The embodied psyche of organismic psychology: a possible frame for a dialogue between psychotherapy schools and modalities¹ Michael C. Heller

Abstract

In this article, I share general principles that allow me to situate body psychotherapy within the realm of other psychotherapy schools. The frame I use comes from experimental psychology, which has traditionally defended the vision of an embodied psyche which includes mind and affects. I will focus on French-speaking organismic psychology (Lamarck – Bernard – Charcot - Ribot - Binet - Janet - Wallon – Piaget) because this was my basic academic training, but I will also mention other trends of organismic experimental psychology. I will then argue that improving the dialogue between these two fields could be mutually beneficial, and that it is also a necessary step to create an umbrella theory for psychotherapy.

Keywords: experimental psychology, psychotherapy, body, organism, James, Charcot, Janet, Freud, Watson, Ferenczi, Reich, schools and modalities

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Introduction

The field of psychotherapy is well known for its division into heterogeneous *modalities* (e.g., cognitive, emotion, verbal, behavior, body) and *schools* (e.g., behavioral, cognitive, Freudian, Jungian, Reichian and systemic). Psychotherapy schools often propose formulations that are school-specific, self-promoting and difficult to share. Recently there has been an increasingly large movement supporting eclectic forms of psychotherapy (Norcross, 2005). The aim is to combine useful tools produced by a variety of schools, for the well-being of patients. The synthesis that emerges from the combination of sometime heterogeneous models requires a theoretical framework that provides at least some common notions and vocabulary. In this article I will try to show that one of the main difficulties to construct a common framework is a form of ignorance, based on the arrogance that specialization is enough. Psychiatrists tend to ignore psychology and psychotherapy, psychologists tend to ignore psychiatry and psychotherapy, and psychotherapists tend to ignore psychiatry and mostly psychology. I have the impression that during more than a century psychotherapy schools tried to invent their version of the wheel every time they looked for a theoretical framework. I will suggest

¹ The subject of this article is based on a keynote presentation given in September 2014, at the EABP (European Association of Body psychotherapy) Lisbon congress. I have also added useful developments presented in Utrecht, in November 2014, to the body-mind section of the Dutch Association of Psychologists (NIP), and at the psychosomatic department of the Clinique Le Noirmont (Switzerland) in November 2015. I thank Nancy Eichhorn and other members of the IBPJ for improving my English.

that by accepting to integrate existing psychological theories instead of *providing patented* private theories, as in pharmaceutical laboratories, psychotherapy schools could discover that a minimal common frame already exists.

This article presents insights on the history of body psychotherapy that I have explored since the publication of my book on the field of body psychotherapy in 2012. I will begin by proposing a short definition of body psychotherapy, and then present key issues that have marked the origins and growth of psychotherapy as a field.

1. Presenting a Short Definition of Body Psychotherapy

"There is not a single one of our states of mind, high or low, healthy or morbid, that has not some organic process as its condition. Scientific theories are organically conditioned just as much as religious emotions" (James, 1902, *The Varieties of Religious Experience:* 18).

Each body psychotherapy school synthesizes a variety of existing psychotherapeutic models in function of their own creative process. However, given their interest in the integration of body dynamics, these syntheses share a certain number of common preoccupations. Here are some characteristics that, in my eyes, justify the classification of these heterogeneous schools in the body psychotherapy modality:

- 1. Body psychotherapy is a psychotherapy.
- 2. Body psychotherapy is a form of psychotherapy that uses *body techniques in an integrated way*. Examples of body therapies used by some body psychotherapists are Rolfing, Psychomotor physiotherapy and Hatha-yoga.
- 3. Body psychotherapy is a form of psychotherapy that also uses *body-mind approaches* in an integrated way. Examples of such approaches are Gindler's gymnastics, Feldenkrais's method, relaxation techniques, and so on. What these methods can teach to experimental psychologists is a detailed practical knowledge of precise body dynamics connected to precise psychological dynamics (Bullinger, 2004).

"Integrated" means that the use of body and body-mind methods are justified at the level of psychotherapeutic theory, models and techniques. A simple *addition* of body techniques to a psychotherapy that does not necessarily require the inclusion of bodywork is not a body psychotherapy. Thus, some psychoanalysts use relaxation (Giordano, 1997), or some cognitive therapists use meditation techniques inspired by far eastern philosophies (Segal et al., 2002). Gestalt therapists (Kogan, 1980; Perls, 1978) and transactional analysts (Cornell, 1997) often use body techniques in a more integrated way.

Just as the root "psycho" is defined differently by nearly every existing psychologist, psychiatrist and/or psychotherapist, the term "body" has a variety of meanings that are relevant in body psychotherapy. For this discussion, I will distinguish three meanings:

- 1. For some, the body is the *whole individual system* of a creature or a person. For instance, Lamarck (1802) and Claude Bernard (1865) talk of the evolution of "living bodies." Several authors, even in body psychotherapy (e.g., Young, 2006; Carleton, 2002), still use the term body in this way. To narrow the polysemy of the term body, I tend to use the term *organism* to designate the whole being and all it contains, as proposed by most biologists since Darwin (1859).
- 2. The body is the *non-psychological part of the organism*, as when psychoanalysts talk of their psycho-somatic vision. This is how I understand the title of Damasio's famous 1999 book: *Body and Emotion in the Making of Consciousness*. I often use the term *soma or physiology* to designate this dimension.

3. The word body is also associated with the body techniques described by Marcel Mauss (1934). It is the system of skin, bones and muscles that allow the organism to adapt to the gravity field. Some also include external breathing patterns. I have found no synonym to designate what some colleagues call the *physical body*, so this is the meaning I tend to associate with the term body.

If one should ask which of these bodies characterizes body psychotherapy, I would answer all three, as they are rarely explicitly differentiated. In the body psychotherapy literature of this field, the meaning of the term body shifts continuously. However, in all cases, the third meaning, associated with body techniques, is present. The use of body techniques is, in one way or another, the basis for the name of this modality. The other meanings are also used in other psychotherapeutic modalities. It is probably because the use of body techniques by psychologists and psychotherapists is legally prohibited in some states of the United States that colleagues in the USA prefer the appellation *somatic psychotherapy*. The term soma has other implications than the term body, but this denomination designates similar psychotherapeutic schools and methods. Most of these schools refer to Wilhelm Reich, who combined body and verbal techniques to modify what he called *vegetative* dynamics. In the following pages, I will help you travel through the many meanings of the term body, as I will often follow the vocabulary used by the author I reference.

In this article I will explore the useful implications of using Pierre Janet's vision as a basic reference for the definition of psychotherapy. He (1889, I, part I) differentiates the body (or physical body), organic life (for soma or physiology), emotions and consciousness. Most of the time he avoids such broad categories and prefers to use more specific descriptive terms without specifying how he situates them. He rarely uses the term organism, but when he does, he refers to an individual entity, in which "an immense number of facts of consciousness" can be experienced (Janet, 1889, II, p. 16).

2. The Advent of Organismic Psychology

"The question of the relationship between mind and biological organization is one which inevitably arises at the beginning of a study of the origins of intelligence" (Piaget, 1936, Origins of intelligence in the child, p. 1).

To situate the different directions taken by psychotherapeutic movements, I will try to show that a possible common framework for most psychotherapeutic movements can be found in what I call *organismic psychology*, which I now define, using a historical approach.

I have often heard body psychotherapists complain that they are the only ones who defend a vision in which the body is an integrated dynamic entity of the organism that constantly interacts with all the dynamics of the organism. There may be a cultural problem integrating body and soul in cultures that have emerged from Christianity, in mechanistic scientific movements, or in the psychoanalytic methods. I will, however, try to show that most researchers in scientific *experimental psychology* are traditional allies for the creation of an embodied vision of the mind as far as theory is concerned. The only real problem that academia has with the notion of body psychotherapy is ideological: its Reichian and spiritual roots. As an example, I use the psychological movement that was the basis of my academic training, which I call *organismic experimental psychology*, as it was taught by Jean Piaget and his team in Geneva (Rochat, 2016). The content I acquired during these studies actually helped me integrate some of the formulations proposed by the body psychotherapists

I became acquainted with. They were clinicians who dared to accompany people taken by organismic storms raised by the whims and passions of human beings. It is the common underlying formulation of these two fields that I sketch in the next pages.

Reflexology: A Chest of Neurological Drawers that Centralize Impressions

"If we try to imagine an idea as persisting beneath the limen of consciousness, we can as a matter of fact only think of it as still an idea, i.e., as the same process as that which it was so long as we were conscious of it, with the single difference that it is now no longer conscious. But this implies that psychological explanation has here reached a limit similar to that which confronts it in the question as to the ultimate origin of sensations. It is the limit beyond which one of the two causal series—the physical—can be continued, but where the other, the psychical,—must end, and where the attempt to push this latter farther must inevitably lead to the thinking of the psychical in physical—i.e., material,—terms" (Wilhelm Wundt, 1892, *Principles of Psychophysiological Psy-chology*, 30, V, p. 453).

Contacting the Organization of Organs

A central area in our discussion is the web of routines situated "beneath the limen of consciousness" (see quote above), where physiological information becomes psychological data, and vice versa. Because I have not found an existing relevant word, I will refer to this crepuscular region of the mind as a web of psychophysiological connecting devices. In European philosophy this zone was already explored by René Descartes (1649) when he assumed that the soul is "jointly linked to all the parts of the body via the mechanisms that regulate the assembling of organs" (I.30). Descartes is often referred to as a proponent of a scientific version of a soul/body split. This may have been true for the young Descartes, but not for the Descartes who wrote his 1649 Treatise on the Passions of the Soul. There he described deep and powerful connections which become manifest when the storms of the soul and the storms of the body interact during a passionate conflagration. During this tempest, the body fluids of the cardio vascular system assail the brain like a sea raging against cliffs (Heller, 2012, chapter 4). Descartes did not have a knowledge base that allowed him to conclude his enquiry in a satisfactory way, but the direction that he pointed to inspire the next generations.

Like Descartes, Spinoza defended a vision in which mind and physiology are clearly separate parallel entities, following different laws and having different properties. However, he dropped the notion that there is a soul, and described the mind as a dimension of a global individual system. He assumed that this system can sense, influence and coordinate whatever happens in sub-systems such as the mind and the body (Spinoza, 1677, V).

This position was later developed by William James (1890, p. 1135) and Edmund Jacobson (1938). Jacobson had analyzed subjects using his *Progressive Relaxation* method, using electroencephalograms (EEG) to measure brain activity and electromyography (EMG) to measure muscular tension. He asked his subjects what they had observed within themselves when asked to focus their mind on a hand. These studies highlighted two phenomena:

- 1. No one can think of his hand without a slight mobilization of the muscles of that part of the body. The subject does not always perceive this mobilization, but it can be detected by EMGs.
 - 2. The thought of the hand and the mobilization of the muscles of the hand occur

simultaneously. It is therefore not one that causes the other. Following Spinoza and mostly James's models, Jacobson assumed that nonconscious organismic regulators have coordinated the mental and the muscular activity.

Spinoza's attempt to maintain a form of coherent parallelism between mind and body within the organism did not convince French philosophers, who preferred the more chaotic vision of the old Descartes. This is manifest in the definition of the soul proposed by Diderot and d'Alembert in their famous Encyclopedia (1751):

"The Soul: (...) But whatever way we understand what thinks itself in us, what remains constant is that its functions depend on the organization, and on the actual state of the body while we live. This mutual dependence between the body and what thinks itself in man, is what one calls the union of the body with the soul; according to a healthy Philosophy and the revelation this union was created by the free will of the Creator. Or rather we have no immediate idea on the dependence, union, or of a form of relation between these two things, body and mind. This union is an irrefutable fact, but its details are unknown to us" (The Encyclopedia of Diderot and d'Alembert, 1751, p. 236, my literal translation).

