

1 A Lost Dialogue

A dialogue between two men took place early September 1909 in Worcester, New England. One of the two was William James, 67 years old, physiologist, medical doctor, psychologist, and philosopher. A portrait of James from around that time reveals a slender man with good posture, warm yet penetrating eyes, and a wild grayish beard. Being an empiricist in the most fundamental sense possible, James insisted on experiencing all, shying away from nothing, the simplest or the apparently bizarre, exploring for “irreducible and stubborn facts.”¹ Robert Richardson, the author of James’s extensive biography, says that “consistency, for James, was not in itself a virtue. Vacillation was ... a fixed habit. He was so open to almost any kind of experience that he was apt to change his mind repeatedly about any single piece of it, from a career plan to a recent book.”² James was the author of many psychology texts, the most celebrated of which is the 1890 *Principles of Psychology*; while not the first textbook of the discipline (textbooks by, for example, Bain and Spencer had been published earlier), James’s *Principles* remains the most relevant to date. It is a systematic analysis of a wide array of human behaviors, ranging from such basic concepts as Habits, Instincts, and Perception to complex phenomena such as Association, Thought, Consciousness of Self, Emotions, and Hypnotism. James’s contributions to philosophy

¹ Richardson (2007, pp. 5 and 297).

² *Ibid.*, p. 152.

2 Science, Psychoanalysis, and the Brain

are of utmost importance, largely due to their emphasis on the psychological machineries underlying key philosophical concepts. He was a firm believer in (and one of the founders of) *Pragmatism*, a conceptual framework much abused over the years, which to James was no less than the path towards knowing what is true by means of ongoing negotiations with the observed, tightly connected to relational dynamics and depth psychology, as will become evident in later chapters of this essay. “By their fruits ye shall know them, not by their roots”³ was one of James’s favorite aphorisms, variants of which appear in multiple places throughout his writings.

The other man was Sigmund Freud. In September 1909, as testified by several photographs taken in Worcester, Freud (at the age of 53) seems almost as old as James, having a somewhat embittered look, with an all-white, well-cultivated beard, slightly bent forward and holding a stylish walking stick. At that time Freud’s ideas, already known in the world of academic psychology, were much criticized but influential. He was called to Worcester by Stanley Hall, the president of Clark University, himself an eminent American psychologist and educator, an old friend, and often contender, of James. Stanley Hall invited Freud to present his theoretical framework to the Americans in a series of lectures as part of a conference in honor of the twentieth anniversary of the university. Freud had hesitated, but eventually accepted the invitation and sailed to Worcester from Europe, embarking from Bremen on board the *Norddeutscher Lloyd* ship *George Washington* on August 21.⁴ He travelled with two of his apostles – Carl Jung of Zurich (who had been invited independently of Freud)⁵ and Sandor Ferenczi of Budapest – a journey in which much is said to have happened

³ James (1902, p. 26); adapted from Matthew 7:20 (KJV) “Wherefore by their fruits ye shall know them.”

⁴ Jones (1955, p. 54).

⁵ While Jung said so, and likewise insisted in his biography, there is no indication to that effect in correspondence with Hall. See Rosenzweig (1992, footnote 2 in pp. 355–6).

A Lost Dialogue

3

between Freud and Jung, maybe the beginning of the collapse of their relationship. They arrived in New York City on August 30, spending several days there, and then took the train to Worcester.

The atmosphere in American academic psychology and its relation to the European (largely German) school around the time of Freud's arrival at Clark University, is described aptly by Flugel in his 1934 book on the history of psychology:

[T]he rapid rise of American psychology is beyond all doubt one of the most striking scientific events of the last two decades of the nineteenth century... But in taking over psychology, America distinctly modified the German attitude. From the very first the principal features of this modification were clearly apparent. They can be summarized very briefly under three heads: (1) a much greater interest in the genetic standpoint; (2) a distrust of introspection and (3) an emphasis on individual differences rather than on the general characteristics of the human mind.⁶

These are the seeds of biologism, behaviorism, and the dominance of quantitative mental tests in America throughout the twentieth century.

