

Introduction

Vitalizing Energies, Creativity and Evolution

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Today energy is not just a keyword: It's a science and a culture. The enhancement of individual energy is conceived as integral to physical fitness, well-being, efficient performativity and mental health to be achieved by healthy lifestyles, nutritious diets, vigorous exercise and modern sporting cultures alongside such movement cultures as Aerobics, Yoga and Pilates. While energy cultures in residential and working environments have become significant in businesses, organizations, schools and universities, they have also become a top priority for many individuals and those concerned with sustainability transitions. Vital to sustaining this energy culture is its production, consumption and preservation, particularly in the face of Climate Change and ecological disasters. Yet this concern with energy is not new.

It can be traced to the discovery of increasing degeneration and depopulation in the mid-nineteenth century amidst the discourses of devolution and ecological catastrophism. It can be correlated to the efflorescence of evolution theories to regenerate populations through populationist organizations, including eugenics. It is highlighted by the efflorescence of modern sporting cultures including gymnastics, boxing, cycling, swimming, diving, rowing, dancing, eurythmics, weight-lifting and the popularization of rugby and soccer. It is

encapsulated by revival of the Olympic Games in 1896, particularly by the Baron Pierre de Coubertin, and his popularization of French energies acknowledged by the book, *An Artisan of French Energy: Pierre de Coubertin*.¹ It is also encapsulated by the science of *energeticism* developed by German physicist, Georg Helm, with physical chemist, Wilhelm Ostwald. Rejecting scientific materialism, these scientists demonstrated that energy is the substrate of all phenomena with all observable changes arising as transformations of one kind of energy into another.² By the fin de siècle, as Helge Krage points out, mechanistic materialism and positivist empiricism came increasingly under attack by the new investigators into energetics, radioactivity and electromagnetism, as well as by Modernist artists.³ In 1895, Ostwald gave a programmatic address in which he argued that energetics would overcome the inherent limitations of scientific materialism to become the scientific world view of the future. “The most promising scientific gift that the closing century can offer the rising century,” he declared, “is the replacement of the materialistic world view by the energeticist world view”.⁴ Dynamically, he concluded, “Do not squander energy. Utilize it!”⁵ Energy was also conceived as integral to evolution, as illuminated by Charles Darwin and other evolutionary theorists.

Elaborating his theory of “natural selection”, Darwin had linked evolution to competition between tribes and races, the fittest being the ones that generally survived. Their fitness did not just depend upon their fertility, numbers and what Darwin called “the grade of their civilization” but their good health, vigour and energy.⁶ Following the legacies of Darwin and Georg Hegel after the humiliating defeat of France in the 1870 Franco-Prussian War, the French philosopher Hippolyte Taine had insisted that it was time for his generation to judge itself according to “race-milieu-moment”: Its own time, its environment and most of all, its energy and fitness as a race.⁷ Across America, Asia, Australia, Britain, Canada, Europe and Russia, there was an increasing concern with generating energies through fitness and healthy

environments entailing hygiene and the embrace of natural elements, particularly exposure to unpolluted air, water and sunlight, as illuminated by Chapters 1, 2 and 3 in this book. Regeneration of the body and its energies was also to be propelled through the practice of such ‘modern’ sports as rowing, yachting, swimming, diving, body-building and weight-lifting, as revealed in Chapters 1 and 2, as well as by rugby and soccer, as illustrated by the Modernist artists examined in Chapters 3 and 6. For many artists, especially Modernists, these new energies did not just entail physiological invigoration.

Following research into neurology, psychology, psychiatry and psychoanalysis linking unconscious emotions with free-energy, these new energies also entailed psychological liberation.⁸ In separating the study of the brain from the body around 1650, Thomas Willis is invariably identified as the founder of neurology, alongside the Swedish inventor, scientist, theologian and visionary, Emanuel Swedenborg. Due to the investigations conducted from the late eighteenth century by the French comparative anatomists, François-Xavier Bichat and Félix Vicq d'Azyr, plus the Scottish anatomist and surgeon, Sir Charles Bell, the study of neurological anatomy and pathology began to converge. After further explorations of neurology and pathology, particularly by Pierre Briquet who in 1859 published his epidemiologic study of 430 cases of hysteria, the *École et Clinique des maladies du système nerveux* was founded in Paris at the *hôpital de la Salpêtrière* at the beginning of the French Third Republic under the professorship of Jean Martin Charcot. Joined by Charcot’s former students, Pierre Janet, Gilles de la Tourette, Paul Richer and Joseph Babinski, for the next 20 years, hysteria, neurological and dissociative disorders were psychoanalysed and documented at *Salpêtrière* in drawings, paintings, photographs and in its anatomo-pathological museum.⁹ Amidst the prevalence of hypnosis, especially its medical demonstrations in Charcot’s ‘theatres’ of hysterical patients, both Henri Bergson and his close friend, Pierre Janet (with whom he had planned to study medicine) experimented with it. Janet focused upon the

notorious magnetist and clairvoyant somnambulant hysteric, *Léonie*.¹⁰ While Bergson taught psychology and neurology from Janet's *Traité élémentaire de philosophie*, Janet drew upon Bergson's *Matter and Memory* to develop his thesis on "psychic automatism" as "the involuntary exercise of memory and intelligence", and to explore how the concept of dissociation from psychological trauma and "traumatic memory" entailed the progressive loss of psychological energy.¹¹

After studying neurology with Charcot at Salpêtrière in 1885, one year later Sigmund Freud opened his private practice in Vienna, publishing with Dr Josef Breuer *Studies on Hysteria* in 1895. Connecting hysteria to traumatic repression and unconscious energies, another year later Freud defined his techniques to identify its sources as psychoanalysis. Four years later, he published *The Interpretation of Dreams*, referenced in Chapter 8, and in 1910 founded the International Psychoanalytical Association. In 1874, Wilhelm Wundt had published the first textbook on experimental psychology and five years later, opened the first experimental psychology laboratory at the University of Leipzig to investigate unconscious energies.¹² In 1882, the Society for Psychical Research had been founded in London followed by the Neurological Society of London four years later. A spate of psychology publications followed including John Dewey's first American textbook on psychology, William James, *The Principles of Psychology* and Havelock Ellis' *Sexual Inversion*, to name but a few key texts. Hence the physiological regeneration of the body and its energies was conceived as inextricably intertwined with liberation of the unconscious through neurology, psychology and psychoanalysis. The psychological energies to be released by this process were conceived as entailing the emancipation of creative energies, particularly through the unleashing of raw emotions, feelings, instincts, intuition, memory, fertility and virility. This fusion became identified with the modern concepts of Vitalism that proved paramount to Vitalist Modernists ranging from Hugo Ball's Dadaist performances demonstrated in Zurich and Salvador Dalí's exploration of his paranoiac critical method to unleash his memories and the unconscious in Paris, to Kazimir Malevich's Suprematism in Moscow, as is revealed by this book.

While Vitalism has a long history, modern Vitalism became extensively theorized in America, Britain and Europe, particularly France and Germany during the late nineteenth and early twentieth century. Despite Bergson becoming one of the most popular philosophers of Vitalism, by no means was he alone in his theorization. This is demonstrated by the Vitalisms

researched by Hans Driesch – the zoologist who had studied with Ernst Haeckel – alongside Friedrich Nietzsche and George Bernard Shaw, who used the same title as Bergson although with very different meanings. To elucidate their modern vitalist theories, particularly their similarities and divergences, the different conception of modern Vitalism by these theorists is charted in the next section of this *Introduction*, before the relationship of their Vitalisms to Modernism is explored in my survey of the chapters in this book.

Philosophizing Modern Vitalism: Bergson, Driesch, Nietzsche and Shaw

Bolstered by the philosophies of Vitalism by Bergson, Driesch, Nietzsche and Shaw, such concepts as life-force and the vital force, *l'élan vital* and *creative evolution* became widely and diversely engaged by Modernist artists and writers. This entailed the conception of life as a constant process of metamorphosis impelled by the free flow of energies, undisrupted by mechanistic materialism, to generate what Bergson aptly called *L'évolution créatrice*, the title of his fourth book published in 1907.¹⁴ Some fourteen years later Shaw appropriated the term in English, *creative evolution*, although with distinctly different meanings. Imbricated within Transformist ecological evolutionary theories, Vitalism was embraced for being anti-mechanistic and materialistic, anti-positivist and anti-rationalist, particularly in its opposition to Thomas Huxley's conception of plants and animals as machines. Vitalism entailed reconception of organic life as inspiring organisms within unspoiled nature, perpetually mutating into increasingly complex species and solidarist colonies following the Transformist concept of 'life-force'. While these philosophies of Vitalism were relatively new, they had

long roots as revealed by Nietzsche's treatises, Driesch's lectures and his book, *The History and Theory of Vitalism*,¹⁵ as well as the lectures and philosophies published by Bergson.