For these authors, there may be intermediary organismic regulators, but the relation between mind and body is ultimately more intimate than what Spinoza had assumed. Today scientific research has made remarkable progress in psychophysiology, but not enough to propose a reliable theory on how mind and body interact, or on whether mind and body are relevant categories.

The many discussions of philosophers on how mind and body interact were suddenly reframed in 1802, when Lamarck published Research on the Organization of Living Bodies. The organismic stance suggested by Descartes and Spinoza became a dynamic history: biological evolution. As living bodies became increasingly complex, they developed ways of centralizing information, such as an increasingly complex nervous system. Pro-gressively animals enhanced their capacity to thrive. Descartes's organization of organs has become a web of dynamic procedures (Bernard, 1865, II), which explicitly coordinate metabolic activity, cells, tissues (bones and fluids are tissues), organs and global connecting physiological systems (cardiovascular, nervous, hormonal, and so on). Seventy years later, in the same Institut de France that hosted hot discussions for or against Lamarck's vision of nervous plasticity (Lamarck, 1809, III, introduction, p. 464), Janet (1889, 1923) developed a psycho-physiological model that modernized certain aspects of Lamarck's psychophysiology, and became a founding moment for the history of psychotherapy. Although he must have discussed Lamarck's psychophysiology, he does not refer to Lamarck. Lamarck had become, for ideological reasons, like Reich today, a dangerous person to quote². Nevertheless, Janet followed in the footsteps of Lamarck and Bernard by assuming that psychological dynamics are a part of the organismic regulation systems. An important innovation introduced by Lamarck is that time has become a central property of all living organizations. Even the essence of a creature may modify its organizing power.

Lamarck was mostly attacked because he presented a highly flexible web of organismic connections that could accommodate to environmental requirements. Until the 1980s, Neo-Darwinists defended a more rigid innate organization of physiological connections. Since then, the introduction of new technologies such as positron emission tomography (PET) scans

² If Janet did not dare to acknowledge that Lamarck was a fundament of the tradition that he represented, his younger colleague, Jean Piaget, had no difficulty being photographed reading one of Lamarck's most controversial books. The photograph was on the website of the Piaget Foundation in September 2015.

have helped researchers to observe that physiological connections have a certain "plasticity." This large body of research at least partially confirms Lamarck's thesis that psychological procedures seem to have emerged as a bridge between increasingly complex physiological and social dynamics, with the aim of coordinating various forms of social and organic *mutual recalibrations* of initially innate organizations. Thus, human organisms contain routines that can use increasingly complex, socially constructed, communicative devices (body signs, tools, language, computers, planes and so on). Without this adaptive potential, the incredible creativity of cultural changes that characterizes the human species would not have been possible. Psychological dynamics attain a degree of complexity that seems to govern individual thoughts and moods without the person being capable of apprehending what is really happening. Most of what is calibrated by psychological dynamics unfolds without us being able to apprehend it consciously:

"As man thrived in different regions of the globe, he increased in number, established himself in society with fellow creatures, and finally progressed and became civilized. His delights and his needs increased and became more and more diversified. He developed increasingly varied ways of relating to the society in which he lived; which, among other things, generated increasingly complex personal interests. His inclinations subdivided endlessly, generated new needs that activated themselves beyond the scope of his awareness. These grew into a huge mass of connections that control, outside of his perception, nearly every part of him" (Lamarck, 1815, *Natural History*, p. 278; translated by Michael C. Heller and Marcel Duclos. in Heller 2012, p. 162).

The Parallelism Between Automatic Nervous and Psychological Activity

In his 1992 Cerebral Unconscious³, Marcel Gauchet describes the history of a neurological unconscious that was gradually defined by 19th-century psychiatrists and neurologists. Today, this unconscious is often referred to as the nonconscious. It has only recently been explicitly differentiated from Freud's unconscious (see also Fraisse, 1992). I tend to enlarge Gauchet's model, and assume that all somatic processes participate in the formation of an organismic psychological unconscious regulated not only by nerves, but also by hormones and cardiovascular dynamics (Brown, 2001).

Gauchet shows how neurologists and psychiatrists of the 19th century attempted to redefine what was previously called the soul, within the frame set by Lamarck. Alan Berthoz (2009)⁴ coined the term "simplexity" to describe the complex set of routines that allow a mind (or a science) to forge usable relevant simplifications of what is happening. This term summarizes the spirit that animated the researchers presented by Gauchet. They noticed that *conscious* thoughts are rarely a cause of what a person does. Awareness routines can only detect and modulate certain aspects of what is activated when an organism interacts with its environment. Thus, for the English neurophysiologist Thomas Laycock, there can only exist a coincidence between breathing and mental awareness (Gauchet, 1992, p. 60). Sensory-motor circuits and psychological procedures coincide, but seldom have *direct* causal connections. The USA philosopher and psychologist William James (1890) summarized this vision by writing that "every representation of a movement awakens in some degree the actual movement which is its object. Every pulse of feeling that we have is the correlate of some neural activity that is already on its way to instigate a movement. Our sensations and thoughts are but cross-sections" (p. 1135).

³ This is one of the many interesting books I discovered thanks to Nicole Clerc.

⁴ I thank Philippe Rochat for drawing my attention to this text.

At the time, psychiatric treatments were often based on a materialistic vision of the mind. Psychiatrists prescribed showers, massages and baths, in healthy and hygienic surroundings. Psychological approaches gradually crept into these multiple forms of physical intervention (Janet, 1919). We must not forget that Wundt founded the first formal scientific laboratory for psychological research in 1879 at Leipzig, under the umbrella of Helmholtz (Frey, 2001). He was soon followed by Ribot in France and James in the USA. These early psychologists were also trained in medicine and philosophy. The development of psychological methods of cure for psycho-pathology developed in a dramatic way when Jean-Martin Charcot mobilized the resources of the Salpêtrière Hospital in Paris, to find ways of differentiating epilepsy and hysteric convulsions in a reliable way (Gauchet & Swain, 1997). At first, he thought that these two illnesses were caused by a malfunction inclusion of sensory circuits in the spine. Gradually he found that their differentiation required the inclusion cerebral mechanisms (e.g., brain le-sions that activated epileptic convulsions) in their explanatory model. Charcot and his team then discovered, through hypnosis, that in hysteria psychological routines could activate sensory-motor circuits of the same kind as those activated by epilepsy. He and his team then discovered that subconscious traumatic memories could activate nervous circuits in a variety of ways. Today, research such as the ones published by Bessel van der Kolk (2014, pp. 41f) confirm that one can observe what I call psychological brain lesions during a crisis such as a post traumatic attack: "We have proof that the effects of trauma are not necessarily different from - and can overlap with - the effects of lesions like strokes. (p. 43)" It could now be claimed that scientific clinical medical research had demonstrated the existence of a psychological dimension that could not be entirely explained by physiological and neurological laws, and which required a specific form of treatment.

Pierre Janet presented his famous thesis on psychological automatisms in 1889. He was then asked by Charcot to become a psychologist in his team. There he was asked to develop Charcot's hypothesis that hysteria was caused by a pathological splitting of conscious processes that could activate relevant or irrelevant (e.g., convulsions) sensory-motor circuits⁵. Janet found useful ways of intervening on this splitting of consciousness, based on recent psychological research, and what was then called *psychological analysis*. For Charcot and his colleagues, psychological analysis was not a school but a *scientific domain of inquiry* (Van Rillaer, 2010). This discipline sought to pool all available resources that could contribute to improve our understanding of how psychological dynamics unfold within a patient's organismic and social ecology, and to find ways of developing a psychotherapeutic approach of mental illness:

"Psychotherapy is a repertoire of all kinds of therapeutic methods, physical as well as moral, which can be applied to illnesses that can be physical as well as moral. These methods are determined by taking in consideration psychological data observed previously, and the laws that govern the development of these psychological facts and how they associate with each other, or with physiological facts. In one word, psychotherapy is an application of the science of psychology to treat illnesses." (Pierre Janet, 1923, *La médecine psychologique*, III, II, p.152, my translation).

These psychological modes of intervention were perceived as the top drawer of a chest of drawers that contained the whole repertoire of medical interventions, ranging from neurology

⁵ This model was revisited during the 1960s by neurologists who studied "split brains" with Roger Wolcott Sperry. They (Gazzaniga, 1967) studied the impact of brains without a corpus callosum on consciousness and voluntary behavior. They confirmed that one part of the consciousness could function relatively independently from another part.

(just below) to metabolic cellular dynamics (the lowest drawer). Janet's psychotherapy coordinates a variety of methods that included the analysis of nervous lesions, reeducation of sensory-motor responses (using massage, baths, medication, gymnastics, breathing exercises, and so on), ways of curing misconnections between mind and brain, a detailed recording the history of the patient, the use of hypnosis and other psychological methods designed to reeducate and strengthen a mind that uses counterproductive procedures. These treatments were administered by a clinician supported by an appropriate team of specialists (Janet, 1919).

In Paris, Charcot claimed that the capacity of being hypnotized and of creating subconscious modes of functioning was a hysterical symptom. Hypnosis then became an accepted form of medical treatment. However, in Nancy, Hippolyte Bernheim showed that the capacity to be hypnotized could be observed in many people, and that it had therefore no necessary link with psychopathology. Hypnosis disappeared from the repertoire of treatments recognized by academic medicine as quickly as it had been imposed by Charcot⁶. A similar fate awaits Freud's idea that sexual frustration is necessarily a neurotic symptom.

Leaving aside violent ideological debates opposing neo-Lamarckians and neo-Darwinians, we could say that from the point of view of the history of science, scientific evolution theory was discovered by Lamarck, and developed thanks to new formulations and findings by Darwin and Wallace, the discovery of genes and DNA, and recent developments in epigenetics. Within that frame, a French-speaking organismic psychophysiology developed through the propositions of Claude Bernard⁷, Théodule Ribot, Alfred Binet, Pierre Janet, Henri Wallon⁸ Jean Piaget⁹ and Paul Fraisse. The common ground of evolutionary psychology assumes that the mind did not suddenly emerge from the body as a coherent entity, sometimes called the soul. During thousands of years, a multitude of organic mechanisms participated in the formation of a multitude of psychological and physiological devices that created different ways of coordinating routines. These multiple forms of perception and feelings follow an immense variety of processes (Rochat, 2014). There are, therefore, a diversity of memories and forms of awareness that have particular ways of connecting with other psychological and physiological routines; there is no clear frontier that separates the somatic from the psychological, or psychophysiology from culture. As always, in biology, a few central mechanisms allow a minimum of coherence, but the details can be highly varied. This vision has been detailed ever since (Clarck, 1997; Varela, 1988; Hubel & Wiesel, 1963).

An Organismic Approach of Body Techniques

In 1934, the French anthropologist Marcel Mauss published a famous article on body techniques. It is a useful example of how organismic theory functions when it *focuses on a specific dimension of the organism*. Mauss refers to activities such as walking, running, breathing, swimming, jumping, massaging, giving childbirth, and so on. He defines these activities as "the ways in which from society to society men know how to use their body."