Freud and Jung stayed at President Hall's house during the one-week conference. William James arrived at Worcester toward the end of the conference, on the evening of Thursday, September 9, "in order to see what Freud was like."⁷ In itself, James's attendance was a valuable statement of an intention, by one of the most distinguished American intellectuals, to understand the principles underlying the psychoanalytical movement. He stayed the night in Hall's house, together with Freud and Jung, and planned to take the next day's (Friday) evening train back home to Boston.

It is reasonable to assume that Freud was eager to impress James; maybe this drove him to change the subject of his planned Friday

⁶ Flugel (1934, pp. 210–11).

⁷ A letter to Theodore Flournoy, September 28, 1909. In *The Letters of William James* (1920), vol. II.

4 Science, Psychoanalysis, and the Brain

lecture,⁸ practically repeating large portions of his previous day's lecture on dreams, slips of the tongue, and accidental behavior, conveying the message that interpretation of dreams and accidental acts are "the *Via Regia* to the knowledge of the unconscious."⁹ Freud asserted that his most regular observation thus made is that the symptoms of his patients are traceable back to impressions from their early sexual life. "In all cases," he said, a thorough explanation of present symptoms "finds its way back to the time of puberty and early childhood... [it] is the enduring, repressed wishes of childhood which provide the power for the formation of symptoms ... [T]hese powerful childhood wishes are almost invariably of a sexual nature."¹⁰ James was there, listening to Freud's message to an allegedly prudish American audience.¹¹

It was probably difficult for Freud and James to have time alone during the twenty-four hours of James's visit. Therefore, Freud, by invitation, joined James on Friday evening on his one-and-a-half mile walk from Hall's house to Worcester railway station, where they would go their separate ways, never to see each other again: James died in 1910. The failure of the genuine attempt made by these two great men to understand each other within the limited space and time (one-and-a-half miles, maybe one hour), was literally heart-breaking:¹² "He [James] stopped suddenly, handed me a bag he was carrying and asked me to walk on, saying that he would catch me up as soon as he had got through an attack of angina pectoris which was just coming on." James did see some possible merit in Freud's

⁸ Rosenzweig (1992, pp. 171–2).

⁹ *Ibid.*, p. 418.

¹⁰ *Ibid.*, p. 426.

¹¹ In a letter to Jung, while contemplating the option of accepting the invitation to come to America (McGuire, 1974, pp. 195–7), Freud expressed his concerns that "once they discover the sexual core of our psychological theories they will drop us. Their prudery and their material dependence on the public are too great."

¹² Freud (1925, p. 52).

A Lost Dialogue

5

idea; in a letter to one of his colleagues he expressed hopes that Freud and his disciples “will push their ideas to their utmost limits, so that we may learn what they are. They can’t fail to throw light on human nature; but I confess that he made on me personally the impression of a man obsessed with fixed ideas. I can make nothing in my own case with his dream theories, and obviously ‘symbolism’ is a most dangerous method.”¹³ In another letter he writes: “I strongly suspect Freud, with his dream-theory, of being a regular *halluciné*.”¹⁴ These are difficult words to read, even today, especially when streaming from a pen belonging to a man of such depth and openness as James. Strangely, Freud (an otherwise obsessive note keeper) never commented, at least not in writing – as far as I can tell – on what James had said (or did not say) to him in this walk to the station. It is strange, because no one single person throughout the American academic world was more strongly identified with the underpinnings of psychology than James at that time. All we know is that Freud came back to Europe with a feeling that “America is a mistake; a gigantic mistake, it is true, but none the less a mistake,”¹⁵ complaining of the traumatic impacts of the trip on his gastrointestinal system and – quite bizarrely – that his “handwriting has deteriorated so very much since the American trip.”¹⁶ Nothing on the intellectual interaction with James, whose scientific approbation Freud surely sought.

The failure to interact with each other, to initiate a genuine dialogue between the then budding Freudian theory that strived for scientific backing, and the age-old, systematic, seemingly solid thread from anatomy to physiology to psychology to mind and philosophy,

¹³ A letter to Theodore Flournoy, September 28, 1909. In *The Letters of William James*, vol. II.