In *The Twilight of the Idols*, Nietzsche had argued passionately for the need to re-evaluate the idols of theology, spurn positivism, reject technologized modernity and ascend "high, free even terrible nature".¹⁶ "Our whole modern world is caught in the net of Alexandrian culture and recognizes as its ideal the man of theory," lamented Nietzsche, "equipped with the highest cognitive powers, working in the service of science and whose archetype and progenitor is Socrates."¹⁷ Nietzsche's reconception of the artist as Apollonian and Dionysian, a vessel of energy rather than neurasthenic, in contact with raw nature and their primal instincts and vitalized by the life-force, was welcomed by many Modernists. This is illuminated in Chapter 2 by Edvard Munch's murals for the newly built Aula, Festival Hall illustrated by Figs. 2.1, 2.2a, 2.2b, 2.2c, 2.2d, 2.2e; 2.7, 2.8 to 2.9. Following Nietzsche's conception of the *Übermensch* in *Thus spake Zarathustra*, it is the energized 'overman' able to create new values that emerges in these Vitalist Modernist murals. Reconceived as *Superman* in Shaw's 1903 play, *Man and Superman*, the *Übermensch* is referenced in Chapter 6 on Vitalist Futurism and features in Robert Delaunay's 1913 painting, *L'Équipe de Cardiff*, in Chapter 3, as the heroic French overman able to soar above all other players in the rugby lineout in order to catch the ball (Figure 3.1).

For the German biologist, Driesch, who had studied with Haeckel, Vitalism was conceived in relation to Entelechy as a vital force guiding the evolution of organisms. In his Gifford Lectures delivered in Aberdeen in 1907-8 and his London Lectures on Vitalism in 1913, Driesch traced what he called "the old Vitalism" to Aristotle's *Metaphysics* and *De Anima*, particularly his bio-philosophy of *entelecheia* entailing different stages of the soul.¹⁸ "Aristotle's theory of life is pure vitalism", Driesch maintained, "and I may call it primitive or naïve vitalism for it arose from an entirely impartial contemplation of life's phenomena."¹⁹

While Driesch highlighted the relationship of Vitalism to evolution and epigenesis through the theories of William Harvey and Georges-Louis Leclerc (Comte de Buffon), he did not explore its development in the eighteenth century at the Montpellier School of Medicine by François Sauvages de Lacroix, Théophile de Bordeu and Paul-Joseph Barthez into a *principium vitale*.²⁰

Rejecting the body-machine concept, the Montpellier Animists postulated a distinction between living and other matter. It was, in fact, at Montpellier that the physiologist and vitalist, Marie-Jean-Pierre Flourens, had trained, as Barbara Larson points out, and whose theory of the “nœud vital” became Paul Gauguin’s model for the soul.²¹ By 1780, Montpellier vitalist therapies and those of physiologist, Marie François Xavier Bichat, regarding vital animal properties and the “milieu interieur”, extended to Franz-Antoine Mesmer’s theories and practices of animal magnetism.²² The linkage that was forged between mesmerism and Vitalism then provided, according to Elizabeth A. Williams, a viable alternative to the Paris Clinical School,²³ as illuminated in Chapters 4 and 5. With the development of the microscope and observations of living tissue, medical vitalists and mesmerists considered that they were then able to furnish empirical evidence that the phenomena of life could no longer be explained by the laws of mechanics.

Despite these vitalist-mechanist debates prominent in medicine, Driesch confined his exploration to Immanuel Kant and what he called “the vitalism of the Nature-philosophers”, including Arthur Schopenhauer whom he posited as bringing an end to “the old Vitalism”.²⁴ “Modern Vitalism”, as he called it, was then identified by Driesch as an Anti-Darwinian theory of descent, his scientificized theory of autonomy being correlated with biology and “universal teleology”.²⁵ Extending this theory to the concept of *becoming*, which became so significant for Bergson, Driesch related it to “the so-called stream of consciousness”, the term introduced by William James in his *Principles of Psychology*.²⁶ “What if *becoming* could be

formulated as if an earlier phase of it were always the reason of a later phase,” Driesch speculated, “and a later phase the consequence of an earlier one? If this were possible, then we might claim to understand *becoming*, to have rationalised it.”²⁷ “Nature”, he then concluded is “the proper field of a theory of *becoming*”.²⁸

To avoid falling into mechanistic traps that he detected in Darwinian and Lamarckian theories, Driesch posited Entelechy as the vital force within a non-material and non-spatial process of *becoming*.²⁹ From 1905, Driesch’s theorisation of Entelechy extended to occult Vitalism, particularly psychic phenomena and parapsychology, which included hypnotism, levitations, phantoms and telekinesis – the movement of objects without human contact. As Serena Keshavjee reveals in Chapter 4, while Driesch was writing *The History and Theory of Vitalism*, he attended séances with the German physician, psychiatrist and psychical researcher, Albert von Schrenck-Notzing and considered that protoplasm could be expelled out of the body into an endless production of creative forms. When asked to lecture at Cambridge University, Driesch met Henry Sidgwick who intensified his interest in psychic phenomena and motivated him to become a member of the Society for Psychical Research of London in 1913 – the very year that Bergson was elected its President. So extensive and intensive did Driesch’s psychical research become after the First World War that in 1926, Driesch was elected President of this Society. That year, he published *Psychical Research and Established Science*, as part of his Presidential address, followed by *Psychical Research and Philosophy*.³⁰ In 1931, he published a methodology of parapsychological research and two years later, *Psychical Research: The Science of the Super-normal*.³¹ Closely associated with British physicist, Oliver Lodge, and Schrenck-Notzing, also examined in Chapter 4, as well as such renowned mediums as Rudi Schneider and ‘Margery’ – Mrs. Osborne Leonard – Driesch concluded that parapsychical phenomena represented an “enlarged” Vitalism, which he called “superVitalism”.³²

The new sciences, including psychic phenomena and “psychic states”, proved integral to the Vitalism explored by Driesch’s French colleague, Bergson, as illuminated in Chapter 5 and its focus upon Pablo Picasso’s creation of durational portraits. “Before Bergson forged his ideas”, surmises Robert C. Grogin, “intellectuals were presented with an almost standard construction of their world, a materially enclosed world which was moved by purely mechanical and mathematical laws.”³³ Reconceiving time from the perspective of memory, intuition and “psychic states”, in Bergson’s first book published in 1889, *Essai sur les données immédiates de la conscience (Time and Free Will)*, time was explored as durational, like an unfolding melody – not discrete instants of chronometric measurement within mechanistic materialism. In his next book, *Matière et mémoire*, published in 1896, Bergson closely engaged in the new sciences. Drawing upon the work of Faraday, Maxwell and Lord Kelvin, Bergson deduced: “Matter thus resolves itself into numberless vibrations, all linked together in uninterrupted continuity, all bound up with each other, and travelling in every direction like shivers through an immense body”.³⁴ Given Bergson’s own grounding in ether physics, as Linda Dalrymple Henderson has revealed, and his friendship with Gustave Le Bon, not surprisingly Bergson’s theory dovetailed with the reconception of matter as penetrable, interacting with space and in turn conceived as a tangible vibrating atmosphere.³⁵

Drawing upon the life of insects, as indicated in Chapter 8, and the evolution of intelligence from simians to homo-sapiens, in his fourth book, *L’Évolution créatrice*, Bergson theorized evolution as *l’élan vital*. A vital impulse and creative force, synonymous with new inventions, Bergson likened *l’élan vital* to the momentum of a continually surging wave. Energized and propelled by this vital impulse and creative energy, the human subject was then posited by Bergson to be in a constant state of *becoming*, as illuminated by Patricia Berman in Chapter 2 and illustrated by Figs. 2a, 2b, 2d and 2e. Pitted against mechanist models of being that included those of Darwin and Lamarck, as well as Monism and

Weismann's theory of germ plasm, in *Creative Evolution* Bergson stipulated that "life does not evolve mechanically and rationally". As he explained succinctly in French: "Elle ne procède pas par association et addition d'éléments", he maintained, "mais par dissociation et dédoublement."³⁶

The Anarchist and Socialist implications of this potent statement are unravelled by Mark Antliff in Chapter 9. Some ten years after Bergson had published *Creative Evolution*, Shaw developed his own theory of this concept inspired more by Nietzsche's concept of the *übermensch*, which Shaw identified as *Superman*.³⁷ In his 1921 play, *Back to Methuselah*, which he called his "Bible of Creative Evolution", Shaw endeavoured to define this concept through his seven-hundred year old bisexual superhuman characters who needed no sleep and who were able to accelerate the evolutionary process by centuries. Hence *creative evolution* for Shaw entailed a life-force able to accelerate the process of evolution from which a race of omniscient and omnipotent supermen could evolve. This is illuminated by his final play in 1950, *Farfetched Fables* in which indestructible humans were able to achieve incorporeality subsisting on nothing but air. Despite using a title identical to that of Bergson, Shaw's concept was then distinctly different from Bergson's *Creative Evolution*. Rather than deterministic methodologies, mechanistic control systems and finalistic models of evolution from which Shaw's super race would supposedly evolve, Bergson's *Creative Evolution* draws upon co-evolutionary interrelationships entailing the symbiosis of humans, plants and animals, as well as reciprocal interpenetration to unleash *l'élan vital*.

