

I mention *The Pillar of Fire* because it was an international best-seller, and was translated into French, German, Italian, Spanish and Dutch. It elicited praise from many world-famous theologians, novelists, poets and philosophers, and enabled Stern to step briefly onto the world stage, before lapsing into obscurity a quarter century later. But the books most relevant to our inquiry were Stern’s second and third non-fiction books, entitled *The Third Revolution* and *The Flight from Woman*, published in 1954 and 1965, respectively. In these books, Stern argued that human beings have two fundamentally different ways of thinking and/or engaging with the world. He referred to them as the “poetic” and the “scientific” modes of knowledge.⁹

At the risk of oversimplifying somewhat, Stern said that the poetic mode of knowledge is intuitive, pre-logical or a-logical (rather than illogical) and based on knowledge acquired through empathy, communion and “participation mystique.” The scientific mode of knowledge, by contrast, leans on language, logic and “knowledge through disassembly”, or de-contextualizing objects and taking them apart. Stern did not claim priority for this discovery. On the contrary, he devoted an entire chapter to demonstrating that different iterations of this idea show up in the writings of Aquinas, Francis Bacon and Goethe, and feature prominently in the work of Wilhelm Dilthey, Henri Bergson, Edmund Husserl and Karl Jaspers, whom he cites extensively. Like his predecessors, Stern made no attempt to localize or anchor these two different ways of knowing and engaging with the world in the anatomy or functioning of the brain, despite his formidable neurological training. Instead, he linked them to Wilhelm Dilthey’s distinction between the *verstehende* and *erklarende* modes of knowledge.¹⁰

To illustrate the difference between these two ways of knowing, Stern asked us to imagine two researchers studying the incidence of psychoses following childbirth – a syndrome often associated with post-partum depression. One investigator is a psychoanalyst, the other, an endocrinologist. Each investigator wants to know

5) Frank Stahnisch, “German Speaking Émigré Neuroscientists in North America after 1933: Critical Reflections on Emigration-Induced Scientific Change,” in “Forced Migration of Scholars and Scientists in the 20th Century,” ed. Christian Fleck, special issue, *Österreichische Zeitschrift für Geschichtswissenschaften* 21 (2010): 36–38.

6) Daniel Burston, *A Forgotten Freudian: The Passion of Karl Stern* (London: Karnac, 2016).

7) Daniel Burston, “The Politics of Psychiatry and the Vicissitudes of Faith Circa 1950: Karl Stern’s Psychiatric Novel,” *Journal of the History of the Behavioral Sciences* 51, no. 4 (2015): 351–364, <https://doi.org/10.1002/jhbs.21742>.

8) Karl Stern, *The Pillar of Fire* (New York: Harcourt, Brace and Co, 1951).

9) Karl Stern, *The Third Revolution: A Study of Psychiatry and Religion* (New York: Harcourt Brace and Co., 1954); Karl Stern, *The Flight from Woman* (New York: Farrar Straus & Giroux, 1965).

10) Stern, *The Flight from Woman*; Burston, *Stern: A Forgotten Freudian*.

why some mothers become psychotic, but approaches their research in fundamentally different ways. Thus, for example:

When the psychoanalytical observer finds that the patient suffers from a psychosis following childbirth because she herself had not been wanted by her mother, he *comprehends* (“takes into”) in the sense of having intellectual sympathy (feel with). In finding that the patient was deficient in a certain ion in the blood, the other observer *explains* (“lays outside”, the movement opposite to comprehending), and no act of intellectual sympathy is involved.¹¹

Stern was leaning on etymology to make his point, but it is an intriguing one. Both in English and in German, the phrase “to comprehend” implies an act of (mentally) enclosing, enfolding, encompassing or internalizing an external object or entity. And “to explain,” by contrast, implies a movement to externalize, to expel. Put differently, if we comprehend a depressed mother’s rejection of her infant as the result of her being rejected by her own mother many years previously, we understand her behavior *empathically*, and in light of her lived experience, and not as the result of an anomaly or chemical imbalance in her blood or brain (in the first instance). If not, her behavior strikes us as profoundly mysterious, if not meaningless, in the circumstances. But Stern did not stop with this isolated example. He went on to claim that all of Freud’s most significant discoveries were all product of empathic or *verstehende* thinking, though they were dressed up in the language of natural scientific thought. In *The Third Revolution*, Stern wrote:

