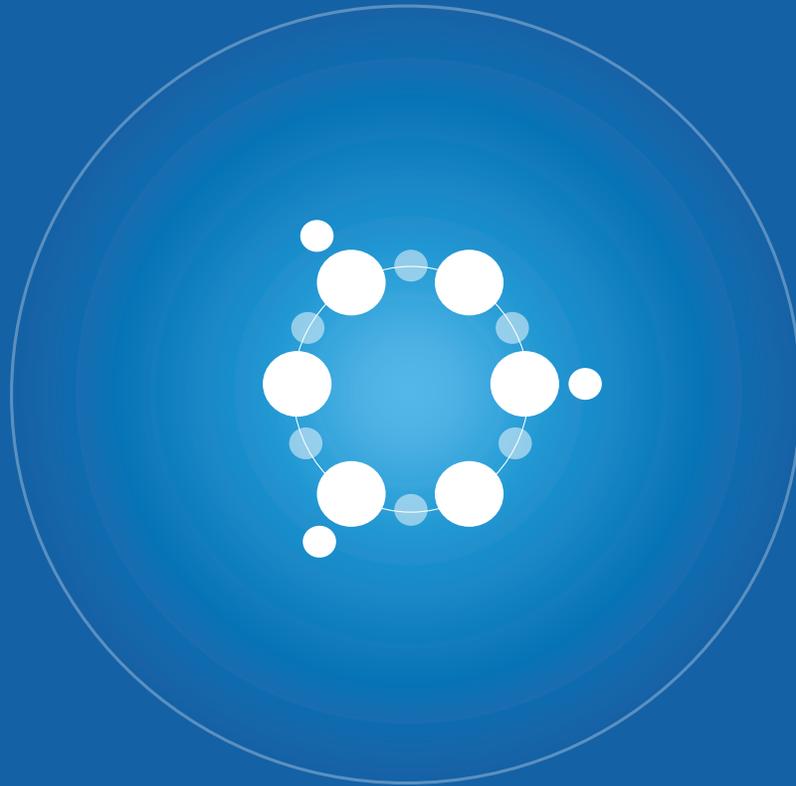# COMPLEX THOUGHT

RESOURCE PAPER

META INTEGRAL®
FOUNDATION
Impacting 1000 Years

COMPLEX THOUGHT
An Overview of Edgar Morin's Intellectual Journey

Alfonso Montuori

Edgar Morin was born in Paris in 1921. He is a French thinker with no fixed disciplinary abode whose contributions span a number of fields and cover a dizzying number of topics. Morin's imprint is to be found in fields ranging from media studies to visual anthropology, philosophy, action research, sociology, politics, systems theory, ecology, and education. Recently, with increasing frequency his contribution is being felt in the natural sciences, particularly in biology and the development of systems biology, with an answer to the limitations of molecular biology (Roux-Rouquié, 2000, 2002). In English, a language in which his work is relatively little known, references to his work can be found in the work of such diverse scholars as historian of religion Mircea Eliade (1978), sociologist Lewis Coser (1997), psychoanalyst Andre Green (2005), physicist Basarab Nicolescu (1997), philosopher Julia Kristeva (1997), historian Daniel J. Boorstein (1992), philosopher Sean Kelly (2010), philosophers of science Gianluca Bocchi and Mauro Ceruti (2002), Islamic scholar and Moroccan Imam Abdessalam Yassine (2000), mathematician William Byers (2007), Mexican Nobel Laureate in Literature Octavio Paz (1986), German philosopher Niklas Luhmann (1995), Iain Chambers (1994), the English scholar of Cultural and Postcolonial studies, and therapist/philosopher Paul Watzlawick (1977).

The 21st century has seen several research centers devoted to Morin's work, including one at the University of Messina in Sicily, *Multiversidad Mundo Real Edgar Morin*, a university in Mexico based on the principles of Morin's work, at Ricardo Palma University in Lima, Peru, and recently the transdisciplinary Centre Edgar Morin in Paris at the Centre National de la Recherche Scientifique (CNRS), the prestigious French National Research Center.