Seizing this vital impulse of life, endemic in nature and redolent in intuition would, Bergson suggests, enable human subjects to become self-creative and invent the new. This would entail immediate, instinctive and intuitive responses able to reach the heart of an other, especially through empathy and what Bergson called "psychic states" examined in Chapter 5. It would also entail unfurling memory, intuition and "psychic states" in realising the duration

of being and the perpetual flux within it as a creative process of *becoming*, as is illuminated by the artworks in Chapters 2, 4, 5, 7 and 8. Hence Bergson, concludes Stephen Lehan, “gave weight to the modernist belief that art is the highest function of our activity, and helped establish the modernist belief that the universe is inseparable from mind and that the self is created out of memory.”³⁸ In his final chapter of *Creative Evolution*, entitled “The Cinematographical Mechanism of Thought and the Mechanistic Illusion,” Bergson reviewed the history of philosophical thought to detect how it had failed to acknowledge the importance of *becoming*, thereby falsifying the nature of reality by imposing static concepts and what he calls “theoretical absurdities”.³⁹ This is explored in Chapter 6, particularly Bergson’s conclusion: “The mechanism of our ordinary knowledge is of a cinematographical kind.”⁴⁰

To pursue *becoming*, Bergson insisted upon the need to “escape from the cinematographical mechanism of thought” and to acknowledge the constant interpenetration of life.⁴¹ “In reality”, Bergson maintained, “life is of the psychological order, and it is of the essence of the psychical to enfold a confused plurality of interpenetrating terms. In space, and in space only, is distinct multiplicity possible. ... I am a unity that is multiple and a multiplicity that is one.”⁴² Given the idiosyncratic fusion of the new sciences, particularly neurology and psychology with occultist sciences in France at this time, as well as in England and Germany, as explored in Chapters 4 and 5, these multiplicities entailed energies which, for Bergson, could be spiritual and phantasmatic, as demonstrated in Chapter 5 and by his publications anthologized in Bergson’s 1919 book, *L’Énergie spirituelle*.⁴³ This idiosyncratic interrelationship was explored simultaneously by such scientists as Charles Richet, Camille Flammarion, Gustave Geley and Karl van Reichenbach, examined in Chapter 4, and by such magnetist scientists as Hector Durville investigated in Chapter 5. Bergson’s concept of spiritual energies in relation to his concept of *durée* as the continuous flow of interpenetrating

moments forging the vital impetus then seem to lend themselves to the notion of souls, spirits, phantoms and auras, as well as etheric and astral bodies taking the form of phantoms, as illuminated in both Chapters 4 and 5.

From 1900, Bergson lectured twice a week on all of these concepts, invariably without notes, at the Collège de France on Fridays at 5 pm and on Saturdays at 4 pm.⁴⁴ Simultaneously his friend Pierre Janet lectured in Psychology at the Sorbonne. Two years after Janet became Chair of Experimental Psychology at the Collège de France in 1902, Bergson was appointed its Chair of Modern Philosophy. So popular did Bergson's lectures become that students queued for hours in the surrounding streets just to hear them.⁴⁵ With publication in 1907 of *L'Évolution créatrice*, Bergson's fame skyrocketed. So popular did it become that its French publisher, Félix Alcan, issued twenty-one editions by 1918. Mythologized as a great artist, Bergson was called "the Corot or the Vermeer of the interior universe".⁴⁶ Whenever Bergson lectured at the Collège de France thereafter, the press were quick to report attendance by the prestigious "Five o'clock Bergsonians" alongside women who flocked to its doors, and the weekly riots that erupted.⁴⁷ Cartoons showed members of the public precariously perched on ladders atop windows of the main auditorium at the Sorbonne just to spy him. So fashionable did Bergson become that the celebrity portraitist, Jacques-Émile Blanche, eagerly painted his portrait in 1911 (Fig. 5.3). So *à la mode* did it become to attend Bergson's lectures that by 1910, Bergson's Room VIII at the Collège de France Amphitheatre achieved notoriety as one of the most "elegant places" in Paris with the Collège de France becoming known as "the house of Bergson".⁴⁸ Even in New York in 1913, his lectures caused a traffic jam on Broadway. In anticipation of his lectures, Columbia University compiled *Contribution to a Bibliography of Henri Bergson*, with an introduction by their philosophy professor, John Dewey, which was presented to Bergson on his arrival in New York City on 2 February 1913.

Attracting major international awards, in 1911 Bergson was invited to give the Huxley Memorial Lecture, which he entitled in English, *Life and Consciousness*, two years later being also invited to give the Gifford Lectures at the Universities of Aberdeen and Edinburgh. Following the metaphysical dimensions of his philosophy, Bergson was also appointed President of the British Society for Psychical Research. In his presidential speech, “Phantasms of the Living” and “Psychical Research”, Bergson surmized: “There is, present and invisible a certain metaphysic unconscious of itself – unconscious and therefore inconsistent, unconscious and therefore incapable of continually remodelling itself on observation and experience as every philosophy worthy of the name must do”.⁴⁹ To emphasize the resonance and sustenance of “l’*élan vital*” within this “*métapsychique*” reality, Bergson succinctly concluded, “it’s organisms that die, not life.”⁵⁰ Subsequently lecturing on this subject in France under the title, *L’Âme et le Corps*, Bergson’s publication of this series as essays, investigated in Chapter 5 of the book, was entitled *L’Énergie Spirituelle : essais et conférences*. Translated into English as *Mind-Energy*, these ideas were explored extensively at the Institut Métapsychique International in Paris from its inception in 1919, as indicated in Chapter 4, by both Bergson and his close friend, the Noble Prize-winning physiologist, Charles Richet.⁵¹

By no means secluded from the First World War, in December 1914 Bergson’s Presidential address to the Académie des Sciences Morales et Politiques, elucidating how metaphysical philosophy and free will could overcome materialist oppression, was subsequently translated and published as *The Meaning of the War: Life and Matter in Conflict*. By January 1917, he also became involved in international diplomacy. Due to his fluency in English gleaned from his English mother and his formative years in England, Bergson was enlisted by the French Government to help broker a deal with President Woodrow Wilson. This entailed France and Britain supporting the creation of a League of

Nations dedicated to maintaining world peace after the First World War if the United States entered the war on the side of the Allies. Successfully negotiated, Bergson was appointed President of the League's International Committee for Intellectual Cooperation, a position he retained until 1925 – much to the chagrin of André Breton and some other Surrealists, as is elaborated in Chapter 8 of this book.