The fact that psychoanalytic insight is primarily empathic insight, as contrasted with scientific knowledge, is concealed and complicated by several features, particularly by the fact that Freud himself from the beginning presented his discoveries within a framework of terms which were borrowed from the natural sciences. There are several reasons for this. The originator of psychoanalysis was a child of the nineteenth century. He had been educated in the laboratory and the neurological ward.... Therefore it was most logical for him and his early followers to use the language of the natural sciences. As we have seen, there are certain aspects of physics (particularly thermodynamics) and biology (particularly ontogenesis) which lend themselves splendidly to conveying basic psychoanalytic concepts by way of approximate analogy. When we speak of an “amount of libidinal energy” which is “split off” or “channeled into” something or “sublimated” or “displaced”, we use the language of physicists or chemists to make concepts out of something essentially preconceptual. The preconceptual, archaic world of imagery, which forms the key to the world of neurosis, reminds us of Edgar Allan Poe’s “unthought-like thoughts that are the thoughts of thought.” Technical terminology for such things at best partakes of the nature of a parable. As Karl Jaspers has pointed out, we fool ourselves if we think that the terminology of psychoanalysis really proves that it is something of the same order as physics or chemistry. Actually, there is no such thing as an “amount of libidinal energy” which would fit into a system of references comparable to that of the sciences. Love and hate, joy and mourning cannot be quantified.¹²

It is hard to overstate the importance of this passage. Clearly, Stern claimed psychoanalysis for the *verstehende* or human sciences in 1954, over a decade before Paul Ricoeur and Jürgen Habermas arrived on the scene making

11) Stern, *The Flight from Woman*, 46.

12) Stern, *The Third Revolution*, 154–155.

similar claims. Would Freud have welcomed Stern's gloss on his work? Probably not. But that fact alone does not invalidate Stern's perspective. Even so, it is interesting to note that Stern's reflections on the poetic and scientific modes of knowledge teem with references to earlier thinkers, but are curiously silent on Freud's own thoughts on this matter. One cannot help but wonder why. After all, like Stern, Freud was a neurologist who ventured into the realms of psychotherapy, personality theory, and theories of human development.

Primary and Secondary Processes

In a posthumously published manuscript known as "The Project for A Scientific Psychology", written in 1895, Freud posited the existence of two fundamentally incommensurable modes of thought and of representation, namely, primary and secondary processes. According to Freud, our initial or primordial way of "being-in-the-world" is *primary process thought*, which is presumably driven by the pleasure principle, or by fear and desire, and colored by magical thinking, or phantasy. Primary process thought is pre-linguistic, pre-logical and poorly adapted to the exigencies of survival because it cannot discriminate between reality and illusions, and cannot tolerate frustration, inhibition or the delay of gratification. By contrast, *secondary process thought*, which emerges somewhat later, is governed by the reality principle. While primary process thought conjures up hallucinatory wish-fulfillments in the face of frustration, secondary process thought tolerates the delay of gratification, and is capable of veridical perception, and of purposive inhibition for the sake of adaptation. It is therefore characterized by greater realism, rationality and restraint.¹³

When he proposed these ideas privately, in correspondence with his friend Wilhelm Fliess, Freud attempted to anchor primary and secondary processes in the anatomy and physiology of the brain. But as he later confessed to Fliess, he abandoned that attempt soon after because he could not solve the problem of *qualia* – qualitative and subjective factors.¹⁴ That was not the only drawback to his model, of course. Freud and his contemporaries knew nothing about the neurological basis of empathy, a factor that does not even register in his initial model of the mind – though in fairness to Freud, the discovery of mirror neurons only occurred a century later.

Having failed to construe primary and secondary processes as neurophysiological mechanisms, Freud nevertheless found these ideas indispensable to his clinical work, and introduced them to the general public in his first major book, *The Interpretation of Dreams*, published in 1899. And a decade or so after *The Interpretation of Dreams* was published, Freud continued this train of thought in an essay entitled "Formulations Regarding the Two Principles of Mental Functioning."¹⁵ Like other clinicians of his era, Freud was apt to speak about impairments to the patient's sense of reality. The degree of impairment to a patient's "reality-testing ego", said Freud, varies considerably depending on the person, the severity of their disturbance, and on whether we are talking about neurosis or psychosis.