⁶ I have followed Janet's description of this debate (Janet, 1923, I, 2:16-21).

Claude Bernard polished the notion that fluids form the internal milieu of the organism. His model inspired Cannon (1932, p. 263) when he developed his model of Homeostasis, which in turn influenced Selye when he developed his psychophysiological model of stress.

⁸ André Bullinger's (2004) work is an example of a researcher trained in organismic experimental psychology who needed the input of psychomotor therapists to produce a detailed description of the development of psychological schemas, and of their dynamic organization (Rochat, 2016).

⁹ Janet is sometimes referred to as Piaget's mentor.

Mauss's analysis shows that even such basic actions vary in function of culture: "These actions are more or less habitual and more or less ancient in the life of the individual and the history of the society" (Mauss, 1934, 473). Every person has a particular way of walking and running that can be caricatured by a humorist. Although most of these skills have an innate basis, they also need to be calibrated and educated by experience.

Today, training an athlete requires sponsors, scientific medicine, teamwork, intelligence, motivation, relaxation, developing breathing and metabolic resources, having a sound cardiovascular system, and so on. An athlete requires all these dimensions support and enhance his physical performance. You should be motivated in a certain way, eat in a certain way, love in a certain way and move in a certain way, if you want to run at the next Olympic Games: "We are everywhere faced with physio-psycho-sociological assemblages of series of actions" (Mauss, 1934, 473).

Mauss's article on body techniques is a good example of how a particular dimension of the organism can only be properly understood if it is situated in its organismic and social ecological niche. I also take into account that each dimension has "imperialistic" demands: it requires that all the other dimensions involved function in harmony with its needs. In the long term, this is impossible because each dimension has distinct requirements and functions. The sometimes-conflicting agendas of biology and mind was already a central theme in early psychoanalysis. Thus, psychotherapists from Freud to Reich thought that when conscious processes cannot integrate sexual needs, they will, by necessity, disrupt a variety of other organismic subsystems: organs, hormones, breathing, muscle tone, memory and interpersonal regulation.

I use the adjective "organismic" to describe such an approach of a specific dimension of a person. For instance, I could say that Piaget used an organismic approach of the development of intelligence; or that Otto Fenichel developed an organismic approach of psychoanalysis.

The Field of Organismic Psychologies

I have for the moment only mentioned French speaking (French, Belgium and Swiss) organismic psychological approaches, because this is the tradition I was trained in. Other organismic theories exist. Classical examples are the more holistic visions of German speaking (Germany and Austria) such as those of Gestalt psychology (e.g., Koffka, 1935) and Kurt Goldstein (1939), Ludwig Von Bertalanffy, Heinz Werner¹⁰, and Laura Perls (1978). Reich's sources were closer to evolutionary Austrian organismic medical biology, influenced by Mendel (Reich, 1940, I) more than by Darwin. I could easily include in this list authors such as James, Cannon, Selye, Laborit, Bateson in his late years (1979), as well as many others. This point of view is so widespread today that it is represented by at least a few members of most psychotherapy schools. It is particularly welcome in forms of psychotherapy that actively combine different dimensions of the organism such as: behavior, cognition and affects (for instance the schema therapy of Young et al., 2003); somatic psychotherapy (Boadella, 1987); psycho-analysts who focus on the coordination between experience and behavior (Beebe et al., 2010; Chouvier and Roussillon, 2008; Stern, 1985); or psychiatrists who treat trauma (Van der Kolk, 2014) and stress (Selye, 1978). Most of the practical methods used by body psychotherapy schools could be revisited and reframed by organismic psychologies.

¹⁰ Werner (and Kaplan, 1963) and Von Bertalanffy (1968) created the label of organismic psychology.

To my knowledge, only Malcolm Brown (2001) and Gerda Boyesen (2001) explicitly present themselves as being influenced by Kurt Goldstein's vision of an organismic theory. Brown's affiliation to the more holistic visions of this organismic theory is manifest, as his school is registered as *Organismic Psychotherapy*. David Boadella (1991) shows his sympathy for the organismic psychology of Janet's psychological analysis when he entitles one of his articles: *Organism and Organization: The Place of Somatic Psychotherapy in Society*.

During the 1970s, Noam Chomsky orchestrated the end of general classical psychological theories such as structuralism, organismic theory, systemics and behaviorism, which reached its culmination at a debate, originally organized by Scott Atran, at the Royaumont Center for a Science of Man, near Paris (Piattelli-Palmarini, 1979). Recent developments in artificial intelligence, modular neurological models and linguistics required local models that could not fit elegantly in known general theories. For instance, the classical nature/nurture debates needed a complete reframing. The attack was remarkably efficient. It obviously said aloud what many were already thinking. The temptation to build global theories has disappeared from the landscape of academic psychology. A similar trend is developing in the field of psychotherapy, but at a slower pace. It is only since the last two decades that eclectic psychotherapeutic approaches are proliferating, but they often remain unacceptable for health institutions that are still trying to understand which psychotherapy schools and modalities they should support. What Chomsky did not predict was that his intervention fitted with the agenda of economic movements that wanted to move fundamental scientific research out of the universities, and replace it by empirical research managed by laboratories owned by multinational companies.

3. Pierre Janet (1859-1947): A First Form of Multidimensional Psychological Analysis

Stepping back from Freud to Janet as the founder of psychotherapy is a useful way of moving forward to integrate existing psychotherapeutic approaches. This step involves a series of different polarities that still frames the development of psychotherapy: academic/school specific training programs, team/individual psychotherapy, and multi- or uni-dimensional focus. I will take these issues one by one. They do not necessarily overlap.

The first theme opposes a medical model that is based on treatments developed in hospitals and in academic training programs, and treatments developed in schools that each proposes distinct therapeutic approaches. The second theme opposes treatments proposed by a team that combines different approaches and an individual psychotherapist who proposes a particular treatment. The third theme opposes treatments that focus on the coordination of several dimensions, and approaches that focus on what may be a particularly relevant modality.

An obvious spontaneous reaction to such a listing would be to assume that they should all be available, in function of the needs of the patient. This can easily be said in hindsight today, but the history of these debates shows that they are nevertheless relevant, if one accepts the underlying issues that created deep splits in the history of psychotherapy that can only now be gradually overcome. Psychotherapy emerged in a field of conflicting interests, such as marketing, ideological preoccupations, rivalry between clans (e.g., between psychiatrists, psychologists, psychotherapists and spiritual movements), and so on. There was also the simple fact that psychology is too young a science to allow an agreement on what stuff thoughts are made of. Academic psychology has supported a certain number of useful approaches of the mind, while psychotherapy schools have explored other equally useful options.

The Cognitive Ethics of Psychological Analysis and Psycho-Analysis

"Most body psychotherapists have from the start been trawling through material which will support their pre-existing experience and intuition. Probably no one has studied neuroscience in order to work out from scratch how to conduct body psychotherapy. (...) Neuroscience is such a fluid and creative field at the moment that it is not hard to 'cherrypick' research findings to support a wide range of different approaches." (Totten, 2003, *Body Psychotherapy*, p. 33)¹¹

I will begin by ethical considerations that have animated lively debates on developing psychotherapy in academia or schools. Janet spent his life in academia, while Freud needed to earn his living as a practitioner. His attempt to have an academic career had failed, but he remained a researcher at heart. It is probably the inherent logic of these two roads that created the conflicting dynamic that only became marked two decades after Janet and Freud had worked in Charcot's Salpêtrière department. I will now present Janet's point of view, and will later describe Freud's.

A way of summarizing Janet's position on scientific knowledge in modern terms is that Janet believes that scientific ethics require a sharing of all available information. This stance was highlighted when, in March 2000 "President Clinton announced that the genome sequence could not be patented, and should be made freely available to all researchers." This decision was necessary because private laboratories tend to protect their findings and skills, as they are their main source of revenue. What should become common shared knowledge according to scientific ethics is now protected private property. Janet noticed that an indepth access to the findings of psychotherapy schools such as psychoanalysis was often only accessible to those who spend time and money following an intense intimate training in that school. This remained true even if Freud, Jung and their colleagues were particularly good at publishing their main findings and observations. This privatization of discovery pro-cesses is particularly regrettable when they lead to highly useful formulations and methods.

Janet's critique of psychotherapy schools is that they a) only use scientific formulations that agree with their thinking, b) use notions and a language that other movements could only partially understand¹³, and c) reduce their capacity to learn from experience by imposing a grid to patients before a therapist has had time to understand the dynamics of the patient. These traits are, for Janet, manifestations of a poor ethics of knowledge, close to the behavior of spiritual sects. To use Jean Piaget's vocabulary, Janet wants to *accommodate* his knowledge to the individual particularities of a patient when possible, while psychotherapists such as Freud, Jung or Reich mostly perceive what their imagination can *assimilate*. For Janet and many other intellectuals, psychoanalysis was perceived as a social tsunami, which tried to destroy all those who disagreed. All he could do was to become a wall that could protect the territory gained by organismic psychology.

Cure is not, for Janet (1923, p. 9) a proof that a treatment has solid scientific bases. Successful healing methods already existed in the Egyptian antiquity. Contemporary "mind cures" he discusses are proposed are those of the Christian scientists of "Mrs. Eddy" (Janet,

¹¹ This useful summary of the present state of affairs is not only true of body psychotherapy, but of most psychotherapy schools; and it is not only true for neuroscience, but for all other relevant scientific disciplines.

¹² Quoted from the Wikipedia article on Human Genome Project, October 2015.

¹³ Dan Sperber (2010) has recently defined this strategy as a "Guru Effect." He associates this communication strategy not only to religious bibles, but also to philosophers such as Sartre and Derrida and psychiatrists such as Lacan. He targets theories that, like the horizon, do not become clearer after years of intelligent debates.

1923, p. 13), and "the psycho-analysis of M. le Dr S. Freud (de Vienne)" (Janet, 1923, p. 26). For Janet and his masters, determining what are the curing procedures included in the rituals used by healers is a subject of future research. For example, ancient Greeks already knew that the tree bark of willows had a curative effect. In the 19th century, chemists isolated the curative substance contained in the willow: salicylic acid, better known as aspirin. A scientific understanding of the impact of aspirin on physiology only began fifty years ago, when researchers like John R. Vane (Nobel Prize in 1982), discovered that aspirin inhibits the production of prostaglandins and thromboxane. Similarly, for Janet, trance activated while praying for Jesus could have important curative effects on psychophysiology in some cases, but these cures do not demonstrate that Jesus exists (Charcot, 1893; James, 1902; Janet, 1923). Janet (1913) developed this argumentation to show that it is not because schools such as psychoanalysis have cured, that their *principles* are necessarily true. Solid systematic scientific research carried out by a web of colleagues that use different methods and references¹⁴, is the only way to improve our understanding of what really activates a cure.

Janet was shocked to read that for Freud all hysterical patients had necessarily suffered from an early sexual trauma, or that all the trees of a dream were necessarily penises, or that all humans suffered from an Oedipus complex (Janet, 1923, pp. 26, 60-61; 1913). These hasty generalizations, based on a small number of patients, were then imposed on patients from the first session onwards. Rigor requires that even when one has a plausible explanation, one should look for other equally plausible explanations before choosing an option. Most of Freud's early theses confirmed some of Janet's published observations; but Janet always showed that one of his findings is only useful for a specific set of patients. Thus, Charcot published on hysterical patients that suffered from a variety of traumatic events (e.g., a car accident, a sexual trauma, etc.), but only Freudians dared to publish that all hysterical patients suffered from sexual trauma. Janet advocates a strict clinical approach, where each patient is described in detail (verbal and nonverbal expressions, neurological and physiological medical status), as exactly as possible, while leaving interpretative options as open as possible. Psychotherapists should then advance scientifically. Which is to say that a case study should test a hypothesis that is situated in a theoretical frame. This hypothesis is necessarily as economical as possible. An observation that does not also test a theoretical theory can be useful, but it then remains a purely empirical exploration.