Following Albert Einstein's visit to the French Society of Philosophy in 1922 and his response to a lecture by Bergson, Bergson published *Durée et simultanéité apropos de la théorie Einstein* in which he pointed out their differences, as was highlighted by Maurice Merleau-Ponty.⁵² Despite 'Bergsonmania' waning later during the 1920s, especially after Bergson's retirement from the Collège de France, *L'Évolution créatrice* was awarded the Nobel Prize in 1927. Sadly by this time Bergson was too crippled with rheumatoid arthritis to travel to Stockholm to accept it. Nevertheless he continued to be honoured and published, three years later being awarded France's highest honour, Grand-Croix de la Legion d'honneur, followed by publication of his book, *The Two Sources of Morality and Religion*, in which he explored the *mécanique/mystique* duality: The experiences of mysticism and mechanicism.⁵³

On the Nazi Occupation of France, Bergson wrote on 1 July 1940: "I have seen this coming for several years now. We have touched the bottom of the abyss. At least now we know what is evil."⁵⁴ In December 1940 aged 81, Bergson declined the Vichy government's offer of exemption from Nazi regulations requiring the resignation of all Jewish employees from State positions. Offering solidarity with the suppression of the Jews, Bergson resigned his position from the Collège de France and registered at the Gendarmerie as "Academic. Philosopher. Nobel Prize Winner. Jew." Despite being seriously ill, he left his sick-bed to queue with other Jewish people to receive the Yellow Star required of all those with Jewish heritage. Contracting pneumonia, Bergson died on 3 January 1941. After his death in Nazi

occupied Paris, Bergson's philosophies were explored most notably by Georges Canguilhem, Merleau-Ponty, Jean-Paul Sartre and Gilles Deleuze during the 1950s. Yet most of all it was Deleuze's *Bergsonism* published in 1966 in which Bergson's intuition and memory were re-examined as an interpenetrating concept of *becoming* in which the past co-existed with the present that gave, in the words of Craig Lundy, "new life to Bergson's thought".⁵⁵ So overwhelming was its impact during Bergson's lifetime that many Modernists identified Vitalism with Bergsonism, as Brandon Taylor illuminates in his exploration of Dada and Neo-Dada in Chapter 7. This is endorsed by the quotation provided by Roberts in Chapter 8 extrapolated from Stephen Lehan: "If the moderns did not have Bergson, they would have had to invent him."⁵⁶ Yet while the dominance of Bergsonism and Bergson's philosophies are examined in Chapters 5, 7, 8 and 9, the Modernists who pursued the vitalist philosophies of Nietzsche are explored in Chapters 2, 3 and 6. How integral Driesch's vitalism became to the nexus between the 'psychic force' and the 'vital force' is illuminated in Chapter 4.

Despite the rapid growth of interest in the interrelationship of these philosophies, sciences and energies to Modernist artists, this is the first major exploration of their different engagements with Vitalism.⁵⁷ That there appear three main dimensions to *Vitalist Modernism*, arising from these philosophies, sciences and energies in relation to Modernist art is signified by the organization of the chapters of this book into three main parts. Posited against positivist empiricism, mechanism and rationalism, the first part of this book reveals how Vitalism at the fin de siècle became correlated with the pursuit of raw nature, wholesome environments, aquatic therapies, heliotherapy, modern sports, water sports, physical culture and eurythmics to energize the human body and, in so doing, vitalize its life force. The second part of this book explores how Vitalism became simultaneously aligned with anthroposophy, esotericism, magnetism, mesmerism, mysticism, occultism, parapsychology, spiritism, theosophy and what Bergson called "psychic states", alongside such new sciences

as electromagnetism and radiology. During and after the devastation of the First World War, the third part examines how Vitalism, particularly Bergson's theory of *becoming*, became associated with Dadaist, Neo-Dadaist and Surrealist notions of amorality, atemporality, dysfunctionality, entropy, irrationality, inversion, negation and the nonsensical, alongside John Cage's concept of *Nothing*. After investigating the widespread engagement with Bergson's philosophies amongst Anarchists, Marxists and Communists concerned with Vitalism and art during and after the First World War, the concluding chapter reveals the official rejection of Bergson and any form of Vitalism in the Soviet Union under Stalin. Yet it also reveals how Vitalism was smuggled back into Soviet culture during the Great Patriotic War through art. How this happened is elucidated in the following summary of the three parts, ten chapters and Modernist artists in their relationship to these multiple dimensions of Vitalism.

BioVitalism: Corporeal Regeneration, Environmental Purification and National Evolution

Faced with increasing depopulation, corporeal degeneration and rampant diseases in *The Sick City* and "a queasy sickening feeling that all was not right", many Modernists expanded the field of art into raw nature, ethnic communities, modern sport and physical cultures.⁵⁸ Disturbed by toxic industrial environments with rapidly inclining suicide rates, accelerating alcoholism, rampant syphilis, degenerating bodies and the prospect of national devolution, such Modernists as diverse as Frédéric Bazille, Paul Cézanne, Gustave Caillebotte, Henry Scott Tuke, Thomas Eakins, Edvard Munch, Robert Delaunay and Albert Gleizes sought to picture the vitalization of energies through regeneration of the body. They did so through their imaging of such modern sports as swimming, diving, rowing, yachting,

rugby, soccer and the new physical culture. This is explored in the first part of this book in which *BioVitalism* is the focus of its first three chapters by Anthea Callen, Patricia Berman and Pascal Rousseau.

In Chapter 1, Callen illuminates how manly vitality, virility and hygiene were perceived to arise through French male bodies becoming immersed in water sports. The concern with water throughout the nineteenth century was, Callen points out, not just as a source of hygiene and cleanliness. Following the new hygiene regimes, public baths were revalued for cleansing the body. Rivers, lakes and seas became highly valued as a locus for not just cleansing the body but invigorating it in raw nature, particularly through sailing, rowing, swimming and diving. Designed to counter degeneration in modern urban society and the prospect of devolution, Callen explores how water sports became integral to the generation of a body culture able to achieve the ‘vital life force’. More specifically, Callen focuses upon how water-sports and hygiene became instrumental in virilizing, vitalizing and homoeroticizing the modern male body, as illustrated by her examples of Gustave Caillebotte’s and Georges Leroux’s naked male divers (Figs. 1.4 and 1.5), Caillebotte’s muscular naked man drying himself after his bath (Fig. 1.6), Frederic Bazille’s naked ‘wild bathers’ (Fig. 1.7), and Thomas Eakins and Caillebotte’s rowers (Figs. 1.8 and 1.9).

In the following chapter, Berman reveals how and why Munch’s Nordic female and male bodies, which appear just as muscular, healthy and hygienic as those of Bazille, Caillebotte and Leroux, were meant to appear virilized and vitalized through sunshine, sea-water and exercise in order to regenerate the Nordic race. This is epitomized by the murals that Munch created between 1909 and 1916 for the newly built Aula (Festival Hall) in Norway’s Royal Frederiks University, now the University of Oslo. Designed to capture, in Munch’s words, “the great forces that govern humankind”, they illuminate the University’s research into electromagnetism, heliotherapy, open-air athleticism and sky science.⁵⁹ In the

paintings of the naked Norwegian men and women flanking the central mural of the sun, the solar rays are pictured as so energizing that their bodies appear to be brought to life by them (Figs. 2.2a, 2.2b and 2.2e) while embryos seem to germinate within them (Fig. 2.2d). Drawing upon Gilles Deleuze's elaboration of Bergson's theory of creative evolution, Berman perceives that the multiple contours with which these bodies are rendered make them appear as if they are in a radial state of *becoming*.⁶⁰ At the central core of these murals, Munch captured *The Sun* as the dominant life-giving force and ultimate signifier of Vitalism – the antithesis to fin-de-siècle decadence, pollution and decay. This is why *The Sun* was chosen for the cover of this book.

For such artists as Caillebotte and Munch, *Biovitalism* could be explored beyond the fringes of such modern art centres as Paris, Oslo and Berlin. It could also be explored amongst seemingly untouched and uncontaminated environments that better represented an organicist concept of Vitalism. This is illustrated by the energizing air, light and water of Caillebotte's summer home on the Yerres River south of Paris and the estate where Munch lived and worked for some 28 years, Ekely at Skøyen. For such early twentieth century German Expressionists as Albert Bloch, Fritz Bleyl, Erich Heckel, Ernst Kirchner and Karl Schmidt-Rottluff who formed *die Brücke* and who were propelled by Nietzsche's Dionysian Vitalism, unspoilt nature became a source of biovitalism, particularly the countryside by the Moritzburg lakes and the Island of Fehman in which they could immerse their mostly naked bodies over summer from 1907 to 1911.⁶¹ Yet for a new generation of young Modernists such as Robert and Sonia Delaunay, Picasso, Umberto Boccioni, Tristan Tzara and Kurt Schwitters, the source of new vitalizing energies they felt pulsating through their veins was the modern metropolis. From 1900, Paris seemed to have become the vitalizing centre, as illuminated by Chapters 3, 4 and 5. Nevertheless the French capital was not without problems of degeneracy and devolution.