In describing reality-testing (or secondary process thought) here, Freud mentioned several "functions", or what are more commonly called "faculties", that are invariably implicated, and which he first addressed in correspondence with Fliess in 1895. One is consciousness, and in particular, the capacity for focal attention. Another is memory, of course, and the third is judgment, which he defined as the ability to discriminate between

13) Robert R. Holt, *Freud Reappraised: A Fresh Look at Psychoanalytic Theory* (New York: Guildford Press, 1989).

14) Jeffrey Moussaieff Masson, *The Complete Letters of Sigmund Freud to Wilhelm Fliess, 1887–1904* (Cambridge: Harvard University Press, 1985).

15) Sigmund Freud, "Formulations Regarding the Two Principles of Mental Functioning," in *Sigmund Freud Collected Papers*, vol. 2, trans. Joan Riviere, ed. Masud Khan (London: Hogarth Press, 1971), <https://doi.org/10.1037/e417472005-292>.

true and false “ideas” – a faculty that is utterly dependent on the preceding two faculties, memory and attention, for its very existence, and therefore severely compromised if our memory or capacity for focal attention are already somewhat impaired.

However, the ability to discriminate between true and false ideas also depends on another process, which is often referred to as the capacity for delayed gratification. And please remember, this kind of purposive inhibition is not to be confused with *neurotic* inhibition, which frustrates the program of the pleasure principle by robbing the ego of opportunities for pleasure in the real world as a result of repression, regression, fixation and so on. On the contrary, according to the Freudian model, the kind of purposive inhibition required for reality-testing operates in the service of the pleasure principle, and develops further as the person matures. But how?

According to Freud in 1911, at some point in its development, “...the mental apparatus had to decide to form a conception of the real circumstances of the outer world and to exert itself to alter them.”¹⁶ Of course, Freud’s notion that a “mental apparatus” could “decide” to “form a conception” of anything at all sounds curious to our ears – or at least, to mine. But what is clear enough from context is that Freud believed in the existence of an “outer world” to which our “mental apparatus” must adapt if we wish to thrive, mature and in due course, reproduce our kind. To that end, the reality-principle seeks to determine what is real, or what actually is the case. Further along in this same essay, Freud speculates that reality-testing develops an increasingly intimate relationship with consciousness as the person matures, but actually begins as an *unconscious* mental process, which became “...endowed with further qualities which were perceptible in consciousness only through its connection with the memory traces of words,”¹⁷ or in other words, language.

The cumulative impression one gets from “Two Principles of Mental Functioning” is that in the normal ontogenetic sequence, language emerges only *after* secondary process thought, which germinates in the unconscious before the advent of language because the immature organism is ill-adapted to the perils, privations and choices rendered necessary by living in the real or “external” world. So unlike many, if not most contemporary psychoanalysts, Freud never imagined that reality is just socially constructed, or that our notions about the world around us are merely the products of consensual validation, or more basically, perhaps, of language. To be frank, the idea that language or discourse creates reality as anathema to Freud and his followers. Indeed, Freud referred to it derisively as belief in “the omnipotence of thought”, and saw it as a childish illusion, a form of collective grandiosity or narcissism that humanity would outgrow in the fullness of time. And yet, with that being said, Freud also believed that “...the substitution of the reality-principle for the pleasure principle denotes no dethronement of the pleasure-principle, but only a safeguarding of it. A momentary pleasure, uncertain in its results, is given up, but only in order to gain in the new way an assured pleasure coming later.”¹⁸ In other words, Freud believed that primary process thought always remains the “master”, while secondary process remains the servant and guardian of our instinctual core, even as it develops greater structure, scope and sophistication in each successive phase of human development. And this remained true throughout Freud’s work, even after his reflections on primary and secondary processes were incorporated into his structural theory of the id and the ego, respectively. Freud simply could not imagine a time when the reality-testing ego became “master in its own house”, and had subdued the id sufficiently to relegate it to subordinate status. Indeed, in “The Dissection of the Psychical Personality”, Freud declared that the program of psychoanalysis, and of civilization as a whole, was, “*Wo Es war, soll Ich werden*” – or, where the id was, there shall ego be – likening the gradual transforma-

16) Ibid., 14.