When attacked, psychoanalysts had the reputation to answer using personal rather than scientific arguments. For example, that the personal neurotic defense system of academic psychologists prevented them from accepting a theory that could cure their neurosis¹⁵. This critic is interesting, and maybe partially true; but it only becomes constructive if it goes both ways. It does not protect psychotherapy schools from making the effort of integrating new scientific findings that may force a school to reconsider some of its initial (or even founding) formulations. The fact that a researcher or a therapist is a neurotic may influence in an unfavorable way some of his conclusions, but it does not disprove the validity of robust observations that have been confirmed by other research teams. After the 1970s, the power games of the psychoanalysts were finally contained by academic scientific ethics. Janet would probably have made similar remarks to classical body psychotherapy approaches such as those of Wilhelm Reich, Alexander Lowen, or Gerda Boyesen.

¹⁴ This is the definition of objectivity.

¹⁵ An expert of this type of slanderous critic of others was Wilhelm Reich (for example, 1952). He repeatedly claimed that a researcher who could not experience an orgasm and the pulsation of the organe energy, was necessarily involved in spreading the emotional pest.

As already mentioned, *psychological analysis* was an expression used by early psychologists to designate a domain of research. As he respected his teachers, Janet was saddened to hear that someone who had studied with Charcot could dare to use this expression as a personal flag. For Janet Freud's *Psycho-Analysis*¹⁶ was plagiary. Janet was shocked when he heard that a movement with such a name could kick out respectable colleagues such as Adler or Jung, just because they did not agree with the founding figure of the movement. It then became even clearer that psychoanalysis was more of a sect than to a field of research close to what Janet respected. Often, in such discussions, academics find it difficult to be confronted by broad theoretical positions based on specific experiences advance by practitioners who are the only ones who dare to gather information on intimacy, but who do not have a form of social support that allows them to integrate all the scientific discussions that are published in all the scientific journals. Schools teach what they are experts in, not what they do not know.

Janet might have appreciated recent observations made by scientists who provide detailed analyses of what actually happens during psychotherapy sessions (as in Frey et al., 1980 and Heller et al., 2001). Daniel Stern proposed the first 'conclusions' to this type of detailed analysis of psychotherapeutic interactions in his 1995 *Motherhood Constellation*. He shows that most therapies have an outcome that is often constructive for patients, but not in a way that can be predicted by the theories used by psychotherapists. For instance, adequate behavior therapy can modify representations that are the target of psychoanalysts, and loosen muscular tensions that are the target of body psychotherapists. Stern, like other contemporary experimental psychologists who are also psychotherapists, claims that we would need more scientific research to understand what really happens during a psychotherapeutic process and what makes them efficient.

Fifty years after Janet's death younger colleagues are grateful for the creative space he has protected. Psychotherapists are feeling increasingly free to propose entirely new directions, different from those psychoanalysts had tried to impose, as in systemic, body, cognitive and behavior therapies... and in new approaches of trauma that often found Janet's perspective at least as instructive as Freud's (Van der Hart et al., 2006; Van der Kolk and Van der Hart, 1989). This led to a revival of Janet's work, and the capacity it has to encompass in a coherent way most psychotherapeutic models and methods. Janet's proposal also facilitates closer connections between experimental psychology and psychotherapy (Van der Kolk et al., 2001).

The Hypnotic Splitting of Conscious Dynamics

For Janet, psychology is a science, and psychotherapy a way of applying this science. However, even this top psychological drawer of the organism contains layers of procedures that are relatively distinct from each other. Thus, sentiments have some conscious constituents, but these are relatively simple (Gergely & Unoka, 2008). Routines that are often considered more complex, such as intelligence and explicit perceptions, can only produce partial accounts of a sentiment (Janet, 1927, p.17f). In a filmed interview, Piaget (1977, first minutes of the film) makes a similar distinction when he explains that conscious movements follow a process that conscious rationality cannot really apprehend. One can have a correct movement (it handles an object in an appropriate way), and have a wrong theory of why and how one does this movement. The same can be said of behaviors activated by a subconscious hypnotic

¹⁶ Janet's (1913) spelling.

injunction. The more rational dimensions of thought are quasi-blind to the interfaces that connect conceptual thinking to somatic dynamics (Fogel, 2009: p.55f; Janet, 1927, p. 18). Janet and body psychotherapists share a common interest for these nonconscious *connections* between mind, affect, soma and behavior. In all these cases, being aware of even a simplified version of what is happening is experienced as highly complex, hence the relevance of notions such as *simplexity* (Berthoz, 2009). One of the chore issues of such a vision is that consciousness does not even know why it focuses on a certain issue in a certain way at a given moment.

The layers of consciousness also include phenomena such as the splitting of explicit consciousness that generate the subconscious that Charcot and his team often observed during distinct psychological states such as hypnosis, in somnambulism and in hysteria. A psychological state is characterized by a distinct coordination of particular cognitive, affective and somatic dynamics: when hypnotized, I can remember events and their associated emotions which I cannot recall once I have woken out of this state. This is an example of subconscious modes of functioning: some modes of cognitive and affective functioning are only available when one is in a particular psychological state. A more refined differentiation of psychological states can be observed when body psychotherapists ask a patient to begin with a tonic grounding exercise, and then lie down on a mattress. The physiology is different (e.g., the vegetative system passed from its sympathetic state to its parasympathetic state), the affective tone is different (e.g., passing from a tonic state to relaxation), and the representations that merge can also follow different tracks (different body sensations, affects, inner images, memories and thoughts). As humans are all different, the blending that occurs in each psychological state always has particular flavors. In the case of pathological states such as somnambulism and hysteric or epileptic convulsions one notices that patients may not even remember that they have entered such states, and that they cannot control how they entered in these states. There is then total dissociation. Even when they have at least some memory that the crisis occurred, they cannot prevent the sudden automatic activation of these states. Today these distinctions have been used to analyze Post-Traumatic Stress (Van der Hart and Van der Kolk, 1989). I also find them useful in the treatment of bulimia. In Janet's language, this splitting of consciousness can weaken moral judgment. For Janet, moral judgment is a psychological power that allows a person to go beyond his automatic reactions by connecting them to conscious dynamics that support rationality and will power (Janet, 1889, p. 475)¹⁷.

Janet's formulations sometimes parallel Alexander Lowen's (1975), such as when he states that mind and body are two sides of the same coin. However, Janet talks of a more differentiated coordination of subsystems, as he would not go as far as to state that a gesture and a sentiment necessarily have the same function. They are often complementary. Intelligence, sentiments, physiology and gestures may participate in different ways in a common state, process and/or behavior (Janet, 1889, p. 481). It is because of these formulations that an increasing number of contemporary body psychotherapists, starting with David Boadella (1997), refer to Janet as one of the founding fathers of body psychotherapy.

Although they use another language, this argumentation can be found in most humanistic psychotherapies. The utility of strengthening moral resources is particularly manifest when working with addiction, which often activates somatic and psychological dissociation (Caldwell, 2001; Glasser, 1965).

4. The Psychoanalysis of Sigmund Freud (1856-1939): Exploring the Stuff Dreams are Made of

Janet's critique of psychotherapy schools remains true today. The cognitive ethics and methodology used by psychotherapy schools remain poor. In Charcot's days, all available methods could be used to explore all aspects of the psyche, as long as they were supported by solid scientific clinical methods. Janet was probably sad to observe that the psy¹⁸ world was gradually creating the sort of splitting of consciousness that Charcot and his team had observed on hysteric patients. Scientific psychology focused on those parts of psychological dynamics that could be explored with highly standardized experimental methods, while psychotherapists found ways of using their own experience and empirical tools to contact the experience of their patients. Everything happened as if academics only scrutinized regions where they could visit with their jeeps, while psychotherapists explored other regions that could only be visited by horse and camel or on foot. The use of Charcot's clinical science to explore the psy dimension was slowly dying.

Janet's dissatisfaction with Freud's cognitive ethics were expressed once this scientific splitting of the psy domain became manifest. Freud influenced the cultural development of the whole planet; while Janet became an ambassador of organismic psychology, read with respect by colleagues. The Viennese philosopher Wittgenstein was also irritated by how psychoanalysts argued, and by some of their psychological models. Nevertheless, he admired Freud who wrote the Analysis of Dreams because "he was someone who had something to say" (Wittgenstein, 2007, p. 41), which for Wittgenstein is a supreme compliment. Although Wittgenstein disagreed with most of Freud's theory, he nevertheless thought that he was one of the few authors alive worth reading (Bouveresse, 1995, chapter I). Rejecting all the formulations of an intellectual movement just because some of them are highly arguable is not, for me, a constructive way of creating a dialogue between psychological schools and modalities (Bourdieu, 1988).

In the following sections, I will highlight some of Freud's proposals that are particularly relevant to the subject of this article.

Using an Expressive Verbal Method for an In-Depth Exploration of the Psyche

After having finished a thesis in neurology on the chemical dynamics of the brain, Freud began his clinical career by working in the private practice of Josef Breuer. Breuer was using a *Taking Cure* and hypnosis to treat female hysterical patients. It is to enrich this collaboration that, in 1885 and 1886, Freud managed to spend a semester in Charcot's Salpêtrière. Together they developed a *Cathartic Method* and published the famous "Studies on Hysteria" in 1895. The method followed the fashionable trend defended by Charcot's psychological analysis, which takes into account all the dimensions of the organism that are connected to a psychological issue. Freud combined hypnosis and related relaxation methods, sent patients to physiotherapists when required, touched the forehead to enhance a hypnotic trance (the pressure technique), and integrated Breuer's talking cure. He carefully recorded all aspects of the patient's behavior, and explored in detail the patient's history, thoughts and impressions. He became familiar with the cathartic episodes that were inevitably activated from time to time when one combines organismic dimensions in a psychotherapeutic process.

¹⁸ I use this term to designate the field that is common to psychology, psychiatry and psychotherapy, and the domain explored by these three professions.

However, Freud was not entirely satisfied. His work generated helpful information and clear improvements, but not necessarily cures. Clearly, a practitioner in a private practice could not coordinate all the information that was already difficult to manage for a psychiatric team. Furthermore, even after the publication of the book on hysteria, Freud did not have enough patients to finance the lifestyle required for his marriage. He let Breuer - as well as others - sponsor him, while he tried to reduce all the methods he was handling to a few essential techniques. For Freud, Janet was creating an *institutional* form of psychotherapy. He needed to find a method that could be used in a *private practice*. This implied aiming at the essence of psychotherapy: focusing on psychological tools to heel the psyche (Freud, 1890). This process took him five years at least. It led to the 1900 famous book on the *Analysis of Dreams* that became an immediate best-seller.