Despite the widespread pursuit of modern energizing sports in France since the Franco-Prussian War and the Commune, Paris still appeared to be so plagued by depopulation and degeneration by 1898 that renowned physiologist, Charles Richet, questioned whether France would perish.⁶² For Baron Pierre de Coubertin, rugby was the panacea. Despite his revival of the Olympic Games, no other sport could revitalize the French body and its energies moreso than rugby, according to Coubertin, as exemplified by its inspirational practice at the English School of Rugby.⁶³ By 1892, the first international rugby match was played in Paris. Nearly twenty years later, after beating the strongest rugby international team, the Scots, the French Rugby team achieved their first major victory. When due to play their next match against the Scots in Paris in 1913, unsurprisingly it received sensationalist newspaper and billboard coverage which inspired Robert Delaunay's series of paintings, *L'Équipe de Cardiff* (Fig. 3.1). Boosted by this new cult of action and Coubertin's Internationalist Vitalism, plus Bergson's and Nietzsche's philosophies, in Chapter 3 Pascal Rousseau reveals how Delaunay simulated the chromatic sensation of strident billboards and colourful rugby guernseys at football stadiums in his paintings to generate the intense experience at rugby matches of vitalist sensations.⁶⁴ In his comparison of Delaunay's painting with *Les Joueurs de football* by Albert Gleizes (Fig. 3.2), Rousseau also reveals why Delaunay abandoned Gleizes' vitalist group dynamic for the Vitalism of heroic individualism epitomized by Nietzsche's "overman".⁶⁵ Yet for Delaunay's Paris-based Spanish contemporary, Picasso, Vitalism took a very different course (Fig. 5.1), as is revealed in the second part of this book.

Occultist Vitalism: Magnetism, Parapsychology, Spiritism and Theosophy

Some 'Metrovitalists' pursued Vitalism through Occultism, particularly its relation to anthroposophy, magnetism, parapsychology, spiritism and theosophy. At the same time many of those pursuing Occultism and the esoteric facets of Vitalism embraced the new sciences, particularly electromagnetism, Roentgen's X-rays and radiology, wireless telegraphy and theories of the luminiferous ether through which electromagnetic waves were perceived to travel. Given the flow of knowledge between the new sciences and occult sciences, both were regarded as vitalisers of an invisible energy that could be physically, emotionally and spiritually transporting, as well as creatively liberating. "Rather than occultism being on the fringe of culture in the late 19th and early 20th century", as Linda Dalrymple Henderson succinctly surmises, "the occult was closely connected to the newest developments in science in a period when the two fields were not seen as so clearly demarcated as later in the 20th century."⁶⁶ This is the focus of the second part of this book.

Throughout the nineteenth century, the new research into science and medicine did not necessarily exclude magnetism, mesmerism, hauntings, phantoms and ghosts in what became known as the psychic sciences. In 1855, Fellows at Trinity College, Cambridge, began to discuss psychic sciences and paranormal phenomena, including ghosts. Seven years later, The Ghost Club was formed with such members as Charles Dickens. Dissolved in 1870 following the death of Dickens, The Ghost Club was revived on All Saints Day in 1882. This was the very year that the Society for Psychical Research (SPR) was incepted. Four years later, one of the earliest exhibitions dedicated to ghost imagery opened at St. James Hall in London. Entitled *The Phenomena of Materialization*, 28 images of ghostly materializations were displayed in this exhibition.⁶⁷ These included, as Keshavjee illustrates in Chapter Four, James Tissot's celebrated mezzotint, *Apparition Mediunimique* [sic], *Dark séances d'Eglinton du 20 May 1885, Londres* (Fig. 4.3) showing the materialized ghost of Tissot's

deceased lover, Kathleen Newton, with a ‘Spirit Guide’. Simultaneously Spiritualism grew rapidly with visualization of apparitions by spirit photographers including John Gerard Keulemans “miniature face forms” emerging from excreted ectoplasm (Figs. 4.4, 4.5 and 4.6). As Florence Raulin-Cerceau surmises, it became widely assumed that life could begin without the input of an external agent.⁶⁸

With comparable research and visual cultures emerging in Paris, a parallel may be drawn between these two centres. However, it was in Paris at the fin de siècle, as Keshavjee reveals, that ‘the vital force’ and ‘the psychic force’ were being extensively investigated in relation to the unconscious. This was happening particularly through hysterical trances and psychic phenomena, as demonstrated by spiritualists, mediums, séances and the excretion of ectoplasm. Hence, while Ostwald was exploring ‘energetism’, the “idea that energy is the substrate of all phenomena”, Dr Charles Richet and Camille Flammarion were conducting extensive research into the psychic sciences of Vitalism that long preceded Bergson’s publication of *Creative Evolution*. Seven years before Bergson theorized Vitalism in *Creative Evolution*, Keshavjee points out, “Flammarion had widely disseminated his teleological Vitalist theory of evolution whereby the law of progress ... regulates all life.”⁶⁹ It was Flammarion’s concept of a directing dynamism moreso than Bergson’s “l’*élan vital*” that Keshavjee considers was appropriated in 1919 by Dr. Gustave Geley when he became Director of the Institut Métapsychique International of Paris. Seminal to their research were visualizations of these concepts of the vital force that shifted, following Keshavjee’s examples, from glowing luminous energy to mechanical forces. This is illuminated by extensive photographs of the performative medium, Eva Carrière, excreting whitish, jelly-like material alongside Juliette Bisson’s and Schrenck-Notzing’s magnesium flash photographs of ectoplasm seemingly directed by a vital force illustrated in Figs. 4.9 and 4.10.

What is sometimes overlooked are these extensive and intensive artistic and culturo-scientific explorations of occultisms being conducted in *avant-guerre* Paris. Yet from the time that Picasso moved in with the poet, Max Jacob in 1901, Jacob acted as a conduit or point of mediation for them elucidating to Picasso alchemy, astrology, chiromancy, magic, palmistry and the Tarot. Picasso was also exposed to magnetism, mediumism, mesmerism, mysticism, spiritism and Bergsonism, the creative outcome of which is explored in Chapter 5. In fact, the very year that Picasso began exploring what is now called Cubism, Bergson's *L'Évolution créatrice* was published. At this time, the renown Parisian magnetist Hector Durville also began experimenting with phantasmatic photography, Baraduc produced *psychicones*, while Albert de Rochas was documenting and photographing magnetized performers and endeavouring to capture 'the vital force'. The ramifications of these uncanny conjunctions are illuminated by my examination of Picasso's Hermetic Cubism which I have called Occultist Cubism in its relation to phantasmatic luminescence and Bergson's concept of "psychic states". Since it is possible to identify Picasso as perpetually playing with concepts of Vitalism, I have called this chapter, *Vitalist Picasso*.

In scrutinizing Picasso's fusion of the new sciences and Bergsonian philosophies with Occultisms, what I have endeavoured to illuminate is how Picasso's Vitalism differed substantially from his earlier explorations of the experience that I have called "becoming simian" and his encounter with African tribal masks.⁷⁰ To unravel its relationship to Bergson's "psychic states", durational being and *l'élan vital*, as well as to phantasmatic luminescence, his Vitalist Cubism is then explored from three multidimensional perspectives.⁷² Initially Picasso's rupture with positivist empiricism and scientific realism is conveyed by comparing Picasso's durational portrait of Daniel-Henry Kahnweiler with Léon Bonnat's empirical *Portrait of the President of France: Armand Fallières*. Unlike Bonnat, Picasso did not render Kahnweiler's portrait from life, in the same stationary position with a

single light source, let alone from direct observation of his art dealer sitting in the same position every time they met. Instead I consider how Picasso's portrait was rendered as a felt experience from sensory memory to capture Kahnweiler's "psychic states" in a non-sequential time and "tactile" space as conceived by Bergson's duration and, following Deleuze's extrapolation from Bergson, a body without organs.⁷³ In the second part of the chapter, Kahnweiler's portrait is rescrutinized through the lens of spiritist photography captured by Baraduc, as well as the magnetist photography of phantoms with uncanny luminescence captured by Durville and Rochas. In the final part, the fusion of *l'élan vital* and *la force vitale* is explored through the conjunctions of Bergsonism with hermeticism, mysticism and occultism in Picasso's illustrations for Jacob's semi-autobiographical prose-poems, *Saint Matorel* and *Le Siège de Jérusalem*. This entailed a very different exploration of Bergsonian Vitalism to that pursued by the Futurists from 1910, particularly by Umberto Boccioni.