17) Ibid., 16.

18) Ibid., 15.

tion of the id into a culturally benign force to an indefinite and ongoing process, “not unlike the draining of the Zuider Zee.”¹⁹

While it had certain advantages, Freud recognized that his theory of primary and secondary processes had at least one fatal flaw. After all, and by his own admission, Freud’s description of primary process thought, and later, of the id, stipulates that our instinctual drives clamor for immediate gratification, but actively resist adaptation to reality. Needless to say, this runs completely counter to all common sense definitions of instincts, which are supposed to promote adaptation, and enhance our chances of survival. Thus, in a footnote to “Two Principles of Mental Functioning”, Freud wrote:

It will be rightly objected that an organization which... neglects the reality principle could not maintain itself for the shortest time, so that it could have come into being at all. The use of a fiction of this kind is, however, vindicated by the consideration that the infant, if one only includes the maternal care, does almost realize such a state of mental life. Probably it hallucinates the fulfillment of its inner needs; it betrays its pain due to an increase in stimulation and delay of satisfaction by crying and struggling, and then experiences the hallucinated satisfaction.²⁰

So, Freud acknowledged that his theory of drives and the “mental apparatus”, or psyche, is only approximately true, but attempted to curtail potential objections to his two “principles” by noting that mothers provide the reality-testing and motor skills that infants lack to care for themselves. They are, in effect, the newborn infant’s ego. This too is true, but only up to a point. In *Childhood and Society*, Erik Erikson pointed out that the behavior of healthy infants is evolved to evoke precisely the kinds of maternal responses that the infant needs to thrive and develop, and consequently, that Freud’s description of the infantile ego as weak and underdeveloped is extremely *adultomorphic* and disparaging. In truth, said Erikson, the infantile ego is as active and strong as it needs to be, given the infant’s stage of development. It is the *lack* of appropriate maternal responsiveness which engenders genuine passivity and helplessness in infants, which looks quite different from the behavior of a normal baby. Nowadays, Erikson’s critique of Freudian theory is amply borne out in the research of Allan Schore, who wrote that:

...the mother of the securely attached infant psychobiologically attunes her right hemisphere to the output of the infant’s right hemisphere in order to receive and resonate with fluctuations in her child’s internal state. This bond of unconscious emotional communication... facilitates the experience-dependent maturation of the infant’s right brain. Neuroscientists are now writing that:

“Spontaneous communication employs species-specific expressive displays in the sender that, given attention, activate emotional pre-attunements and are directly perceived by the receiver.... The ‘meaning’ of the display is known directly by the receiver.... This spontaneous emotional communication constitutes a *conversation between limbic systems*.... It is a biologically-based communication system that involves individual organisms *directly* with one another: the individuals in spontaneous communication constitute literally a biological unit (Buck, 1994, p. 266, my italics).”²¹

19) Sigmund Freud, “The Dissection of the Psychological Personality,” in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. 21, ed. and trans. James Strachey (London: Hogarth Press, 1981 [1932]), 80.

20) Freud, “Formulations Regarding the Two Principles of Mental Functioning,” 14–15.

21) Allan N. Schore, *Affect Regulation and the Repair of the Self* (New York: W.W. Norton, 2003), 70.

After surveying the growing literature on infancy and right hemispheric functions, Schore concludes that:

Most neuropsychological studies of “the minor hemisphere” have focused solely on motor behaviors, visuospatial functions, and cognition, but only recently have neuroscientists delved into the fundamental activity of the right brain in the recognition of facially-expressed nonverbal affective expressions (Kim et al., 1999; Muller et al., 1999; Nakamura et al., 2000; Narumoto et al., 2000). This research demonstrates that the right hemisphere is specialized for both the receptive processing (Blair et al., 1999) and expressive communication (Borod, Haywood, & Koff, 1997) of facial information during spontaneous social interactions, such as in “natural conversation” or within “interpersonal family communication” (Blonder et al., 1993). This hemisphere is also dominant for evaluating the trustworthiness of faces (Winston et al., 2002).²²