Despite the fact that his work is only beginning to be translated into English, Edgar Morin's work has been very influential in Europe, Latin America, and French-speaking Africa. Numerous books discussing his work have been written in France, Spain, Italy, Canada, and England, as well as in Latin America and Africa (Anselmo, 2005, 2006; Banywesize, 2007; Bianchi, 2001; Celeste, 2009; Ciurana, 1997; De Siena, 2001; Fages, 1980; Fortin, 2002; Kofman, 1996; Manghi, 2009). He was recently the subject of a second major biography (Lemieux, 2009) as well as a documentary on French television. The extent of his influence in diverse and even remote fields exceeds perhaps even Gregory Bateson's. As Emeritus Director of Research at the CNRS, Morin has received honorary doctorates (appropriately in subjects ranging from political science to psychology to sociology) from universities including Messina, Geneva, Milan, Bergamo, Thessaloniki, La Paz, Odense, Perugia, Cosenza, Palermo, Nuevo Leon, Université de Laval à Québec, Brussels, Barcelona, Guadalajara, Valencia, Vera Cruz, Santiago, the Catholic University of Porto Alegre, the Universidade Federal do Rio Grande do Norte, Candido Mendes University (Rio De Janeiro), and he holds an itinerant UNESCO chair in Complex Thought.

At the same time, we should remember that despite these achievements and honors, Morin was for a long time an "outsider," not identifying himself with the popular French postmodern vogue in the United States, and easily misinterpreted, misrepresented, and dismissed as a multidisciplinary omnivore who didn't belong in any particular discipline or tradition, and didn't engage or address the popular thinkers of the times but explored his own research agenda. Now in his early nineties, Morin is without a doubt more broadly accepted than ever before, and indeed viewed in many ways as prescient in his choice of issues to address and their relevance for contemporary times.

Perhaps the best way to provide a contextual introduction to Edgar Morin's work is through an outline of his intellectual trajectory, in the form of a "biblio-biography." A review of Morin's journey helps us, I believe, to better understand the man and his mission.

Morin's books address such a variety of topics, in such a range of disciplines, that it's necessary to first of all catalog at least some of them, a small selection out of the 60 or so books he has published, in order to get an idea of the scope of his work. Over the years Morin has categorized his work in different ways. In the boxed set of *Method*, we find the following categorization: *Method*, which comprises the six volumes of *Method* and comes in at approximately 2,500 pages, with the first volume, *The Nature of Nature*, published in 1977 (as well as in English in an unfortunate translation) and the final volume, *Ethics*, published in 2004; *Complexus* covers numerous more theoretical works on complexity focusing on sociology and the philosophy of science; *Pedagogy* addresses Morin's work on education, inspired by requests from both the French government and UNESCO; *Fundamental Anthropology* covers a seemingly odd assortment of books, including his work on death, cinema, and *Le Paradigme Perdu* (Morin, 1979), which was a precursor to *Method* and an effort to explore how human nature integrates with science and the humanities, as well as the three volumes on the "unity of man," organized with Massimo Piattelli-Palmarini (Morin & Piattelli Palmarini, 1978); *Our Times* explores topics as diverse as ecology, popular culture, including the Hollywood star system, the contested nature and history of Europe, the Soviet Union, the student revolts of 1968, his reflections on Israel, and the experience of Jews in Europe; *Politics*, with both his early effort to articulate the relationship between human nature and politics and his later work on creating a "politics of civilization," a term that was picked up by President Sarkozy in a way that Morin immediately and publicly declared illegitimate; *Lived Experience*, eight volumes of journals and first-person accounts and reflections, starting in the 1950s and covering among other things his experience in California in the late 1960s (Morin, 2008a), the fall of the USSR, a trip to China, and the death of his wife (Morin, 2009a); *Transcriptions of Talks* concludes with several interviews and assorted presentations. In the process of reviewing some of these volumes, we can begin to see the "path laid down in walking," and begin to recognize the threads that tie much of Morin's work together.[1]