From 1910 to 1911, an affinity between Boccioni's stated explorations of Futurism and Picasso's Occultist Cubism may be discerned. In the 1910 *Technical Manifesto of Futurist Painting*, Boccioni's claim to penetrate "the opacity of bodies" seemed to endorse the transparency of Picasso's Cubist bodies.⁷⁴ Their relative affinity appeared to be reinforced by the occultism of Boccioni's Vitalism alongside his relationship to Bergsonism. Yet as David Mather reveals in Chapter 6, Boccioni denounced Picasso's Cubism as "the result of an impassive scientific calibration" drained of life.⁷⁵ Mather then considers how Boccioni's deployment of a full chromatic scale may be regarded as an outright rejection of what he called Picasso's "ghostly emanations" in his dark Cubism. In response to the question, "What Divides us from Cubism?", Boccioni did not hesitate to identify Cubism as "a dead stop" supposedly "lacking all vitality".⁷⁶ In contrast, Boccioni argued passionately in favour of Futurism's chromatic intensity as the prime signifier of its Vitalism, particularly in its

engagement with the vitalist dimensions of Bergson's philosophy. Following Bergson's metaphor for duration as a kaleidoscope blazing with a full range of vitalistic colours and intensities, Mather explores how Boccioni then developed this into Futurism's chromatic strategy to vitalize intuitive perception of all energizing phenomena, transform the Italian beholder and inspire new social configurations.⁷⁷ Nevertheless, the life-enhancing and socially regenerative dimensions of Futurist chromatic Vitalism were counter-balanced, as Mather reveals, by the incendiary dynamism of vitalist destruction and Italy's interventionist strategies in the First World War. Ending the second section of this book with the First World War then provides an historical segue to the third part, *Bergsonian Neo-Vitalism* in which *becoming* is explored in relation to absurdity, dysfunctionality, inversion and negation in Dada, Neo-Dada and Surrealism during and after this War.

Neo-Vitalism: Absurdity, Dysfunctionality, Inversion and Socialism

In Chapter 7 provocatively entitled *Was Dada Vitalist?*, Brandon Taylor stresses the hostility of Hugo Ball to utilitarianism and mechanization, particularly given their linkage to the mass destruction of war. So illogical and inhumane was this carnage that this was why, as Taylor points out, Theo van Doesburg's "neo-Vitalism" entailed such inversions as amorality, atemporality, discord and indifference alongside tactics of absurdity, contradiction, detachment, illogicality, irony, parody, randomness, negation and the nonsensical. Underlying these tactics, as Taylor reveals, was the dialectical interplay of absence and presence, assertion and denial, construction and destruction. While Dada Neo-Vitalists were identified as Albert Einstein and Charlie Chaplin, due to Bergson's phenomenology of negation and "The Idea of Immutability and the Idea of Nothing", Taylor singles him out, particularly the

dialectic of extremes Bergson theorises in *L'Évolution créatrice* “to escape from the cinematographic mechanism of thought”.⁷⁸ In performing these dialectical strategies in protest against what Hugo Ball called “the mechanical world”, Taylor reveals how these Dadaists illuminated the absurdity of mass devastation while affirming intuitive rhythm, instinctive performativity and *becoming* as enhancing energies that could be unleashed in unpredictable interdisciplinary art. How this was pursued is demonstrated by Taylor’s incisive readings of the *antipoetry* of Ball, *Bruitism* of Richard Huelsenbeck, *Ready-mades* of Marcel Duchamp, “non-zoological vitality” of Picabia, *Counter-Compositions* of Theo van Doesberg alongside Kurt Schwitters’ vitalist intuition in his *Merz*. These readings encompass Bergsonian paradoxes in which nothing energizes something, culminating in Taylor’s brilliant decoding of Cage’s *Lecture on Nothing*.⁷⁹

In the following Chapter 8, Donna Roberts examines Bergson in relation to Surrealism, “the vital impetus” and what she calls, after Salvador Dalí’s painting, “The Persistence of Memory”. Due to André Breton’s resistance to Bergsonian Vitalism, the connection between Surrealisms and Bergson’s philosophies has received relatively little scrutiny. Yet paradoxically, as Roberts points out, both Bergson and Breton outrightly rejected what Breton calls “chop logic” for open-ended flux. Both explored the flow of time, the organic nature of memory, the self-creative impetus, experiential environmental relationships, co-evolution and interspeciality through what Bergson called “reciprocal interpenetration”.⁸⁰ Deploying a post-Deleuzian methodology, Roberts then examines how Bergson’s melding of memory with organicism in an intuitive and “an *eco-logical* vision of the contemporary world”,⁸¹ may be correlated to Surrealism. From this perspective, Roberts considers that Surrealism may have engaged, moreso than any other Modernist movement, “the radically transformative possibilities of an open-ended, spontaneously creative principle of life and art”, as illuminated by Julien Gracq’s identification of the concept of

“automatism” articulated in the First Manifesto of Surrealism as “highly Bergsonian” and by the correlations between Roger Caillois’ explorations of instinctual sympathy and Bergson’s concepts of co-evolution. This is also illuminated by her exploration of such contemporary philosophers of vitalism as Monica Greco and Elizabeth Grosz, as well as Robert Mitchell’s concept of “experimental Vitalism”. Having navigated their theories in the first part of her Chapter 8, Roberts then deploys them as tools in her second and third parts to dissect the Bergsonian vitalism in Dalí’s *The Persistence of Memory* (Fig. 8.1) and Yves Tanguy’s two paintings, *And there it is! (The Evening Before)* (Fig. 8.2) and *Heredity of Acquired Characteristics* (Fig. 8.3).

That Dalí was able to portray the incongruity of measured time in relation to the organic flow of time and memory is illustrated by Roberts scrutiny of *The Persistence of Memory* (Fig. 8.1). Bergson’s juxtapositions of artificially measured clock time with the fluid psychological time of memory in which the past flows into the present and anticipations of the future is the context for her decoding of Dalí’s dream painting. Memories of the golden Cap de Creus cliffs of the Costa Brava, its aquamarine seawater by the clay-filled Catalan earth of Dalí’s childhood seem to form his unconscious mind-place on which Roberts discerns Dalí’s somnambulistic phantom in dream states. Despite the conundrum between physical time and psychological time that Paul Davies calls a “glaring mismatch”, Dalí’s dream states seem to be echoed by Dalí’s notorious pocket watches melting, which Roberts relates to Bergson’s experiences of the sensation of clock chimes melting into one another in unbroken continuity – each moment permeating one another through intuition. Roberts then explores how Tanguy captured the coming-into-being of primitive and aquatic life forms and their relationship to the process of painting as an open-ended inner duration in his paintings, *And there it is! (The Evening Before)* (Fig. 8.2) and *Heredity of Acquired Characteristics* (Fig. 8.3).

To identify the character of deep-sea life in the planet's oceans and determine the penetration of light, British oceanographers within The Royal Society of London had launched the Challenger Expedition in 1875. Some 4,700 unknown species and oceanic trenches were discovered and measured, the depth of the Mariana Trench being found to well exceed the height of Mount Everest. Already the zoologist Ernst Haeckel at the University of Jena had embarked upon explorations of marine biology in the Mediterranean and the Canary Islands from 1866, naming 150 new species of radiolarians while demonstrating the affinities between the embryos of fish, salamanders, chickens, cows, pigs, rabbits and humans in his 1874 tome, *Anthropogenie*.⁸² From 1899 to 1904, radiolarians, cnidarians, sea anemones and medusas were also copiously illustrated in Haeckel's book, *Artforms in Nature*.⁸³ These explorations were well-known to the French Neo-Lamarckian naturalists, Alphonse Milne-Edwards and Edmond Perrier, at the Muséum National de l'histoire naturelle in Paris. From 1880 to 1883, scientific expeditions funded by the French Education Ministry had been conducted by French marine biologists aboard the *Travailleur* and *Talisman*, which led to Perrier's reports on *Annélides*, *brachiopods*, *crustacions*, *mollusques*, *Cirrhipèdes* and *Echinodermes* and Perrier's 1891 book, *Les Explorations sous-marines*.⁸⁴ By that year, France hosted the largest number of marine laboratories.⁸⁵ Hence scientific research into marine biology and its relationship to evolution was well underway in France by the time that Bergson was drafting *Creative Evolution* and Tanguy travelled to Africa and America as a merchant marine officer cadet in 1918, returning to Africa in 1930.