The Harmony of the Hemispheres: Conscious and Unconscious

So, if Schore’s research is any indication, Freud was wrong to imagine that the infant’s basic instincts are completely maladapted to survival in the real world. But he was right to surmise that the a-logical, pre-linguistic “primary processes” precede the capacity for logical or abstract thought. As Schore, McGilchrist and others insist, the right hemisphere develops much faster than the left one, at least initially. Indeed, the left hemisphere doesn’t actually come “on line” until the infant is 12–18 months old. And this has striking implications for any contemporary theory of human development. As McGilchrist points out, the unconscious is more strongly associated with the right hemisphere than with the left. Conversely, says McGilchrist,

...conscious processing tends to go on in the left hemisphere. This dichotomy can be seen at play even in a realm, such as emotion, with an admittedly strong right-hemisphere bias; the right hemisphere processes unconscious emotional material, whereas the left hemisphere is involved in the conscious processing of emotional stimuli. Certainly the right hemisphere experiences material that the left-hemisphere cannot be aware of; and according to Allan Schore, Freud’s preconscious lies in the right orbitofrontal cortex. Freud wrote of non-verbal, imagistic thinking that it “is therefore, only a very incomplete form of becoming conscious. In some way, too, it stands nearer to unconscious processes than it does to thinking in words, and it is unquestionably older than the latter both ontogenetically and phylogenetically”....²³

And what are the implications of Schore and McGilchrist’s work for Karl Stern’s poetic and scientific modes of knowledge? Unfortunately, neuroscience was not sufficiently advanced in the 1960s for Stern to explain the “conversation between limbic systems” that occurs between securely attached infants and their mothers in robust scientific terms. So he resorted to more descriptive and metaphorical language to describe the unconscious communication that Schore and his colleagues have studied intensively. According to Stern, the act of severing the umbilical cord – the physical connection between mother and child – does not sever the *psychic connection* between mother and child, which remains strong throughout infancy. Indeed, he said: “There exists

22) Ibid., 71.

23) McGilchrist, *The Master and His Emissary*, 187–188.

a deeply knowing relationship between the child and the mother – a mode of knowledge much stronger than the tie to the father, which only arises somewhat later.”²⁴

According to Stern, in optimal circumstances, the relationship between mother and child is so close that the psychic boundaries between them are actually quite diffuse. They form a kind of mother-infant matrix, from which the child extricates itself slowly. Or, as Donald Winnicott famously observed: “There is no such thing as an infant.”²⁵ What Stern called the poetic mode of knowledge grows out of this early, intimate, pre-Oedipal soil. This helps explain Stern’s frequent allusions to the close connection between it and Freud’s oral stage of development. For example, in *The Third Revolution*, he wrote:

All knowledge by *union*; all knowledge by incorporation (incorporating or being incorporated); and all knowledge through love has its natural fundament in our primary bond with the mother. The skeptic warns the believer not to “swallow” things, not to be “taken in.” And from his point of view he is right. Faith, the most sublime form of non-scientific knowledge, is (if we consider its natural history, independent of all questions of grace) a form of swallowing or being taken in. This is also true about Wisdom. *Sapientia* is derived from *sapere*, to taste, and *Sophia* is the She-soul of Eastern Christendom.²⁶

We’ll return to Stern’s views on faith momentarily. Meanwhile, when (or where) does scientific reasoning come into play in Stern’s theory of human development? Following Jean Piaget, Stern suggested that children are not capable of fully rational abstract thought (or “formal operations”) till the age of 12 or so. Before formal operations commence, said Piaget, human beings are not yet capable of being fully rational, and the child knows and engages with the world in other, more concrete and immediate ways. But unlike Piaget, who argued that these earlier stages of development are definitively superseded with the advent of formal operations, Stern argued that this more child-like way of knowing and relating to reality continues to function alongside our rational intellect, and is seldom superseded by abstract or discursive reasoning completely. On the contrary, Stern insisted that the mental health of adults depends on maintaining a harmonious balance between them.²⁷