Given that hypnosis did not keep all its therapeutic promises, Freud focused his attention on Breuer's home-made technique: the *Talking Cure*. He explored various ways of using it, and gradually focused on the automatic verbal free association method developed by hypnotists. His way of using the technique introduced a central method of future psychotherapy: co-exploring forms of behavior that express different layers of what is experienced. The patient transforms implicit impressions in explicit expressed formulations, while the therapist can experience the impact of what is expressed, and fit it in the memory of a listener with professional experience. By coordinating their experiences of the same behavior, psychotherapist and patient co-constructed an emerging analysis that could not have become apparent if this information had not been combined¹⁹. Free association is sensitive to the more or less conscious inner atmospheres that generate various forms of impressions. Having at last found a way of using his creative powers, Freud managed to reduce the Talking Cure to an incredibly rich sauce that allowed him and his patients to taste together "such stuff as dreams are made on" (Shakespeare, 1623, *The Tempest*, Act 4, scene 1, 148–158).

The material provided by this method is so rich that it took decades for an increasing number of psychoanalysts to discover some of its most obvious implications. Afterwards, similar forms of free associations were explored, using other modalities such as gestures and drawing. As psychoanalysts had enough work exploiting verbal free association, associating with nonverbal modalities was explored in other psychotherapeutic schools after the Second World War, such as Gestalt and body psychotherapy, which were at first quite close (Kogan, 1980).

Proposing the Psyche as a Well-Differentiated Focus for Psychotherapeutic Methods

"There are also psychic truths that can neither be explained nor proved, nor contested in any physical way. If, for instance, a general belief existed that the river Rhine had at one time flowed backwards from its mouth to its source, then this belief would in itself be fact even though such an assertion, physically understood, would be deemed utterly incredible" (Jung, 1958, *Answer to Job*, p. 553)²⁰.

Freud and Jung were probably the most compelling advocates of the idea that there exists such an entity as the psyche, and that its mode of functioning could not be reduced to that of physiology. They managed to convince an increasing number of psychiatrists that pathological psychological dynamics could only be cured through psychological means. Interventions on other dimensions of the organism were not excluded, but they were only

To be fair, co-construction was mostly a preoccupation of some of Freud's pupils who, like Sandor Ferenczi, liked to explore transferential dynamics (transfer and counter-transfer) (Haynal, 1987; Heller, 1987).

useful as contingent support. Nevertheless, the movement that was set by Wundt and James on the one hand, and Freud and Jung on the other, remained within the frame of organismic psychology. At the end of his life, Freud summarized his position in the following way:

"We know two kinds of things about what we call our psyche (or mental life): firstly, its bodily organ and scene of action, the brain (or nervous system) and, on the other hand, our acts of consciousness, which are immediate data and cannot be further explained by any sort of description. Everything that lies between is unknown to us, and the data do not include any direct relation between these two terminal points of our knowledge" (Freud, 1938, An Outline of Psycho-Analysis, I.i, p. 144).

Complexities for Individual Psychotherapy

As described above, psychoanalytic sessions yielded more information than could be dealt with during a private dyadic psychotherapeutic interaction. Further reduction of the material produced by patients and the experiences of the therapist was therefore still necessary (Braatøy, 1954, p. 110f). This led Freud to propose the following technical procedures:

- 1. A standardized postural frame. The patient is asked to lie on a couch and to avoid looking at the therapist as much as possible. The therapist sits behind the patient and refrains from interacting with patients as much as possible, even when he proposes an interpretation. Lying on a couch without interacting with others is as close as you can get to induce a quasi-hypnotic relaxation that can support the need to associate verbally as freely as possible while focusing on what is being experienced within the space occupied by the patient's organism (Braatøy, 1954, p. 335)²¹. Being protected from the patient's gaze also helps the therapist to remain in a state of floating attention, and reduces nonverbal solicitations to its essential component: the management of the atmosphere in a well-known room. It also frees the therapist from having to worry about all the bizarre automatic mimics and self-regulatory gestures that may spontaneously occur when he focuses on his inner impressions (Braatøy, 1954, p. 40).
- 2. A simple (simplistic) system of interpretation. Descartes recommends that when one begins an enquiry one should start with the simplest possible hypothesis, and only gradually use more complex ones when the simpler ones can be reliably rejected (Descartes, 1628, rule II). Freud's focus on the pleasure principle is a reasonable way to begin a verbal psychotherapeutic approach. Zeroing in on sexual issues was maybe courageous given the morality of these times, but a reasonable choice if one wants to gather as quickly as possible information on the intimate experience of a person. Furthermore, the domain could easily be reduced to the simplistic metaphors used for jokes. Understood by all, they can easily trigger complex associative chains.

These two frames were used as a way of strengthening a person's psychological resilience, by becoming able to relax, to face not only truths but also options on the sort of desire one could have. This educative stance is finally not so far from Janet's position that strengthening one's inner moral stance is a key feature of psychotherapy.

Epidemiological Psychiatry

One of the reasons why Freud and Reich became so famous was their way of showing that psychological malfunctioning was linked to socio-political issues that required an in depth

²¹ Trygve Braatøy's introduction to psychoanalysis contains other useful remarks on the use of the couch.

reformulation of cultural ways of dealing with emotions, sexuality and representations. For them only a part of a person's psychological dysfunction could be solved in a psychotherapeutic treatment²². The psychotherapist has the duty to inform social institutions and Medias of how cultural dynamics can destroy a person's organismic regulation system, and on how they could become constructive and supportive. Regrettably, this ethical stance has nearly completely disappeared from the duties today's psychotherapist imposes on himself.

A New Nonacademic Liberal Profession: Psychoanalysis and Psychotherapy

Finally, Freud threw a bomb in the market of liberal professions, as becoming a psychoanalyst required a form of training that could only be acquired outside of university, by practicing the method on oneself and others on a regular basis. Yet psychoanalysts asked for a form of respect and payment that is equivalent to that of academically trained liberal professions. The issue was not only that relevant practical work could not be practiced in a university, but also that a psychotherapy school should be able to control the formulations of those who use that practical work. Freud created the first school of psychotherapy and the pattern that schools should respect the formulations of their founder or be expelled. This is the standard procedure in most private scientific laboratories today. Given the high status and academic training of those who were expelled from psychoanalysis (medical doctors such as Adler, Jung, Reich and Lacan), the argument that Freud wanted to protect the professional standards of psychotherapy is not relevant.

The complexity of having introduced psychotherapeutic schools, initiated by Freud, probably requires more transparent ethics in the management of self-produced knowledge, and its association with the knowledge produced by other schools and academia. I will return to this complicated issue at the end of this article.

5. The Behaviorist Therapy of John Broadus Watson (1878–1958): an Educational Mode of Psychotherapy

In the 1920s, influenced by John Watson, USA psychologists created a radical pragmatic movement called Behaviorism. This led to a form of psychotherapy based on the education of reflex behavior. One of the features of this approach was complete coherence between academic psychology and its therapeutic application on patients. These early Behaviorists did not analyze what behavior expresses, or the specific behavioral signs that can influence others. For that, we have to wait for the advent of nonverbal communication studies and systems theory (Bateson & Mead, 1947). The main goal of behavior therapy seems to have been *educational*. If a person had inappropriate automatic behavior, the therapist would try to *recondition* those mechanisms that regulate behavior in a more appropriate way (Watson & Rayner, 1920)²³. This aim was close to Janet's notion of automatic behavior and thinking, and Pavlov's notion of conditioned reflexes (Pavlov, 1904). However, in a radical move, Watson and his colleagues threw away all forms of hypothesis testing on unobservable phenomena as unreliable. Thoughts are an example of an unobservable phenomenon, while behavior can be recorded and reliably observed by trained colleagues.

²² It is in this context that psychoanalysts developed an analysis of how unconscious resistances could influence intellectual creativity. Regrettably, as already mentioned, this tool was often used for proselytism rather than to increase our understanding.

²³ A film on how Watson and his team worked with a child (little Albert) can be found on the net (http://www.simplypsychology.org/classical-conditioning.html, viewed in November 2015.

The mechanisms that organize verbal and nonverbal behaviors are unknown. They form a black box that cannot be studied by the scientific methods that existed at the time.

Behaviorism was severely attacked by European psychologists and philosophers (Koestler, 1968), but it won at least one battle: the use of introspection was banned from experimental psychology during the rest of the century. Psychotherapies influenced by psychoanalysis were the only stronghold that continued to use this option to explore the intricacies of the realm of impressions. Some introspection was also used in Piaget's "clinical" experimental method (Mayer, 2005).

We have seen how Freud initiated a form of psychotherapy based on verbal expressive behavior. Behaviorist psychotherapists inspired by Watson explored the possibility of using what I call levers: modifying behavior in a specific manner was a way of provoking reactions in the unknown complex territories of the organism, and then observing what behavioral changes became implemented. If these results were not satisfactory, the therapist would use a slightly different educative procedure and see how that influenced the targeted behavior.

This lever model was then used in other forms of psychotherapy. To help patients who suffered from a form of mental defect, psychotherapists looked for manageable ways of influencing what cannot be really grasped, with the hope that their intervention could (a) repair maladjusted routines of the mind, (b) repair unreliable connections between thoughts and its organismic and social environment, and (c) improve our understanding of how these mechanisms function. In other words, they looked for levers that could influence psychological dynamics, and then observe how their use can promote a constructive reshuffling of nonconscious organismic regulators. In the realm of Reichian and neo-Reichian therapists, cathartic discharges are sometimes also used as a form of lever.

6. Combining Methods and Frames: from Ferenczi to Groddeck and Fenichel

Expressive and Educational Lever Therapeutic Strategies

We have, up to now, explored two unimodal strategies based on the notion that no scientist can provide a usable model of how the mind functions and how it inserts itself in its immediate environment:

- 1. Free association in one modality (e.g., psychoanalysis).
- 2. Training corrective procedures (e.g., behaviorism).

The advantage of using a one-lever device approach, is that a practitioner can develop detailed techniques that can easily be taught and shared with other colleagues. This type of approach is also relatively easy to integrate in empirical and scientific research programs.

Introducing Active Techniques that Encourage the Free Association of Expressions

With the First World War, military institutions invested in the development of new psychotherapeutic tools designed to help traumatized soldiers. Famous medical figures such as Cannon and Goldstein, as well as psychoanalysts, were asked to provide helpful active techniques for trauma²⁴. Ernst Simmel developed educational tools framed by psychoanalytic theory, which mixed spontaneous expressions such as dreams and advice. To develop these short cuts, psychoanalysts were able to create a compromise between classical psychoanalysis and more polyvalent forms of intervention.

²⁴ Although Janet has had a strong influence on trauma therapists since the Second World War, I have not seen his name mentioned for trauma work during the two World Wars.

In the early 1920s, Sándor Ferenczi (1920) attempted to synthesize the implications of these changes of technique, by proposing a new *Psychoanalytic Active Technique*, which even integrated certain aspects of behavioral therapy (Ferenczi, 1921). This technique encouraged Ferenczi to find ways of asking patients to explore how certain behaviors could be used as a source for free association exploration, just as dreams were used as bases for such an exploration. He then used transferential dynamics to explore the impact of new ways of doing and perceiving things. For instance, in one case, he asked a female patient to explore why she always crossed her legs on the couch. In another case, he asked a patient to explore different ways of singing a song she dreamed of. Ferenczi and these patients thus became conscious of a whole series of defenses that inhibited their capacity to lead a pleasant life. Ferenczi thinks that this content would probably have never appeared if he had followed a classical psychoanalytical approach. Ferenczi also noticed that as soon as he mixed modes of intervention, cathartic reactions became more frequent. This active approach created a major shift outside of the psychodynamic realm, creating a space for a wide range of new approaches, such as systemic, gestalt, humanistic and body psychotherapy.