Given Tanguy's time in the merchant navy and his family origins in Brittany, in Chapter 8 Roberts points out that his artwork has been invariably correlated with the submarine. Yet it was the experience of being deeply underwater, far removed from sunlight, amidst billowing gases, star-like phosphorescence and hybrid humanoid forms, according to Roberts, that was captured in Tanguy's painting with a title inverting the progressive

chronological imperative, *And there it is! (The Evening Before)* (Fig. 8.2) Imaging what Roberts calls “sprouting flora, spermatazoic organisms and cloudy gaseous emissions,” she perceives that this painting appears “to ripple with vital energy and a poetic pleasure in ambiguity.” At the same time, she also explores how it invokes “a vivid image of involution, harking back to deep ancestral states of primordial indistinction” that Bergson theorizes in *Creative Evolution* as evolutionary anteriority. Conceiving of Tanguy’s artwork as less Freudian than Bergsonian, more concerned with capturing concepts of memory and *déjà vu* than unravelling the unconscious, Roberts then observes how the solitary spermatozoon in Tanguy’s painting seem to “imply a picture of life as pre- or non-human anteriority in the process of *becoming*, with the darkness making of space an infinite temporality.” While acknowledging the Lamarckian evolutionary derivation of Tanguy’s title for Fig. 8.3, *Heredity of Acquired Characteristics*, Roberts deduces that the amorphous nature of its life-forms in an indeterminate space signify deep time. This deduction seems to be affirmed by the correlation of the Lamarckian title and images in Tanguy’s painting to the deep-time geological research conducted by Jean-Baptiste Lamarck into the earliest and simplest of microscopic organisms for his *Hydrogéologie* (1802), *Recherches sur l’organisation des corps vivans* (1802) and *Philosophie zoologique* (1809).⁸⁶ Roberts then concludes that Bergson’s explorations of the organic vitalism imbricated within different forms of duration appear to come “most vividly into play” in the artwork of Tanguy with the coming-into-being of Tanguy’s indefinite life forms also configuring the gestational process of painting as one of inner duration precipitating matter and consciousness over deep-time. In the following chapter, the relationship of vitalism to cultural and political ideologies at this time is explored.

In the *Surrealist Map of the World*, published in 1929, all of Europe, except for Paris, plus the United States of America have disappeared along with other countries identified with

colonial imperialism.⁸⁷ Inverting the Eurocentric world view on this map, the margins seem to have become the centre with the Pacific Ocean appearing at its focal point while Russia looms so large that it appears to dominate. Although Tanguy's political ideologies rarely appeared explicit, unlike those of Dalí, he endorsed Socialism. A political activist at that time aligned with the Vitalist Left, in 1931 Dalí became involved with the Communist Group in Spain, *The Workers and Peasants Bloc*. Yet from the time that *La Révolution Surréaliste* was launched on 1 December 1924, the Surrealist revolution had become identified as inextricably intertwined with Marxist theories and the Communist revolution, Breton and four other Surrealists joining the Parti communiste française in January 1927, although not for long. That the Vitalist Left and its artists became inextricably intertwined with Communism, Bergsonism and creativity is examined in Chapter 9 by Mark Antliff.

Even though Bergson was a major influence upon Surrealism, Dada and Futurism, as this book demonstrates, the three other important sites of vitalist thinking were, as Antliff identifies in Chapter 9, the Paris-based journal *Action d'Art* edited by the poet, philosopher and theatrical performer, André Colomer; *Creative Revolution: A Study of Communist Ergotocracy*, by Eden and Cedar Paul, and the Bergsonian Vitalism of Georges Sorel. So closely involved with *Action d'Art* did the Paris-based Futurist, Gino Severini, become that he planned to launch a Théâtre d'Action Art.⁸⁸ Not only was Bergson deployed by Colomer to promote Max Stirner's radical nominalism but also to release intuition, achieve the anarchist creative self and turn their lives into works of art.⁸⁹ Outraged, Pieter Kropotkin attacked Bergson's *Creative Evolution* as "elegantly fantastical assertions" with no basis in scientific facts.⁹⁰ This elicited what Antliff calls Colomer's "stinging rebuke" entailing a Bergsonian critique of communist concepts of collectivity and a defence of intuitive knowledge for overcoming habitual thinking, releasing willed empathy and grasping the creative life force permeating the cosmos.⁹¹

While the syndicalist and “shop-steward” movements were identified by the Pauls as manifestations of the vital impulse, Antliff points out that they considered the First World War activated “a highly creative break” enabling Bergsonian Vitalism to transform history. More specifically Bergsonian Vitalism corresponded to, as Antliff reveals, Lenin’s “soviet dictatorship”, able to nurture “individual freedom”. For the Pauls, the Soviet state born of the revolution constituted a vital order, “flexible” and “mobile” like duration itself, with Lenin as the “Great artist” producing by means of creative revolution “other artists”. In his focus, Antliff then portrays a very different Bergsonian conception of the Soviet Union to that conveyed in the following chapter by Patricia Simpson.

From the time that *L'Évolution créatrice* was published in 1907, Moscow University students avidly read and discussed Bergson’s philosophy.⁹² By 1914, all of Bergson’s writings had been translated into Russian, as had Dreisch’s *Vitalism: Its History and System*. While the Russian Formalists, Viktor Shklovsky and Yuri Tynianov, engaged with Bergsonism, such Russian Modernists as Wassily Kandinsky drew upon Bergson’s reconceptions of time and space.⁹³ In turn Kazimir Malevich correlated non-objectivity in his art to creative intuition, while defining his Suprematism as Bergsonian unbounded creativity able to encompass all aspects of life.⁹⁴ However, as Simpson points out in Chapter 10, after the Stalinist shut-down of avant-garde cultures, by 1930 “vitalist” and “Vitalism” constituted terms of abuse signifying enemies of the state.

Nevertheless ironically by the Great Patriotic War against Nazi Germany, Simpson reveals that Vitalism was seemingly smuggled into the Darwin Museum in Moscow. As “evolutionary psychotherapy”, it was designed to revitalize wounded soldiers suffering “shell-shock”. Artworks were commissioned by the Directors of the State Darwin Museum, Dr Aleksandr Kots and his wife, Nadezhda Ladygina-Kots, from the zoologist and “animalist” sculptor and painter, Konstantin Flerov, featuring “animals as a means and

weapon of war” alongside models of superhuman physiological strength identifiable with the Soviet aspirational model of the “New Man”.⁹⁵ Designed to illustrate the stories that Aleksandr Kots told the Soviet soldiers about the roles played by animals and humans, these paintings would have been also used to identify the heroes or villains with whom the soldiers should feel empathy or *sobornost’* – the covert vitalistic elements of Soviet “Creative Darwinism”.

Hence in these ten chapters exploring the conception of life as a constant process of metamorphosis impelled by the free flow and momentum of physiological and psychological energies to generate *creative evolution*, this book endeavours to reveal how Vitalism became widely and diversely engaged by Modernists. It endeavours to chart how their engagement entailed the rejection of positivist empiricism, mechanical materialism, “chop logic” and chronometric imperatives for such new vitalist concepts as those philosophized by Bergson, Driesch and Nietzsche, amongst others, amidst the new corporeal and psychological energies being unleashed by modern sports, physical cultures, the new psychology, spiritisms and occultisms. It reveals how those Vitalist Modernists who did so included Hans Arp, Sophie Taeuber-Arp, Juliette Bisson, Hugo Ball, Giacomo Balla, Umberto Boccioni, Georges Braque, John Cage, Gustave Caillebotte, Eva Carrière, Carlo Carrà, Charlie Chaplin, Bruno Corra, Salvador Dalí, Robert Delaunay, Marcel Duchamp, Albert Gleizes, Richard Huelsenbeck, Louis Lumière, Kazimir Malevich, Edvard Munch, Francis Picabia, Picasso, Enrico Prampolini, Ivan Puni, Barbara Reichel, Luigi Russolo, Kurt Schwitters, Gino Severini, Yves Tanguy, Vladimir Tatlin, Tristan Tzara and Theo Van Doesburg. It examines how these Vitalist Modernists explored intuition, instinct, spontaneity, chance, empathy, intense emotion, memory, hypnosis, mesmerism, occultisms, ‘psychic states’, unconscious states, uncanny vibrations, socialism, communism and a continuous flow of time through duration fusing the present, past and future within the concept of *becoming*. Nevertheless

despite the immense significance of Vitalism to these Modernist artists from Caillebotte in *Impressionism* France to Cage's *Lecture on Nothing*, first performed in Manhattan in 1949, this book ends with its decline during the Second World War and a paradox: That even when outlawed by Stalin, it was smuggled back in through art during the Great Patriotic War in order to revitalize traumatized Soviet soldiers.