As noted previously, for some strange reason, Stern did not address Freud’s theory of primary and secondary processes explicitly when he talked about the two ways of knowing and engaging with the world. But he did invoke Freud’s conjectures about our innate bisexuality, arguing that the poetic mode of knowledge is essentially feminine, while scientific reasoning is essentially masculine in character. In fact, Stern explained the malaise of modernity as a result of the fact that the “masculine” (scientific) mode of knowledge has become dominant in our culture, and therefore devalues, overtakes or supersedes the “feminine” (poetic) mode of knowledge. When this is not merely an individual phenomenon, but a cultural trend, said Stern, people become anxious and disconnected from their bodies and each other, though science and technology continue to develop apace. In short, as civilization progresses, we grow exponentially in knowledge, while as wisdom atrophies, we become spiritually impoverished.

Needless to say, the theory that Stern was advancing, though suffused with Freudian ideas, ran counter to prevailing wisdom in the psychoanalytic world, which insisted that mental health can only be insured by

24) Stern, *The Flight from Woman*, 32.

25) For Winnicott on the origins of his use this phrase, see Donald Winnicott, “The Theory of the Parent-Infant Relationship,” *International Journal of Psycho-Analysis* 41 (1960): 4n.

26) Stern, *The Third Revolution*, 54.

27) Stern, *The Flight from Woman*.

strengthening the ego at the expense of the id (and superego.) And it must be said, articulating this position in the face of certain rejection took some courage. In calling for a balance between the two modes of knowing, and an androgynous model of the mind, rather than a one-sided emphasis on language, rationality and “ego-strength”, Stern was advancing a “deviant” or heterodox position on the meaning of mental health that guaranteed his outlier status and his perceived irrelevance in mainstream psychiatric circles despite his formidable record as a research neurologist. This may also help explain his rapid decline into obscurity after his death in 1975.

At the same time, for all its boldness, the kind of gender essentialism Stern embraced in the 1960s, while commonplace then, has been widely discredited in the past few decades. And while some elderly feminists, remembering Carroll Gilligan and her colleagues, still refer to “women’s ways of knowing” on occasion,²⁸ McGilchrist rejects the notion of gendered epistemologies, arguing that right and left-hemispheric orientations to the world are neither feminine nor masculine, but generic human attributes. Nevertheless, if you discount this critical difference, strong resemblances between Stern and McGilchrist remain. What Stern termed the poetic and scientific modes of knowledge correspond in many ways to what McGilchrist describes as right and left-hemispheric competences and values. Moreover, like McGilchrist, Stern asserted that modernity is characterized by an increasingly one-sided and ultimately unhealthy reliance on the scientific mode of knowledge, and that the net result is a cultural devaluation of other, more intimate ways of knowing the world, the gradual erosion of our collective mental health, and significantly, of our spiritual lives as well. Stern said these cultural trends began with Descartes (1596–1650), while McGilchrist believes that they started a little earlier, with Martin Luther (1483–1546) and the Protestant Reformation. Whether, or to what extent, these parallel trains of thought are rooted in their neurological training and their shared fondness for literature, music, phenomenological philosophy and in particular, the work of Max Scheler, is an open question.

Faith, Knowledge and Belief

One thing is not in doubt, however. Stern and McGilchrist share very similar views on the nature and meaning of religious experience and belief, and differ dramatically from Freud on this score. Religion, in Freud’s estimation, is nothing more than a collective symptom of obsessional-compulsive rituals and beliefs, of infantile fears and longings, or thinly disguised psychotic ideation. Just as the reality-testing ego grows and matures with each successive phase of psychosexual development, Freud, like the philosophers of the Enlightenment, believed that the march of reason in history is a slow but inexorable process that will cause religion to atrophy and die at some indefinite point in the future – and the sooner the better, no doubt.