At first Freud claimed that symptoms "had to disappear once its unconscious meaning had been brought into consciousness" (Reich, 1940, p. 21). However, a multidimensional approach became necessary when psychoanalysts discovered that the state of patients who could finally remember a traumatic event did not necessarily improve. Ferenczi's active technique and Reich's Character Analysis introduced the requirement that patients should not only remember a past trauma cognitively, but also re-experience its traumatic emotional impact.

The Return of Body and Somatic Phenomena in Psychology and Psychotherapy

The integration of behavior and body techniques in a psychodynamic approach was officially opened once Freud declared that, "the Ego is, first and foremost, a bodily ego" (Freud, 1923, II, p. 26). This fit well with the general spirit of European psychology at the time. To integrate what they believe to be the more interesting proposals of behaviorism in a model close to organismic psychology, researchers such as Henri Wallon (1934, 1926)²⁵ and Jean Piaget (1936) were embodying (to use a more recent term) their analysis of the development of psychological dynamics. Ulf Geuter and his colleagues (2010) remind us that, in 1931, the sixth congress of the "Common Medical Society for Psychotherapy" met in the German town of Dresden. Its general topic was "treating the soul from the body."

In Berlin, during the late 1920s, the psychoanalyst Otto Fenichel became involved with the gymnast Elsa Gindler, who explored movement and breathing from the outside and the inside. With his wife Clare, he (Fenichel, 1928) organized presentations at the psychoanalytic institute on the way to integrate certain aspects of Gindler's work into psychodynamic theory (Geuter et al., 2010; Reichmayr, 2015). This opened discussion on how to integrate the body and soma in psychoanalysis. When they emigrated to the USA, Franz Alexander and Alexandre Radó continued to explore this theme, and created a psychoanalytical psychosomatic medicine.

Although we only have indirect evidence, it would seem that Fenichel and Gindler observed that the spirit required to explore body movements and the spirit required to analyze dreams

²⁵ Henri Wallon's vision is also that of a sensory-motor development of affects and intelligence that forms character. He became communist during the Second World War. His use of dialectics made him develop considerations that are not so far from the communist Reich.

through free verbal associations is different: these approaches require different theories, a different way of relating to pupils and patients, and a different inner attitude. Fenichel and Gindler seemed to agree that it is impossible to combine high quality bodywork and psychoanalysis directly. They would have recommended that the patient receive help from a team: an expert in bodywork and a trained psychoanalyst. This direction, in line with Janet's proposal, led to the creation of psychotherapy teams in institutions. Examples of such group work are: Esalen Institute in California, founded by Fritz Perls and his colleagues; the Boston Trauma Center, created by Bessel van der Kolk and his colleagues; and the psychosomatic department of Le Noirmont clinic in Switzerland, created by Duc Lê Quang and his team.

It is in this intellectual atmosphere that Wilhelm Reich arrived in Berlin and joined those who explored ways of introducing bodywork in a multidimensional private practice. Inspired by Groddeck's (1931) use of deep massage in psychotherapy, he investigated different ways of combining psychoanalysis and bodywork. He rediscovered that combining modalities can activate cathartic experiences. It can thus be said that the Wilhelm Reich of the early 1930s was one of the first body psychotherapists.

Antidepressant Medication and Psychotherapy

Another type of lever that is often used to heal psychological sufferance is medication. Although prescribing drugs is not recognized as a form of psychotherapy, I have observed that integrating the use of medication in a psychotherapy process can be extremely useful. Being a body psychotherapist, integrating somatic and psychological dynamics in an explicit way is a part of my work. When an antidepressant is experienced as helpful, I ask the patient to describe, as precisely as possible, in what way; and then explore with him how we could find a useful similar impact without medication. Typically, some patients report an experience of having more inner space. The patient does not know how these changes came about, but he has an explicit experience of an inner capacity he appreciates. I may then show that a similar inner space can be found through breathing exercises, dream analysis, clarifying issues, orgasm, and so on. In body psychotherapy, we often have patients who report feeling whole again and more inner space after an exercise. The difficulty, of course, is helping patients to acquire this capacity in a lasting way, be it through classical psychotherapy and/ or body-mind exercises. I also noticed that under medication some patients, but not all, can integrate inter-psychic conflicts they were incapable of handling before.

I have chosen the easy example of a patient who takes an efficient antidepressant medication, but there are, of course, cases that are more complex.

7. The Explosive Potential of Connecting Devices in the Organism

In the previous sections, I included body psychotherapy in the list of psychotherapies that use one or several levers to explore psychological dynamics that are integrated in the regulation system of an organism. It was inevitable that some psychotherapists would ask themselves how they could directly influence the mechanisms that *connect* the psychological and somatic dynamics within an organism. As science gradually improves its understanding of psychology and of how organisms function, therapists began to give more substance to this notion.

The theory of how specific organismic procedures can interact is still work in progress, in psychophysiology and in computer engineering. It requires an analysis of a web of *connecting devices* that function as *interfaces* between mechanisms that follow highly variable procedures.

Let us consider two types of interfaces:

- 1. Interfaces between different types of procedures in a computer program or in the mind (Piaget, 1975).
 - 2. Interfaces between different dimensions of a machine or of the organism.

That one needs interfaces between mental routines shows how varied they are, not only in their aims and requirements, but also at a procedural level. For instance, explicit conscious reasoning follows a different type of routine than intuition and automatic reasoning; or short and long-term memory use different types of logistics, in a personal computer as well as in the brain and in the mind. These issues are relevant for psychotherapists who work with attention deficit and/or high potential patients. It is remarkable how these cognitive issues can have a deep impact on affective dynamics and self-esteem (Tuckman, 2009). Yet these issues are regrettably often forgotten by psychodynamic, humanistic, systemic and body psychotherapists. A high variability of genetic, neurological, experiential and cognitive procedures has, for instance, been well documented in research on specific clinical groups such as autism spectrum disorders (Schaer et al., 2014).

Then we have interfaces that connect different dimensions. In the computer world, connecting devices convert analog signals into digital information, or electrical computation into images on a screen. In a joint presentation at the 2014 Lisbon EABP Congress with Rubens Kignel, we gave the following examples to show that the influence of the mind on muscles is not of the same type as the influence of muscles on the mind:

- 1. An exercise taken from Edmund Jacobson's (1938) Progressive Relaxation showed how muscular relaxation can induce psychological relaxation.
- 2. An exercise taken from Johannes Heinrich Schultz's (1932) Autogenic Training showed how mental relaxation can induce muscular relaxation.

Having experienced these two methods, the participants could easily perceive that they were a) often efficient, and b) so different that they require a different inner atmosphere and different forms of involvement.

I call *organismic* therapies approaches that focus mainly on these connecting devices. Psychological dynamics are only one of the important subsystems to be considered. One of the interesting clinical findings of this type of approach is that they confirmed the relevance of Descartes's hypothesis that emotions and instincts are grounded in these coordinating organismic devices. Organismic therapies have had a strong influence on body and somatic psychotherapies, but they are different from body psychotherapies because it is the organism taken as a global entity that is their core preoccupation, not the psyche. The distinction may appear to be, at first, a nuance; but I will try to show that organismic therapies are a separate fascinating field. Well-known examples are Reich's Vegetotherapy, and the approaches developed by Cannon and Selye to tackle unsolved issues related to war trauma during the Second World War.

Wilhelm Reich (1897–1957) and Vegetotherapy

When, in 1934, Wilhelm Reich was expelled from the International Psychoanalytical Association (API), Reich turned his back on all forms of psychotherapy. In Oslo, he created a new form of therapy that focuses on how the global organism regulates itself and how it coordinates its connecting devices. For instance, the common trait of epileptic and hysteric convulsions, for Charcot, was that both activated the same sort of dysfunctioning connecting devices that spread from the mind and the neocortex to the spinal sensory-motor reflexes.

Reich was inspired by German-speaking physiologists who were exploring new paths that went in the same direction as Cannon's. They mostly focused on what is connected by the vegetative²⁶ nervous and hormonal sympathetic and parasympathetic systems. This new organismic orientation was based on Reich's previous work on the orgasm reflex. Orgasm is perceived by Reich as a loose innate reflex that automatically coordinates physiology, ways of breathing and moving, affective mobilization, behavioral virtuosity, cognitive patterns, relational strategies and cultural symbols. He assumed that if such a mechanism exists in the realm of sexuality, a similar mode of functioning could also be found for all the drives that were the center of attention of psychoanalysts in the 1930s. For Reich, people like Fenichel and Gindler, when they analyzed representations and gestures, only observed the smoke produced by the fire he wanted to work with. Thoughts and movement are but the foam on top of waves that are activated by deep organic currents and the impact of social winds.

Once again Reich is confronted by powerful emotional discharges that mobilized the whole organism in an important way. His predecessors had been uncomfortable with these cathartic organismic mobilizations. Reich decided to explore them head on, to understand why catharsis inevitably emerges when you work on the deeper connections between thoughts, body, behavior and physiology. He found ways of giving them the space they needed, and ways of setting aside the fears that prevented patient and therapist from exploring how these trance states could reshape how an organism regulates itself.

Walter Bradford Cannon (1871–1945) and János Selye (1907–1982): Synthetic Forms of Organismic Therapy

Reich developed his orgone work in Maine (USA). He was close to Harvard, where Cannon had developed his homeostatic model, and his analysis of the fight and flight responses that were activated by stress (Cannon 1931, 1932). Not far from there, in Montréal (Canada), a decade later, Hans Selye (1978) developed his model on stress reactions to treat soldiers traumatized by the Second World War. He assumed that stress activates a psychophysiological circuit that coordinates cognition, affects, neurological reactions, hormonal activators situated in a variety of organs, cardiovascular responses, and the immune system. In this model, Selye shows that stress is produced by organismic regulators that malfunction and produce a negative vicious circle. He describes chronic stress as a form of pathological organismic organization that insert themselves in long-term procedural memory. These organismic therapies strengthen the impression that one cannot just change organismic connective devices in a mechanical way, as when you change a memory slot in a computer.

Later, but still in this corner of America, Bessel van der Kolk (2014), closer to Janet's formulations, refined and combined all these approaches after the Vietnam war. Stress and trauma therapists need to work with the assumption that to transform this vicious circle one must simultaneously work at the metabolic level (with medication and breathing exercises for example), and initiate appropriate affective, cognitive and behavioral changes. Once a stress circuit has implanted itself in an organism, it recalibrates organismic regulation systems in such a way that it becomes difficult to extract this circuit without reinforcing its implantation.

²⁶ English-speaking physiologists tend to use the term autonomous nervous system.

Conclusion

This article has two principal aims:

- 1. Participating in current attempts to find a general theory of psychotherapy that can provide basic common models and vocabulary, while protecting the creativity of the field.²⁷
- 2. Trying to situate body psychotherapy in the field of psychotherapy and to find frames and metaphors that can help each modality to learn from each other.

To achieve this aim, I have tried to situate psychotherapy within the more general scientific psychological theories and have suggested that a good place to start is to look for links that exist between psychotherapy schools that implicitly or explicitly use scientific evolutionary organismic psychological theories as a main reference. I have then tried to show that psychotherapies that use this organismic frame seem to explore certain aspects of organismic theory more than others. For example, body psychotherapy is particularly good at including what I call organismic connecting devices in a psychotherapeutic process. If one wishes to combine body psychotherapy and behavior therapy, one can begin by spotting a particular schema, as defined in cognitive and behavior therapy (Young et al., 2003), and then find ways of modifying how it inserts itself in more global organismic regulators, as one would do in body psychotherapy²⁸. The flexibility required to approach a person from different points of view requires a capacity to combine not only methods but also relevant frames (e.g., ways of thinking) that allow one to combine techniques in an appropriate way.