¹⁴ A letter to Mary Calkins (September 19, 1909), in Rosenzweig (1992, p. 174).

¹⁵ Jones (1955, p. 60). The Jones account of Freud’s ambiguity towards the American experience is educative and humorous (pp. 53–60).

¹⁶ Letter from Sigmund Freud to Ernest Jones, January 27, 1910, in *The Complete Correspondence of Sigmund Freud and Ernest Jones 1908–39*, pp. 42–3.

6 Science, Psychoanalysis, and the Brain

a thread to which James devoted his intellectual life, should not have come as a surprise. It is James who wrote of scientists yielding “to the pleasure of taking for true what they happen so vividly to conceive as possible ... [representing] a mood of Faith, not Science.”¹⁷ It is James, rooted in physiology, who stated that “the ignoring of data is, in fact, the easiest and most popular mode of obtaining unity in one’s thought,”¹⁸ and that the “theorizing mind tends always towards the oversimplification of its materials.”¹⁹ While James rejected “the assertion ... that the only sound psychological science is that founded in physiology” and against “the most brutal materialism,”²⁰ he clearly articulated his faith that “the way to a deeper understanding of the order of our ideas lies in the direction of cerebral physiology. ... [I]t is only as incorporated in the brain that such schematism can represent anything *causal*.”²¹ The dialogue between James and Freud was a dialogue between one who was open to explore any direction, yet restrained by his insistence on “irreducible and stubborn facts,” and one who was significantly more relaxed regarding facts, but insisted on seeing things through his own prism – psychoanalysis, as he envisioned it.

Depth psychology and physiology went their separate ways. The psychoanalytic movement, arguably the only branch of psychology that dares to hypothesize on the dynamics of motives and conflicts underlying human psychic life, distanced itself from issues of matter, focusing on the development of a rich conceptual framework, addressing psychodynamics independently of the underlying physical machinery. This separation process stands in sharp contrast to the development of other branches of psychology that took less insecure paths, attending to aspects of human behavior to which the

¹⁷ Richardson (2007, p. 163).

¹⁸ *Ibid.*, p. 184.

¹⁹ James (1902, p. 32).

²⁰ Richardson (2007, p. 195).

²¹ James (1950[1890], volume 1, p. 593).

A Lost Dialogue

7

method of measurement might be applied. These other branches of scientific psychology (for instance, the study of perception, learning, memory, categorization, and decision making) position themselves at a more convenient place in their negotiations with the discipline of physiology. Moreover, they make every possible effort to distinguish themselves from the misty language of psychodynamics. At the same time, physiology had confined itself, until very recently, to matter, with marginal reference to the mind. A dialogue between physiology and psychology, where realized, was limited to the above-mentioned branches of scientific psychology that focus on measurable behavior. Only in one (critical) front – the borderline of medical practice – did clashes flare here and there between applied physiology and the psychoanalytic movement; most notable is the Osheroff versus Chestnut Lodge case.²² These clashes, however, were immediately extinguished, usually by psychoanalysts clearing the way and withdrawing from the field of conflict.

Over the past decade or two we have been witnessing a change in the relations between depth psychology and physiology. Technological advancements in manipulating and measuring brain activities around the transition from the twentieth into the twenty-first century, taken together with an atmosphere that rewards interdisciplinary approaches, have brought neurophysiology and psychoanalysis into contact again. Ernst Mach (1838–1916) referred to such often seen transient phenomena, where fields that have developed in parallel come into contact, hoping that relating them to each other might throw light on otherwise hidden important facts. On such occasions there is a natural tendency to think that one of the fields may be absorbed by the other. But, says Mach:

[T]he period of buoyant hope, the period of over-estimation of this relation which is supposed to explain everything, is quickly followed

²² Klerman (1990, 1991); Stone (1990).