Like Freud’s friend, the Reverend Oskar Pfister, Stern readily conceded that Freud’s critique of religion accurately depicted the inner dynamics of a neurotically distorted Christianity. Nevertheless, like Pfister, he insisted that Freud completely missed the boat when it came to the real thing, and that a keenly developed critical faculty is by no means incompatible with “the metaphysical sense”, an awareness of mystery, and by implication, with religious faith. Indeed, in *The Pillar of Fire*, Stern reassured his readers that there is no intrinsic conflict between science and faith, and therefore, that the effort to embrace the two simultaneously need not occasion any inner conflicts in the believer. As he put it:

Some time ago I read that Pascal’s early death was caused by the inner tortures he endured resulting from the conflict between Science and Religion. It is quite possible that Pascal suffered inner

28) Carol Gilligan, *In a Different Voice* (Cambridge: Harvard University Press, 1993); Mary Field Belenky et al., *Women’s Ways of Knowing: The Development of Self, Voice and Mind* (New York: Perseus Books, 1997).

conflicts, but there is no indication that this was one of them. I presume that de Broglie is a Christian and that Planck was a Christian. Pascal and Newton were Christians. It is possible that they were Christians *besides* being Scientists or *on account* of being Scientists, but why should they have been Christians *in spite of* being Scientists?²⁹

To make this point clearer, he compared new scientific discoveries to pieces of a puzzle that somehow fit into a bigger picture. In his own words:

No fragments of a jig-saw puzzle mean anything unless you are convinced that they are a part of a whole which will finally turn out to be a picture. Every good scientist has a cosmology. He may be dimly aware of it and carry it with him as an ill-defined shadowy image, or it may be elaborate like that of the great Christian thinkers of the middle ages, or that of the evolutionists of the nineteenth century. There is no scientist who does not try to fit his findings, which are by their very nature fragmentary, into the jigsaw puzzle of some universal idea.³⁰

So, by Stern's account, "every good scientist has a cosmology" and tries to fit their findings "into the jigsaw puzzle of some universal idea". The tacit implication of this remark is that much scientific research is motivated by a search for cosmological coherence – the hope (or belief) that the universe comprises an integrated and intelligible totality or system. Is this actually the case? Yes and no. On the face of it, the claim that *every* scientist tries to fit his (or her) findings into a broader cosmological framework is demonstrably untrue. But then as Thomas Kuhn observed, all scientific findings (including many born of serendipity) are integrated (at one point or another) into a more comprehensive *paradigm* that is shared by other practitioners of the same discipline. And it is also the case that many *great* scientists really do search for cosmological coherence. Thus, for example, Albert Einstein remarked to Max Born that "*He* [God] is not playing at dice [with the universe]."³¹ And on another occasion, he was moved to say that "science without religion is lame; religion without science is blind."³²

Just as Stern traced religious faith and "the metaphysical sense" to the poetic mode of knowledge, McGilchrist traces the roots of religious convictions to right-hemispheric attitudes, as follows:

Believing is not to be reduced to thinking that such-and-such might be the case. It is not a weaker form of thinking, laced with doubt. Sometimes we speak like this: "I believe the train leaves at 6:13" where "I believe that" simply means that "I think (but am not certain) that". Since the left hemisphere is concerned with what is certain, with knowledge of the facts, its version of belief is that it is just the absence of certainty...

But belief in terms of the right-hemisphere is different.... For it, belief is a matter of care.... Thus, if I say that "I believe in you" it does not mean that I think such- and-such things are the case about you, but can't be certain that I am right. It means that I stand in a certain sort of relation...

29) Stern, *The Pillar of Fire*, 250.

30) *Ibid.*, 250–251.

31) Albert Einstein, "52: December 4, 1926 [Letter to Max Born]," trans. Irene Born, *The Born-Einstein Letters* (New York: Walker and Company, 1971), 91.

32) Albert Einstein, "Science and Religion," *Ideas and Opinions* (New York: Citadel Press, 1956), 26.

towards you that entails me in certain kinds of ways of behaving... toward you, and entails on you the responsibility of certain ways of acting and being as well. It is an acting *as if* certain things were true... that in the nature of things cannot be certain....