Early Career

Edgar Morin's first book, *L'An Zero de l'Allemagne* [*Germany Year Zero*], was written after the end of the Second World War when Morin, then in his mid-twenties, was in Germany with the French Army. *Germany Year Zero* was his effort to document the devastation of one of Europe's most sophisticated and cultured countries, the home of Goethe, Beethoven, Kant, and other towering figures of Western civilization. It was an attempt to understand how such a country could have been overtaken by the horror of the Nazis. Central to the book is Morin's unwillingness to reduce Germany and Germans to "sale boches" (filthy Germans), and to assess the horror of the situation in a broad context. Here we already find a cornerstone of what Morin, the Jewish resistance fighter who lived in mortal danger for the war years, would later call *Complex Thought*, a refusal to reduce and thereby "mutilate." Complex Thought seeks to not reduce or polarize. Morin does not want to reduce Germany and its people to the actions of the Nazis, which in the immediate aftermath of the war was all too easily done. This refusal to reduce, to take a Manichean, simplistic view (such views are driven by fear, anger, and other emotions, but often masquerade as coldly rational) is a central element of Morin's work.

---

[1] For a useful introduction to Morin in English, the reader is referred to Myron Kofman's *Edgar Morin: From Big Brother to Fraternity*, in the Pluto Press Modern European Thinkers series (Kofman, 1996). Kofman is particularly good on the historical context and Morin's experience with Hegelian-Marxism. Given the relatively limited space here, and the vast range of Morin's experience, I will refer to Kofman's work for a discussion of this fascinating period and its influence on Morin's thought. Morin's *Homeland Earth* offers an accessible introduction to his sociopolitical and moral thought intended for a popular readership.

The term *reductionism* is used with great, perhaps excessive, frequency these days. For Morin, the concern about reductionism emerges from, and is embedded in, the existential reality of daily life. It manifests in the unwillingness to be a reductionist toward anybody, and in the ethical stance of not reducing anybody to their worst characteristic or action.

Morin's next work, published in 1951, was *L'Homme et la Mort* [*Humanity and Death*] (Morin, 1970a). Here we find, in typically Morinian fashion, a sustained meditation on death that is both deeply personal and planetary, both holographic and multidimensional, to use terms Morin would employ later. Personal, because Morin lost his mother at an early age, and the event affected him profoundly. It haunts his work in too many ways to address in this brief sketch.[2] Morin's work is planetary in scope because he explores death cross-culturally in the great religions and spiritual traditions, throughout human history, and in the sciences, finding that the plurality of interpretive frameworks shed light, each in a different way, on this most profound event. Morin's work has always had a holographic, multidimensional quality: the part and the whole are always interconnected, and one finds the part in the whole and the whole in the part; and the subject is approached from a variety of dimensions, from the biological to the cultural to the psychological and mythological.

Morin's book on death brings together two themes that recur throughout his work. The motivation for inquiry emerges from personal experience, most dramatically with the death of his mother, and certainly not abstract speculation or disciplinary agendas. Another key element in this work is transdisciplinarity. Morin's inquiry is never limited by disciplinary boundaries. It is transdisciplinary and draws on a whole range of what he calls *pertinent knowledge* (Morin, 2001b). In other words, he is not approaching his topics from what I have elsewhere called a discipline-driven perspective (Montuori, 2005), which means he is not driven by problem solving in the context of the agenda of a specific discipline.[3] Rather, he is motivated by his own experience, in this case his loss, and more specifically by the need to make sense of lived experience, his own and that of every other human being inevitably facing loss. The research is lead by the demands of the topic, and moves across disciplines to draw on knowledge that is pertinent to shed light on the topic. This is central to what makes Morin's vision of transdisciplinarity so important and so timely: it is grounded not in attempts to create abstract totalizing theoretical frameworks, or to further the agenda of a discipline. It is grounded in the need to find knowledge that is pertinent for the human quest to understand and make sense of lived experience, and of the "big questions" which are increasingly left out of academic discourse precisely because they are too complex and span a variety of disciplines. Lived experience, in this view, simply cannot satisfactorily be reduced to the perspective of one discipline.

Morin's approach has always been both planetary and personal. We later find wonderful examples of this "holographic" method in several of his books, most notably his diaries, including his experience at the Salk Institute and in late 1960s California, *California Journal* (Morin, 2008a), and also *Vidal and His Family* (Morin, 2009b), which is at once a biography of his father, named Vidal, a history of his family, of Sephardic Jews, and of Europe, interweaving personal letters and macro-history, family anecdotes, and the cultural. The political, cultural, and religious context of Jewish migrations provide the reader with a rich picture of the 20th century. In *Pour Sortir du Ventieme Siecle* [*To Exit the 20th Century*] (Morin, 2004b), Morin addresses key political issues through a combination of theoretical and historical reflection on the state of the world grounded with extensive examples from and reflections from his own experience.