8 Science, Psychoanalysis, and the Brain

by a period of disillusionment, when the two fields in question are once more separated, and each pursues its own aims, putting its own special questions and applying its own peculiar methods. But on both of them the temporary contact leaves abiding traces behind. . . . [T]he temporary relation between them brings about a transformation of our conceptions, clarifying them and permitting of their application over a wider field than that for which they were originally formed.²³

Regarding the matter in hand, whichever direction of abiding traces one seeks to identify – psychoanalysis to neurophysiology or vice versa – one must be aware of the danger of making the category errors that are entailed in the mixing of scales and levels of organization, inherent to wandering within the psycho-physiological chasm. Scientists tend to become less sensitive to such category errors – otherwise unacceptable within established scientific disciplines – when jumping scales across disciplines; more so when it comes to making statements about psychology, the “permitted” discipline.

With Ernst Mach’s perceptive comment in mind, a potentially important project – beyond the scope of the present essay – might be imagined, where psychologists attempt to identify abiding traces of transformations within psychoanalysis, brought about by modern approaches to complexity and organization in dynamical systems theory,²⁴ or by neurophysiological findings.²⁵

But this essay is about the complementary direction: identification of traces of those transformations that depth psychology imposes on neurophysiology, transformations that survive the disillusionment with relations that are supposed to explain everything. To this end, the century-old dialogue between physiology and depth psychology is presented in a manner that might help in defining what can and, more important, what cannot be exchanged between

²³ Mach (1914[1897], p. 83).

²⁴ See, for instance, Stolorow (1997).

²⁵ Kandel (1998, 1999).

A Lost Dialogue

9

the two disciplines. Acknowledging the inherent irreducibility of the depth psychology discourse, the dialogue – as presented here – departs from the aura of physiological chauvinism that dominates at the present time. It is important to do so in order to protect physiology from an ignominious materialism when it comes to issues of psychic processes. It is vital – for the benefit of neurophysiology – to secure the intellectual autonomy of depth psychology discourse from the impacts of a naive reductionism that aims to explain away psychic concepts by pointing at biological mechanisms and semantically empty causal relations.

While I subscribe to the belief that no direct mapping between the concepts that constitute psychoanalytic and neurophysiological discourses is available for us *in principle*, proper abstraction may expose domains within each of the disciplines, through which a meaningful dialogue may be reified. After all, both disciplines share a history of intellectual interest in relational, functional development and adaptation of representations over extended spatial and temporal scales; they share a history of intellectual interest in the ways representations (of admittedly very different kinds of objects) are formed, grow, interact, split, and merge; they share a history of confusion about what is pre-determined and what is open to evolve over the human life cycle; what is physical and tangible, and what is independent of structure. Taken together with the links between them, these and related issues constitute a space for dialogue; a floor where a genuine attempt may be made by both depth psychology and neurophysiology to understand each other and – importantly – to define the boundaries of their trades, their individuation. In this process, neurophysiology is a major donee by possible gain of meaning.

The present invitation to establish a deferential dialogue between depth psychology and physiology is mainly intended for the sake of physiology. It is in itself an unvoiced dialogue that might have taken place within the minds of physiologists that are interested in meaningful input from depth psychology, but are concerned by the

10 Science, Psychoanalysis, and the Brain

simplistic biologism that characterizes several of the recent trends. The dialogue is presented as a collection of thoughts, associations, and reflections that critically examine potential points of contact in an abstract space between the two disciplines. Concepts are phrased in terms that promote a dialogue, focusing on generic aspects of depth psychology and neurophysiology, primitives that are situated at the basis of these fields. In the analysis of neural structures and dynamics no specific brain anatomical loci are mentioned, nor cellular or genetic correlates of behavior. Not in order to spare the psychologists the agony of sinking into physiological technicalities do I refrain from localizing functions in the brain. Rather, it is because localization in its broader sense is the very thing that is detrimental to a dialogue between depth psychology and physiology.

We carry with us the symptoms and signs of the James-Freud 1909 symbolic failure to converse, sometimes paradoxically twisted, but clear to the eyes of those who seek them. Maybe it is time now to resume deferential tones dissolved too early, to dialogue in a more suitable space and definitely with no intentions in mind, nor in its matter, either to condescend or to ignore each other for one more century.