This helps illuminate belief in God. This is not reducible to a question of a factual answer to the question “does God exist?”.... It is having an attitude, holding a disposition towards the world, whereby that world, as it comes into being for me, is one in which God belongs.... An answer to the question whether God exists could only come from my acting “as if” God is, and in this way being true to God, and experiencing God (or not, as the case may be) as true to me.... This... is not a... “cop-out”, an admission that “really” one does not believe what one pretends to believe. Quite the opposite; as Hans Vaihinger understood, all knowledge, particularly scientific knowledge, is no more than acting “as if” certain models were, for the time being, true.³³

Though it may not have been intended that way, McGilchrist’s attempt to root religious faith in a mode of relationship suffused with care, trust and responsibility is reminiscent of (and probably modelled on) the Biblical concept of *covenant*. That being so, it is important to note that there is very little room in Freud’s model of the mind for relationships of this kind. In a paper entitled “Thoughts for the Times on War and Death”, published in 1915, Freud said that human beings are naturally very violent and selfish creatures. Indeed, in keeping with his “hermeneutics of suspicion”, Freud even claimed that human kindness and compassion are the result of sublimation and reaction formations that transform our instinctive cruelty into nobler and more elevated passions. For example, he writes that:

...the existence of strong “bad” impulses in infancy is often the actual condition for an unmistakable inclination towards “good” in the adult person. Those who as children have been the most pronounced egoists may well become the most helpful and self-sacrificing members of the community; most of our sentimentalists, friends of humanity, champions of animals, have been evolved from little sadists and animal tormentors.³⁴

So, take note, all you pacifists, vegans and animal rights activists! And take that, all you good Samaritans, philanthropists and community-volunteers! Freudian psychoanalysis demonstrates that your pro-social feelings and inclinations are really the result of reaction formations, or of sublimated sadism, and that despite your adult attitudes and convictions, you started life as little monsters who reveled in spreading misery and suffering, not alleviating it!

This insistence on the secondary or derivative character of our pro-social tendencies continued unabated in *Civilization and Its Discontents*, where Freud stipulated that the ties that bind families and communities together are not instinctive, but the result of “aim-inhibited love” or of sublimation. That does not make them any less important for Freud, of course, for without them, human existence would be unbearable. Granted, they are a product of civilization and therefore “unnatural”, in Freud’s estimation, but they are vitally necessary to communal life, because they contain and deflect the relentless aggression that nature inscribed in our basic biological programming. Given his unshakeable belief in our innate depravity, and the deathless

33) McGilchrist, *The Master and His Emissary*, 170–171.

34) Sigmund Freud, “Thoughts for the Times on War and Death,” *Collected Papers*, vol. 2, trans. Joan Riviere, ed. Masud Khan (London: Hogarth Press, 1971), 296.

character of the “death instinct”, it is no wonder that Freud felt the id was always the master – whether we know it or not.

So on reflection, there are several striking parallels in the way Stern and McGilchrist take up Freud. Both men reject Freud’s attempt to reduce religious faith to the level of a symptom, and both derive the constitutive dualism that presumably underlies human existence from a reading of (or in McGilchrist’s case, a rejoinder to) Freud. For Stern and McGilchrist alike, our capacity for empathy and our pro-social strivings are not “second nature”, nor are we all “enemies of civilization” in the depths of our unconscious. On the contrary, our pro-social strivings are instinctive or primary, and not secondary (or acquired) characteristics. That being so, their perspectives on the malaise of modernity are quite different from Freud’s. They acknowledge the possibility, indeed the likelihood, that the erosion and devaluation of “the poetic mode of knowledge”, or of right-hemispheric competences and values, has already reversed the “natural” state of affairs, and that if we want to live fully human lives, we need to re-evaluate our cultural priorities and practices.

Like Freud, Stern and McGilchrist have their critics, and may indeed be wrong on various specifics. But can we afford to ignore the overarching perspective they bring to bear on contemporary culture? I fear not. At the height of the Cold War, another Scottish psychiatrist, Ronald Laing, expressed the opinion that before we lay waste to the planet, we will have had to lay waste to our own sanity.³⁵ That utterance, a commentary on the nuclear arms race, seems prophetic and even more broadly applicable now than it was a half century ago. With mounting climate disasters and mass extinctions on our doorstep, the threat of nuclear annihilation still very much on the horizon, and authoritarian regimes dismantling democracy all over the planet, we need to reflect very carefully on our next steps.

35) Ronald David Laing, *The Politics of Experience and The Bird of Paradise* (New York: Penguin Books, 1967), 49.

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