---

[2] For readers of French, a thoughtful discussion of the role Morin's mother's death played in his life can be found in Heinz Weinmann's introduction to the collection of Morin essays entitled *La Complexitè Humaine* (Morin, 1994b).

[3] Typically, academic research is oriented by of a lot of factors such as funding and differentiation from other disciplines that have nothing to do with what might be best for the inquiry itself (Wilshire, 1990).

Autocritique

Morin's early work on death shows his willingness to grapple with profound existential issues so often obliterated in the frequently all too sterile discourse of social science and philosophy. Morin's work does not come from an attempt to escape life for an ivory tower, or to control it through intricate theoretical frameworks and maps, but from an effort to immerse himself in it more deeply, and to provide the sciences with tools to account more adequately for the lived complexity of life, and indeed to assist the reader in that process of immersion. Morin characterizes his later work on Complex Thought as an attempt to develop a method that does not "mutilate," that does not fragment and abstract, that does not do violence to life, that is not unidimensional, anemic, antiseptic, homogenized *pars pro toto*. This transdisciplinary approach could later be seen in the journal *Arguments* that Morin led along with Roland Barthes, Kostas Axelos, and others from 1956 to 1962. The unusually broad range of topics addressed in the journal reflected a focus on issues rather than disciplinary agendas, and a willingness to range far and wide.

After the Second World War, the influence of the Left and of the Communist party in European thought was enormous. There were very clear boundaries with which to assess what was considered be outside the party line. Morin's independent thought was clearly transgressive, and in *Autocritique* (Morin, 2004a) Morin documents his expulsion from the party for writing an "inappropriate" critical article. Morin's *Autocritique* is a remarkable document from an "engaged" intellectual grappling with the complexities of politics and self-deception. An exercise in honesty and self-reflection, it provides us with rare visibility into the life and thought of a man in the thick of the events that were shaping European and indeed planetary culture at that time, such as Stalin's rise to power and the repression in the Eastern block countries. Drake (2002) writes that Morin was "one of the few PCF (French Communist Party) intellectuals who refused to blindly follow the Party line" (p. 70). Exploring such phenomena as self-deception, cognitive dissonance, groupthink, and authoritarian thinking and behavior in himself and in "the party," we find another theme that was to run through all of Morin's future work. In his *7 Complex Lessons in Education for the Future* (Morin, 2001b), a document he wrote at the request of UNESCO, the first lesson is about self-deception and combating "error and illusion." How is it that we let ourselves literally become possessed by ideas, by the party, by our "faith," by our "cause," even by what we believe to be "science?"

Autocritique (Morin, 2004a) marks an important turning point for Morin. While we normally assume that we have ideas, it became clear to Morin that ideas can also have us—literally possess us. Human beings can literally be possessed by ideologies and belief systems, whether on the Left or the Right, whether in science or religion. Henceforth, Morin's effort would be to develop a form of thinking—and of being in the world—that is always self-reflective and self-critical, always open and creative, always eager to challenge the fundamental assumptions underlying a system of thought, and always alert for the ways in which, covertly or overtly, we create inviolate centers that cannot be questioned or challenged. Knowledge always requires the knowledge *of knowledge*, the ongoing investigation and interrogation of how we construct knowledge. Indeed, *Knowledge of Knowledge* is the title of the third volume of Morin's *Method* (Morin, 1986).

The participation of the observer in every observation, the role of self-reflection and self-inquiry in inquiry, the dangers of reduction and disjunction, and the often hidden motives of the quest for certainty are central and recurring themes in all of Morin's work. This epistemological position integrating the inquirer in every inquiry is central to Morin's work, and can be found in his philosophy of science as well as being a cornerstone for his ethics, developed in the sixth and final volume of *Method*. For Morin this means constant vigilance, self-examination, self-criticism, what he refers to as an ongoing effort on "psychic culture," in order to avoid phenomena such as self-deception, projection, and groupthink. Morin's experiences with the Communist party sensitized him to the many ways human beings can become victims of errors and illusions, wanting to believe, and above all, perhaps, driven by an illusion of certainty and a desire to categorize and bring order to a complex, uncertain world.