Using scientific psychology as a reference requires certain choices that not all psychotherapy schools are willing to make. For the moment, psychology cannot integrate what some psychotherapies refer to when they describe how energy circulates in the organism and how it is perceived. That does not mean that the observed phenomena do not exist or are irrelevant. Like faith or the bark of the willow tree, these models may have a curative impact that science cannot yet unravel (Totten, pp. 63–68). I do not claim that referring to Janet, and more generally to relevant scientific psychology movements, can structure all the issues that constitute the field of psychotherapy; but I am assuming that an important step towards a constructive clarification can be obtained in this way.

Many such examples could be used to show that by combining approaches one could refine existing psycho-therapeutic tools. The main difficulty of my proposal is that most founders of psychotherapy schools are not psychologists. By ignorance, or because they perceive psychologists as rivals in the case of medical doctors such as psychiatrists, or both, they assume that psychology has nothing to teach them²⁹. I hope I have convincingly shown that these clan reflexes should be overcome. This would nevertheless raise training issues, as it implies that some psychotherapists at least should train in psychology. This is, of course, already the case, but these psychologists often feel the need to forget what they have learned at the university, and adhere to what is taught in their psychotherapy school. When this happens, it confirms Janet's hunch that psychotherapy schools may have modes of functioning

In 1931, Saul Rosenzweig had already written an article on the need to unify the theoretical positions of psychotherapy schools, using a mode of thinking close to Janet's position. However, these psychologists were looking for a unique federative theory that did not leave much room for variety. For them variety can only be produced by contradiction.

²⁸ See Caldwell (2001), and my chapter on George Downing's approach (Heller, 2012, chapter 22).

²⁹ Fritz and Laura Perls are an example of psychotherapists creatively inspired by organismic experimental psychology into account.

that are close to those of sects. A more constructive process would be to reframe what a school has discovered with the help of psychologists. This would not only be a cognitive revolution, but an in-depth modification of the existing power games that characterize psychotherapy schools. Such a move could lead to a more transparent and creative ethics of knowledge and clearer epistemological stances; and this could create and intellectual space large enough to integrate several approaches.

In its present form, psychotherapists have been remarkably creative, developing methods and models that no experimental psychologists could even have imagined. I prefer to defend a coordination of strategies rather than a unique strategy. Human complexity deserves a coordination of points of view. Therapists who have not studied psychology and medicine tend to construct and imagine strategies from immediate experience up to broader theories, which are often based on personal (ideological, philosophical, spiritual, personal) interests more than on facts. However, their intuition has often found implicit connections between theory and observations that have helped them to develop highly innovative insights. These are still of interest when one wishes to specialize on specific issues, or when one wants to follow a form of training that begins with concrete issues, and then move upwards to form a more general knowledge base. In their laboratories, experimental psychologists tend to proceed from theory to the highly simplified data they can analyze with their methods. They can thus never grasp the human complexities that therapists need to manage every day. In between, we have the empirical procedures of clinical psychology, based on tests and statistics, which also bring interesting perspectives. When clinical psychologists attempt to validate a psychotherapeutic approach, their results can be more ideological than scientific, but they may nevertheless highlight interesting phenomena that were not perceived by their experimental and therapeutic colleagues. I have also mentioned innovative scientific studies that are trying to understand what really happens during a psychotherapy session. Finally, I can include in this list attempts to influence moods through medication, and to analyze the impact of their expression through video analysis of nonverbal behavior. It is this variety of sources that needs to be coordinated to form a valid umbrella theory of psychotherapeutic interventions. Such a project does not have, for the moment, adequate institutional support; however, it is becoming an increasingly important activity in the European Association of Body Psychotherapy (e.g., in its scientific committee).

Since 30 years, several philosophical and psychological movements talk of an "embodied mind" (e.g., Rowland, 2006; Marlock and Weiss, 2001; Brunner, 1990; Varela, 1991). Some of these movements inspire body psychotherapists, but I am not sure that all these authors are in sympathy with body psychotherapy as it presented itself in the 1980s. The term "embodiment" is a new way of exploiting the general notion that consciousness is experienced in the organic dynamic space created by human or animal organisms, and robots (Oliver, 2009, p. 209; Ziemke and Sharkey, 2001; Varela 1988). I have the impression that if body psychotherapists want to be clearly situated in the realm of psychotherapeutic approaches, they should accept that the body that characterizes our modality is an integrated inclusion of what Mauss calls body techniques in the toolbox of a psychotherapist. We propose a particular vision of embodiment, a particular way of dealing with embodiment. This is what still needs to be specified.

REFERENCES

- An * denotes when the article can be found on the internet.
- Bateson, G. (1979). Mind and nature. A necessary unity. Toronto: Bantam Books, 1988.
- Bateson, G., & Mead, M. (1947). *Balinese character. A photographic analysis*. New York: Special publication of the New York Academy of Sciences.
- Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., et al. (2010). The origins of 12-month attach-ment: A microanalysis of 4-month mother-infant interaction. *Attachment & Human Development, 12,* 1:3–141.
- Bernard, C. (1865). An Introduction to the Study of Experimental Medicine. Dover Books, 1965.
- Berthoz, A. (2009). La simplexité. Paris: Odile Jacob.
- Boadella, D. (1987). Lifestreams: An introduction to biosynthesis. London: Routledge.
- Boadella, D. (1991). Organism and organization: The place of somatic psychotherapy in society. *Energy and Character*, 22: 1–58.
- Boadella, D. (1997). Awakening sensibility, recovering motility. Psycho-physical synthesis at the foundations of body-psychotherapy: the 100-year legacy of Pierre Janet (1859–1947). *International Journal of Psychothe-rapy*, 2, 1: 45–56.
- Bourdieu, P. (1988). L'ontologie politique de Martin Heidegger. Paris: Editions de Minuit. Bouveresse, J. (1995). Wittgenstein Reads Freud: The Myth of the Unconscious. Princeton: Princeton University press.
- Boyesen, G. (2001). Body psychotherapy is a psychotherapy. In M. Heller (Ed.), *The flesh of the soul: the body we work with:* 33–44. Bern: Peter Lang.
- Braatøy, T.F. (1954). Fundamentals of psychoanalytic technique. New York: Wiley.
- Breuer, J., & Freud, S. (1895). *Studies on hysteria*. Pelican Freud Library, 3. Harmondsworth: Penguin, 1986.
- Brown, M. (2001). The how is blood-synergy direct touch. In M. Heller (Ed.), *The flesh of the soul: The body we work with*: 45–58. Bern: Peter Lang.
- Bruner J.B. (1990). Acts of Meaning. Harvard University Press.
- Bullinger, A. (2004). Le développement sensori-moteur de l'enfant et ses avatars. Paris: érès.
- Caldwell, C. (2001). Addiction as Somatic Dissociation. In M. Heller (ed.), *The Flesh of the Soul. The Body We Work with:* 213–230. Bern: Peter Lang.
- Carleton, J.A. (2002). Body, Self and Soul, Evolution of a Holistic Psychotherapy. Journal of the International Society for the History of Medicine, 2: 30–39.
- Charcot, J.-M. (1893). La foi qui guérit. Rivages, 2015.
- Chouvier, B., & Roussillon, R. (2008). Corps, acte et symbolisation. Psychanalyse aux frontières. Louvain: De Boeck.
- Cannon, W.B. (1931). Again the James-Lange and the thalamic theories of emotion. *Psychological Review*, 38: 281–195. doi:10.1037/h0072957*
- Cannon, W. B. (1932). The wisdom of the body. New York: Norton.
- Clark, A. (1997). Being there: Putting brain, body, and world together again. Cambridge, MA: MIT Press.*
- Cornell, W. (1997). Touch and Boundaries in Transactional Analysis: Ethical and Transferential Considerations. *Transactional Analysis Journal*, January, 27, 1: 30-3. doi: 10.1177/036215379702700108
- Damasio, A. (1999). The feeling of what happens: Body and emotion in the making of consciousness. New York: Harcourt Brace.

- Darwin, C. (1859). The origin of species. London: Penguin Books, 1985.*
- Descartes, R. (1628). Règles pour la direction de l'esprit. In R. Descartes, Œuvres et lettres: 33–119). Paris: Editions Gallimard, 1953.
- Descartes, R. (1649). *Les passions de l'âme.* In R. Descartes, Œuvres et lettres: 691–803. Paris: Editions Gal-limard, 1953.
- Diderot, D., & D'Alembert, J. Le R. (1851). Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers, I. Paris : GF Flammarion.
- Fenichel, O. (1928). Organ libidinization accompanying the defense against drives. In H. Fenichel (Ed.), O. Fenichel, The collected papers of Otto Fenichel, First Series: 128–146. New York: Norton.
- Ferenczi, S. (1920). *The Further development of active therapy.* In: Further Contributions to the Theory and Technique of Psychoanalysis: 198–216. London: Hogarth, 1950.
- Ferenczi, S. (1921). Psycho-analytical observations on tic. *International Journal of Psychoanalysis*, 2:1–30.
- Fraisse, P. (1992). Le Non Conscient, interview d'Anne Fraisse. Adire, 7-8: 173-182.
- Freud, S. (1890). Psychical (Or Mental) Treatment. White Press. 2014.
- Freud, S. (1900). *The interpretation of dreams*. Harmondsworth: The Pelican Freud Library, Penguin Books, 1978.
- Freud, S. (1923). *The Ego and the Id.* In J. Strachey (Ed. & Trans.), The standard edition of the complete psy-chological works of Sigmund Freud (Vol. 193–67). London: Vintage, 2001.
- Freud, S. (1938). *An outline of psychoanalysis*. In J. Strachey (Ed. & Trans.), The standard edition of the com-plete psychological works of Sigmund Freud (Vol. 23: 141–207). London: Hogarth Press, 2001.
- Frey, S. (2001). New directions in communications research: The impact of the human body on the cognitive and affective system of the perceiver. M. Heller (ed.), *The flesh of the soul: The body we work with:* 257–282. Bern: Peter Lang.
- Frey, S., Jorns, U., & Daw, W. (1980). A systematic description and analysis of nonverbal interaction between doctors and patients in a psychiatric interview. In S. A. Corson (Ed.), *Ethology and nonverbal communica-tion in mental health:* 231–258. New York: Pergamon Press.
- Gauchet, M. (1992). L'inconscient cérébral. Paris: Seuil.
- Gauchet, M., & Swain, G. (1997). Le vrai Charcot. Les chemins imprévus de l'inconscient. Paris: Calmann-Lévy.
- Gazzaniga, M.S. (1967). The Split Brain in Man. Scientific American, 217: 24 29
- Gergely, G., & Unoka, Z. (2008). The Development of the Unreflective Self. In Busch F.N. (ed.), *Mentalization. Theoretical considerations, research findings and clinical implications:* 57–102. London: The Analytic Press, Taylor and Francis Group, New York, London.
- Geuter, U., Heller, M. C., & Weaver, J. O. (2010). Reflections on Elsa Gindler and her influence on Wilhelm Reich and body psychotherapy. *Body, Movement and Dance in Psychotherapy*, 5, 1:59–73.
- Giordano, E. (1997). Relaxation Training as a Long-Term Psychodynamic Psychotherapy. In J. Guimón (Ed.). *The body in psychotherapy.* Basel: Karger.
- Glasser, W. (1965). *Reality Therapy. A new approach to psychiatry.* New York: Harper & Row, Publishers.