Endnotes

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 - 2 Wilhelm Ostwald, "The Modern Theory of Energetics", *The Monist*, 17/4 (1907): 481-515.
 - 3 Helge Krage, *An Introduction to the Historiography of Science* (New York: Cambridge University Press, 1989).
 - 4 Paul Walden, *Wilhelm Ostwald* (Kessinger Publishing: 1904) 231.
 - 5 Wilhelm Ostwald, *Der energetische Imperativ* (Leipzig: Akademische Verlagsgesellschaft m.b.H., 1912).
 - 6 Charles Darwin, *The Descent of Man, and Selection in Relation to Sex* (London: John Murray, 1871) 212.
 - 7 Hippolyte Taine, *Les Origines de la France contemporaine*, vol. 1 (Paris: Hachette, 1896) 70-71.
 - 8 Michael T. Michael, "Unconscious Emotion and Free-Energy: A Philosophical and Neuroscientific Exploration", *Frontiers in Psychology* (21 May 2020) <https://doi.org/10.3389/fpsyg.2020.00984>

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- 33 Robert C. Grogin, “Henri Bergson and the University Community, 1900-1914”, *Historical Reflections*, 2/2 (1976): 209.
- 34 Henri Bergson, *Matière et Mémoire : Essai sur la relation du corps à l’esprit* (Paris: Félix Alcan, Éditeur, 1896); *Matter and Memory*, trans. Nancy Margaret Paul, W. Scott Palmer (New York: Zone Books, 1988) 200-1.

³⁵ Linda Dalrymple Henderson, "Writing Modern Art and Science – An Overview. Cubism, Futurism and Ether Physics in the Early Twentieth Century". *Science in Context*, 17/4 (December, 2004): 423-466.

36 Bergson, *Creative Evolution*, 89.

37 In *The Perfect Wagnerite* published in 1895, Shaw mentions an impulse in nature he calls the "life-force" able to change matter and generate new forms.

38 Stephen Lehan, "Bergson and the Discourse of the Moderns," *The Crisis in Modernity: Vitalist Controversy*, eds. Frederick Burwick, Paul Douglass (Cambridge: The Cambridge University Press, 2010) 311.

39 Bergson, *Creative Evolution*, 313.

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43 Henri Bergson, *L'énergie spirituelle : essais et conférences* (Paris: Librairie Félix Alcan, 1919): Its English translation as *Mind Energy*, appears inaccurate given the contents addressing *L'au-delà*, 29, *L'Âme et le corps*, Chapitre II, and *Fantômes et vivants*, Chapitre III, in which Bergson explores *la "Recherche psychique"*; his philosophy was referred to as "a new spiritualism".

44 Grogin, *Henri Bergson and the University Community*, 213.

45 From the time that Bergson began teaching at the Collège de France, he proved so popular that he was blamed for students rejection of other academics, particularly Charles Péguy. By 1906, such strident student criticism of most of the other Sorbonne professors was made that a senatorial scrutiny of the complaints was conducted.

46 Gabriel Marcel, *The Bergsonian Heritage*, ed. Thomas Hanna (N.Y. 1962) 126.

47 *La Vie Parisienne*, 1912, 509; quoted by Grogin, 215.

48 Jacques Chastenet, *La France de M. Fallières* (Paris: Fayad, 1949) 213.

⁴⁹ Henri Bergson, “Phantasms of the Living” and “Psychical Research”: Presidential Address to the Society for Psychical Research, London, 23 May 1913, *Mind-Energy*, trans. H. Wildon Carr, ed. Keith Ansell Pearson and Michael Kolkman (Basingstoke, 2007), 77.

⁵⁰ J. Saussman, ““It’s organisms that die, not life””; Henri Bergson, Psychical Research and the Contemporary uses of Vitalism”: Chapter 1 in *The Machine and the Ghost: Technology and spiritualism in nineteenth- to twenty-first-century art and culture*, S. Mays and N. Matheson (eds) (Manchester : 2013) : 16-36.

⁵¹ Jesse Hong Xiang, *The Outline of Parapsychology* (London : 2009) 42.

⁵² Maurice Merleau-Ponty, *Signs*, trans. Richard C. McCleary (Northwestern University Press, 1964).

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⁵⁴ *Archives of Literary Life under the Occupation* (Paris: Hôtel de Ville Exhibition, 2011).

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The Spirit of Vitalism: Health, Beauty and Strength in Danish Art, 1890-1940, eds. Hvidberg-Hansen and Gertrude Oelsner, provides invaluable explorations of the interrelationship of nature, health and sport in Danish Vitalism but does not venture beyond Denmark. The excellent anthology, *Bergson and the Art of Immanence: Painting, Photography, Film*, eds. John Ó Maoilearca and Charlotte de Mille (Edinburgh University Press, 2013; paperback 2015) explores Bergsonism in relation to Duncan Grant, Roger Fry, Alfred Manessier and Jean Fautrier.

⁵⁸ Sharon L. Hirsch, “The Sick City”, Chapter 4, *Symbolism and Modern Urban Society* (Cambridge: Cambridge University Press, 2004) 121.

⁵⁹ Edvard Munch, Konkurransen om den Kunstneriske Utsmykning av Universitetets Nye Festsal (Competition for the Artistic Decoration of the University's New Festival Hall), pamphlet, 1911, x.

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Gilles Deleuze, *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1988); Eric Alliez, “On Deleuze’s Bergsonism”, *Discourse*, Vol. 20, No. 3 (Fall 1998) 226-246; Craig Lundy, *Deleuze's Bergsonism* (Edinburgh: Edinburgh University Press, 2018).

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C. Richet, "Faut-il laisser la France périr?", *Revue bleue* (1896): 620-622.

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Also refer Fae Brauer "Vitalist Cubisms: The Biocultures of Virility, Militarism and *La Vie Sportive*", *Sport and the European Avant-Garde (1900-1945)*, eds. Andreas Kramer and Przemyslaw Strozek (Leiden/Boston: Brill Avant-Garde Critical Studies, 2022) 19-56.

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Linda Dalrymple Henderson, "Rethinking Modern Art, Science and Occultism in Light of the Ether of Space: Wassily Kandinsky, Umberto Boccioni, and Kazimir Malevich", *The History of Art and 'Rejected Knowledge': From the Hermetic Tradition to the 21st Century*, ed. Anna Korndorf (Moscow: The State Institute of Art Studies, 2018) 218-37.

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The Phenomena of Materialisation; described in *Light*, vol. 6 (January 16, 1886): 34.

⁶⁸ Florence Raulin-Cerceau, *À la recherche d'intelligences extraterrestres* (Paris: Upper Editions, 2017); *Les origines de la vie. Histoire des idées* (Paris: Editions Ellipses, 2009).

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Flammarion, *The Unknown*, x.

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Fae Brauer, "Becoming Simian: Devolution as Evolution in Transformist Modernism", *Picturing Evolution and Extinction: Degeneration and Regeneration in Modern Visual Culture*, eds. Fae Brauer and Serena Keshavjee (Lady Stephenson Library, Newcastle upon Tyne: Cambridge Scholars Publishing, 2015) 127-156. The state of "becoming simian" arose during Picasso's midnight forays into the *Jardin des Plantes*. This was followed by his exploration of "becoming tribal" after Picasso's notorious epiphany experienced amidst the Musée de l'Homme collection of African tribal masks and sculptures.

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With Occultist Cubism, Picasso appears to have abandoned any confinement of the human body to a contour with a wholesome surface and a clear distinction between its interior and exterior, let alone a distinct separation from the world it inhabits.

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⁸² Ernst Haeckel, *Anthropogenie, oder, Entwicklungsgeschichte des Menschen* (Leipzig: W. Engelmann, 1874).

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⁸⁴ Alphonse Milne Edwards and Edmond Perrier, *Expéditions scientifiques du Travailleur et Talisman pendant les années 1880, 1881, 1882, 1883* (Paris: G. Masson, 1888-1906); Edmond Perrier, *Les Explorations sous-marines* (Paris: Librairie Hachette, 1891).

⁸⁵ Benoît Dayrat, "Henri de Lacaze-Duthiers and the creation of the Laboratoire de zoologie expérimentale, Roscoff, France", *Revue d'Histoire des Sciences*, 2/69 (2016) 335-368.

⁸⁶ For more on the relationship of Lamarck and Neo-Lamarckism to Modernism, refer Fae Brauer, "Becoming Simian: Devolution as Evolution in Transformist Modernism", *Picturing Evolution and Extinction:*

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⁸⁷ “Le Monde au Temps des Surrealists”, *Variétés*, “Le Surréalisme en 1929”, Belgium, 1929: Anonymous, this countermap has been attributed to Paul Éluard.

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