For Morin, *Homo Sapiens Sapiens* is really *Homo Sapiens Demens*, and there is a rich complexity in this "uniduality." *Homo* is clearly not only *sapiens*, or wise. It is also *demens*, or irrational, prone to wild excess, and unconstrained emotion. But *demens* should not be viewed as exclusively "diabolic," but rather as a contributor to our imagination and inspiration, that can manifest both in great art and in desperate hallucinations. Above all, we see here an ongoing cybernetic process of navigation and calibration rather than a static black and white choice between say a good and a bad side. The imagination and the imaginary play a central part in Morin's understanding of the human, as we shall see.

Sociology and Popular Culture

At the same time that Morin was writing about death and engaging in a very public political "self-critique" of his participation in the Communist party, and the way that this applied holographically to the larger issues of the role of ideologies and totalitarianism and participation in larger planetary culture, he was also beginning to write a series of books on what might be initially thought of as "lighter fare." In the mid- to late 1950s and early 1960s, Morin wrote groundbreaking works about cinema, the Hollywood star system, and popular culture. Several of these books have been published or reissued in the United States by the University of Minnesota (Morin, 2005a, 2005b). Morin's innovative work in this area has been recognized as crucially important—both prescient and still vitally relevant in a discussion that has often drowned in vapid and sensationalist scholarship as well as thuggish Marxism. As Lorraine Mortimer writes in the introduction to *Cinema, or the Imaginary Man* (Morin, 2005b), Morin's book was a breath of fresh air in 1959, when much of the discourse on cinema was highly critical of bourgeois entertainment, viewing it as opium for the masses that promoted capitalist values, and its publication 45 years later in English suggests it still has a lot to offer. Mortimer pointedly reminds us of how sociologist Pierre Bourdieu attacked Morin's study of mass culture because it was "an instrument of alienation at the service of capitalism to divert the proletariat from its revolutionary mission" (Mortimer, 2001, p. 78). This once again gives us an idea of Morin's constant battle against reductionism, the attempt to reduce a complex phenomenon to one potential aspect and manifestation, and in the process dismiss it. In the case of Bourdieu's statement, we see represented a position popular among left-wing academics, a view of cinema that that reduces it to a diversion, a distraction from the serious work of revolution, and does not take into account the infinite emotional, social, and cultural complexities that the experience can also afford us.

In the late 1950s in *Stars*, Morin (2005a) was the only thinker associated with what at the time was the completely countercultural idea that the cult of celebrity has a strong religious component. Interestingly, Young (2002) goes on to cite research conducted 50 years later in the United Kingdom and the United States that suggests celebrity worship does indeed play a role similar to that of religion and is the source of new "myths" and mythical figures in today's society.

Morin was one of the first academics to take popular culture seriously. His psychoanalytically influenced discussion of interiority, subjectivity, dreams, myth, his use of the concepts of projection and introjection, and his focus on creativity and the imagination acknowledged the importance of understanding popular cultural phenomena that clearly had, and continue to have, an enormous impact on people's lives. Among other things, Morin studied the seemingly trivial fan letters written to movie stars in popular magazines, identifying the mechanisms of projection and identification in the adulation of "stars." Again we see Morin moving from the macro role of popular culture to the micro, the specific examples of individual gestures of fans towards their idols. This reflects a guiding principle of Morin's work, found in Pascal's statement that it is impossible to understand the whole without understanding the part, and impossible to understand the part without understanding the whole. In *Method*, Morin would later use this as an entry point to critique both reductionism and holism.