- Goldstein, K. (1939). The organism. New York: Zone Books, 2000.
- Groddeck, G. (1931) *Massage and psychotherapy*. In L. Schacht (ed.) The Meaning of Illness: Selected Psycho-analytic Writings by Georg Groddeck. London: Maresfield Library, 1997.
- Haynal, A. (1987). The technique at issue. Controversies in psychoanalysis from Freud and Ferenczi to Michael Balint. London: Karnac Books, 1988.
- Heller, M. (1987). Introduction. Adire, 2 & 3: 3-21.
- Heller, M. (2012). *Body psychotherapy. History, concepts, methods.* New York: W.W. Norton & Company.
- Heller, M., Haynal-Reymond, V., Haynal, A., & Archinard, M. (2001). Can faces reveal suicide attempt risks? In M. Heller (Ed.), *The flesh of the soul. The body we work with*: 231–256. Bern: Peter Lang.
- Hubel, D. H., & Wiesel, T. N. (1963). Receptive fields of cells in striate cortex of very young, visually inexperi-enced kittens. Journal of *Neurophysiology*, 26:944–1002.
- Jacobson, E. (1938). Progressive relaxation, a physiological and clinical investigation of muscular states and their significance in psychology and medical practice. Chicago: University of Chicago Press.
- James, W. (1890). The principles of psychology. Cambridge, MA: Harvard University Press, 1983.
- James, W. (1902). *The varieties of religious experience*. Electronic edition published by The Anonymous Press.*
- Janet, P. (1889). L'Automatisme psychologique: Essai de psychologie expérimentale sur les formes inférieures de l'activité humaine. Paris: Alcan.^{30*}
- Janet, P. (1913). Psycho-Analysis. XVIIth International Congress of Medicine, London. London: Henry Frowde Oxford University Press and Hodder & Stoughton.*
- Janet, P. (1919). Les médications psychologiques. Etudes historiques, psychologiques et cliniques, sur les méthodes de la psychothérapie. Paris : Librairie Félix Alcan.*
- Janet, P. (1923). *La médecine psychologique*. Paris, Ernest Flammarion Éditeur. I used the web edition, original-ly proposed by Jean-Marie Tremblay, professor of sociology at the Cégep of Chicoutimi.*
- Janet, P. (1927). De l'angoisse à l'extase. Tome II, première et deuxième parties. I used the web edition, origi-nally proposed by Jean-Marie Tremblay, professor of sociology at the Cégep of Chicoutimi.*
- Jung, C. G. (1958). Answer to Job. Princeton: Princeton University Press, 1973.
- Koestler, A. (1968). The ghost in the machine. New York: Macmillan.
- Kogan, G. (1980). Your body works. A guide to health energy and balance. Berkeley: Transformation Press.
- Koffka, K. (1935). Principles of Gestalt Psychology. London: Lund Humphries.
- Lamarck, J.B. (1802). Recherches sur l'organisation des corps vivants. Paris: Fayard, 1986.*
- Lamarck, J.B. (1809). *Philosophie Zoologique* [Zoological philosophy]. Paris: Flammarion, 1994.^{31*}

³⁰ References of Janet's work are taken from the editions published on the web at http://classiques.uqac.ca

³¹ T. Elliot's 1914 translation is not reliable.

- Lamarck, J. B. (1815). Histoire naturelle des animaux sans vertèbres, vol. 1. Paris: Verdière.*
- Lamarck, M. de (1820). Système analytique des connaissances positives de l'homme [Analytical System of Positive Knowledge of Man]. Paris: Presses Universitaires de France, 1988.*
- Lowen, A. (1975). Bioenergetics. New York: Coward, McCann & Geoghegan.
- Marlock, G., & Weiss, H. (2001). In search of the embodied self. M. Heller (ed.), *The flesh of the soul. The body we work with:* 133–152. Bern: Peter Lang.
- Mauss, M. (1934). Techniques of the body. Economy and Society, 1973, 2:70-88.*
- Mayer, S. J. (2005). The Early Evolution of Jean Piaget's Clinical Method. *History of Psychology*, 8, 4: 362–382.
- Norcross, J. C. (2005). A primer on psychotherapy integration. In J. C. Norcross & M. R. Goldfried (Eds.), *Handbook of psychotherapy integration* (2nd ed., pp. 3–23). New York: Oxford.
- Oliver, K. (2009). *Animal lessons: how they teach us to be human.* New York: Columbia University Press.
- Pavlov, I, (1904). *Nobel Lecture*. http://www.nobelprize.org/nobel_prizes/medicine/laureates/1904/pavlov-lecture.html, November 2015.
- Perls, L. (1978). An Oral History of Gestalt Therapy: Interviews with Laura Perls. *The Gestalt Journal*, 1, 1: 8–31.*
- Piaget, J. (1936). *Origins of intelligence in the child.* London: Routledge & Kegan Paul, 1953.*
- Piaget, J. (1975). L'équilibration des structures cognitives: problème central du développement [The develop-ment of thought: Equilibration of cognitive structures]. Paris: Presses Universitaires de France.
- Piaget, J. (1977). Piaget on Piaget. A film by Luis Lam. You Tube: https://www.youtube.com/watch?v=0XwjIruMI94.
- Piattelli-Palmarini, M. (1979). Language and Learning: The Debate between Jean Piaget and Noam Chomsky, at the Royaumont Center for a Science of Man. Cambridge, MA: Harvard University Press, 1980.
- Reich, W. (1940). *The function of orgasm: Sex-economic problems of biological energy* (T.P. Wolfe Trans.). New York: Bantam Books, 1967.
- Reich, W. (1952). Interview de Reich par Kurt Eissler. In M. Higgins & C. M. Raphael (eds.), *Reich parle de Freud [Reich speaks of Freud]*. Paris: Payot, 1972.
- Reichmayr, J. (2015). Otto Fenichel. Psychoanalyse und Gymnastik. Giessen: Psychosozial-Verlag.
- Rochat, P. (2014). Roots of typical consciousness. Implications for developmental psychopathology. In D. Cic-chetti (Editor), *Handbook of Developmental Psychopathology*. Hoboken: Wiley Publisher.
- Rochat, P. (2016). Engagement global du corps et connaissance précoce. Enfance, 4: 453-462.
- Rosenzweig, S. (1931). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry*, July, 6, 3: 412–415. http://dx.doi.org/10.1111/j.1939-0025.1936.tb05248.x
- Rowlands, M. (2006). The New Science of the Mind. From Extended Mind to Embodied Phenomenology. Cam-bridge, MA: MIT Press.

- Schaer, M., Francini, M., & Eliez, S. (2014). Latest findings in autism research. How do they support the im-portance of early diagnosis and immediate intervention?. Swiss Archives of Neurology and Psychiatry, 165, 8: 277–289.
- Schultz, J. H. (1932). Autogenic training: A psycho-physiologic approach in psycho-therapy. New York: Grune & Stratton, 1959.
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse.* New York: Guilford Press.
- Selye, H. (1978). The stress of life, 2nd edition. New York: McGraw-Hill.
- Shakespeare, W. (1623). The Tempest. Oxford: Oxford University Press.
- Sperber, D. (2010). The Guru Effect. *Review of Philosophy and Psychology,* 1, 4: 583–592. doi:10.1007/s13164-010-0025-0
- Spinoza, B. de. (1677). Ethics (E. Curley, Trans.). Harmondsworth: Penguin, 1996.
- Stern, D. N. (1985). The interpersonal world of the infant. A view from psychoanalysis and developmental psy-chology. London: Karnack Ltd., 2003.
- Stern, D. N. (1998). The Motherhood Constellation. London: Karnak books.
- Totton, N. (2003). Body psychotherapy: An Introduction. Maidenhead: Open University Press.
- Tronick, E. Z. (2007). The neurobehavioral and social-emotional development of infants and children. New York: Norton.
- Tuckman, A. (2009). *More attention, less deficit: Success strategies for adults with ADHD.* Plantation: Specialty Press, Inc.
- Van der Hart, O, Nijenhuis, E.R.S., & Steele, K. (2006). *The Haunted Self.* New York: W.W. Norton & Compa-ny, Inc. ISBN 0393704017.
- Van der Hart, O., & van der Kolk, B.A. (1989). Pierre Janet's Treatment of Post-Traumatic Stress. *Journal of Traumatic stress*, 2, 4: 1–11.*
- Van der Kolk (2014). The Body Keeps the Score: Memory & the Evolving Psychobiology of Post Traumatic Stress. New York: Viking Press.
- Van der Kolk, B.A., & van der Hart, O. (1989). Pierre Janet and the Breakdown of Adaptation in Psychological Trauma. *The American Journal of Psychiatry,* December, 146, 12: 1530–1540.*
- Van der Kolk, B. A., Hopper, J.W., & Osterman, J.E. (2001). Exploring the nature of Traumatic Memory: Com-bining Clinical Knowledge with Laboratory Methods. Journal of Aggression, Maltreatment & Trauma, 4, 2: 9–31.*
- Van Rillaer, J. (2010). Analyses psychologiques et psychanalyses: un capharnaüm. *Science & Pseudo-Science*, 293, hors-série Psychanalyse: 4-11.*
- Varela, F. J. (1988). Connaître les sciences cognitives. Tendances et perspectives. Paris: Gallimard. (This book has not been translated into English).
- Varela, F., Thompson, E., & Rosch, E. (1991). *The Embodied Mind*. Cambridge, MA: MIT Press.
- Von Bertalanffy, L. (1968). Organismic Psychology and Systems Theory, 1966 Heinz Werner lecture series, vol. 1. Worcester: Clark University Press.
- Wallon, H. (1926). *Mouvement et psychisme*. In H. Wallon, Ecrits de 1926 à 1961, psychologie et dialectique. Paris : Messidor/Editions sociales, 1990.
- Wallon, H. (1934). Les Origines du caractère chez l'enfant. Les préludes du sentiment de personnalité. Paris : Presses Universitaires de France, 2002.
- Watson, J. B., & Rayner, R. (1920). Conditioned emotional reactions. Journal of Experimental Psychology, 3, 1: 1–14.

- Werner, H. and Kaplan, B. (1963). Symbol formation: An organismic developmental approach to language and the expression of thought. NY: John Wiley.
- Wittgenstein, L., & Barrett, C. (2007). Ludwig Wittgenstein: Lectures and Conversations on Aesthetics, Psy-chology and Religious Belief. Oakland: University of California Press.
- Wundt, W. (1907). *Outlines of Psychology*. Translated with the author by Charles Hubbard, third revised edition. London: Williams & Norgate G.E. Stechert & Co.*
- Young, C. (2006). One hundred and fifty years on: The history, significance and scope of body psychotherapy today. *Body, Movement and Dance in Psychotherapy, 1*, 1: 17–28
- Young, J.E.; Klosko, J.S. and Weishaar, M. (2003). *Schema Therapy: A Practitioner's Guide*. Guilford Publica-tions: New York.
- Ziemke, T., & Sharkey, N. E. (2001). A stroll through the worlds of robots and animals. *Semiotica*, 134, 1–4: 701–746.