But why this sudden detour into cinema? Morin's research is motivated by his own life experiences. After the death of his mother, the young Morin became an obsessive moviegoer, and developed a fascination

for the magical dimensions of cinema. As he explained, they allowed him to temporarily inhabit and dream of a different world, escape his pain, and immerse himself in a world of creativity and imagination through a ritualistic process not unlike the experiences of art of our distant ancestors, glimpses of art illuminated by flickering lights in dark caves. It is a commonplace to say that one's research is really a reflection of one's life. But in Morin's case this is particularly evident, and central, and he has been very clear about this, in any number of works, and perhaps most clearly in *Mes Demons,* or *My D(a)emons*, in which he recounts his intellectual journey and influences (Morin, 1994). As I have suggested, this is central to his transdisciplinary approach, which does not seek to simply solve a problem, but is rather a quest for meaning derived from personal experience, and clearly from that of millions of other movie-goers.

In 1961, filmmaker Jean Rouch and Edgar Morin made the documentary *Chronicle of a Summer*. Set in Paris in the aftermath of the Algerian war and before the explosion of riots that played such a role in the 1960s, culminating in the events of 1968, this documentary holds the distinction of being recognized as the first example of *cinema verité*. At the heart of it lies a simple question, asked of Parisians going about their business around town: "Are you happy?" Roland Barthes wrote that what the film engages is humanity itself. In his review of documentary filmmaking, *Claiming the Real: The Documentary Film Revisited*, Brian Winston referred to *Chronicle of a Summer* as a key *cinema vérité* film (Winston, 1995).

The documentary had a profound influence on French filmmaker Jean-Luc Godard, and it has become a classic of documentary making and visual anthropology. *Chronicle of a Summer* breaks down the barrier between camera and the subject, in a precursor to a far more participative approach to inquiry and documenting events, and the more recent excesses of (largely manufactured) "reality television." Particularly important is the self-reflective dimension, which includes interviewers and interviewees being filmed observing footage of the interviews, creating a self-reflective loop (Ungar, 2003). This innovative approach shows Morin's lifelong concern for intersubjectivity and self-reflection that was later to be articulated extensively in his works of sociology and Complex Thought (Morin, 1994b, 1994c, 2007a).

The next step in Morin's political reflections, *Introduction à une Politique de L'homme. Arguments Politiques* [*Introduction to a Politics Of Humanity. Political Perspectives*] (Morin, 1999a), was published. in 1965. Here Morin explored the nature of human nature in the political context, critiquing Marx, Freud, and other currents of thought, including a trenchant critique of the notion of "development," while developing his notion of a planetary politics and planetary culture, which he was to elaborate in later works. Essential here was Morin's excavation of the underlying assumptions of the various approaches to understanding and framing human nature, which he was to return to in the work that became the predecessor to his magnum opus, *Method*, *Le Paradigme Perdu* (Morin, 1979). Morin's transdisciplinary approach crosses and integrates a plurality of disciplines. A key dimension of transdisciplinarity is understanding the way that knowledge is constructed in various disciplines and approaches (Montuori, 2005a). Morin's work is radical in this sense because it traces the roots of knowledge, digging deep to find the underlying assumptions that form the foundations for the differing perspectives. Transdisciplinarity explicitly surfaces the assumptions of the many different disciplines it addresses. While not demanding in-depth expertise and specialization to the quite same extent that a discipline-based researcher might have, transdisciplinary research does demand a more philosophical or meta-paradigmatic position that steps back to observe how different paradigms shape the construction of knowledge, exploring the roots of the disciplines. The point is to become aware of one's own assumptions about the process of inquiry, as well as uncovering the assumptions of the various perspectives that inform inquiry.

Morin's next two works, written in the mid-1960s, followed somewhat naturally from his *cinema verité* documentary. They focused on innovative, participatory approaches to social research, what he called a "sociology of the present," using a "multidimensional method." Both of these works were fortunately translated into English. *The Red and the White* (Morin, 1970), a study of modernization in the Breton village of Plozevet, utilized Morin's "phenomenographic" approach, a precursor to the boom in qualitative research methodolo-

gies, at a time when most if not all sociological research was quantitative. Morin and his research team actively participated in the life of the village, and collected data in a variety of ways, both quantitative to the qualitative, by living in the village and keeping diaries about their experience as researchers. These diaries have recently been published in their entirety (Morin, 2001a). *The Red and the White* shows Morin's desire to capture the full complexity and richness of this village, and the realization that traditional sociological methods simply did not come close to this—they did not address the lived experience of human beings undergoing a major social change.

Rumor in Orleans (Morin, 1971) is the fascinating and disturbing account of a rumor about alleged white slave trade conducted by Jews in the city of Orleans, which led to some degree of panic and attacks on store owned by Jews. Morin's research managed to unravel the web and actually put the rumor to rest. Again we see Morin at the leading edge of thought with what would be called "action research" today. Morin broke down the assumptions that research should be quantitative, and should place the researcher as "the expert," "objectively" studying his "subject." His research was also an intervention, and an example of "clinical sociology." For Morin, this research is also a critique of universalism, the search for laws and grand theories, and a valorization of what he called "the event," the unique, the unrepeatable, the destabilizing moment, and crisis as an opportunity for inquiry, a subject he was later to explore in his work on "crisiology" (Morin, 1993).

Discussing his methodology, Morin (1970b) wrote:

> Our method seeks to envelop the phenomenon (observation), to recognize the forces within it (praxis), to provoke it at strategic points (intervention), to penetrate it by individual contact (interview), to question action, speech, and things. Each of these methods poses the fundamental methodological problem: the relationship between the research worker and the subject.
>
> It is not merely a subject-object relationship. The "object" of the inquiry is both object and subject, and one cannot escape the intersubjective character of relations between men. We believe the optimal relationship requires, on the one hand, detachment and objectivity in relation to the object as object, and on the other, participation and sympathy in relation to the object as subject. As this object and subject are one, our approach must be a dual one. (p. 259)

From his work on popular culture to *cinema verité* to his participatory research approach, we find Morin challenging assumptions about high and low culture, about the objectivity and distance of the researcher and the camera, and a critique of expertism that instead favors immersion and participation in the everyday, and draws on the knowledge of non-specialized participants. This is part of Morin's larger thrust to bring the discourse of social science in much closer relationship to the lived realities of human experience, the contingencies, the seeming trivialities, the emotions, subjectivities, and uniqueness of life in all its manifestations while at the same time uncovering the epistemological dimension, addressing how we make sense of the world, how we construct our knowledge.

Journals

In the early 1960s, Morin began publishing selected journals. These were very personal reflections and explorations that chronicled his experiences from the very mundane to the dramatic, from the profound philosophical and psychological reflections of *Le Vif du Sujet* (Morin, 1982b) to the account of his voyage to China in the 1990s (Morin, 1992c), to the death of his wife in 2007 (Morin, 2009a). These documents showed the author grappling with issues in the moment, and with his own responses to the crises he was facing, whether intellectual or personal. Particularly fascinating is the *California Journal*, now available in English (Morin, 2008a). It

is an account of Morin's year in California at the height of the 1960s, spent at the Salk Institute in San Diego, in the company of Jonas Salk, François Jacob, Jacob Bronowski, and Anthony Wilden, among others. Morin immersed himself in biology, cybernetics and system theories, reflected on the dramatic social changes he was witnessing, and meditated upon them in what was to become *California Journal*.

Many of his closest colleagues and collaborators have considered Morin's journals to be some of his deepest and most significant contributions. The author's voice, already so vivid in his scholarly works, becomes even more alive in these pages, as we go behind the scenes during the writing of a book, during a television appearance, house-hunting in Paris, or at a conference. Ironically, some of Morin's journals have been attacked by critics who have found them lacking the "seriousness" one should find in an intellectual. Academia is still very suspicious of "subjectivity," which essentially amounts to the everyday experience of life, and particularly of the subjectivity of academics themselves. One can deconstruct anything but the academic him or herself remains at a safe distance, and personal life is not addressed. One's subjectivity, one's domestic life needs to be neatly compartmentalized and strictly separated from one's life as a scholar. While it is acceptable to engage in phenomenological research of lived experience—somebody else's, of course—it is mostly feminist scholars who have stressed the importance of fully integrating the knower in all her vulnerabilities. Morin insists on reminding us that life is not confined to one or two disciplines, and his life involves, among others, movies, house-hunting, his wife's asthma attacks, pets, conferences, friendships, publishers, the vagaries of travel, and the occasional overindulgence at dinner. A philosophy of life cannot exclude these moments from its purview.

The pretense of objectivity unsullied by the contingency of life has never been something Morin aspired to. In fact, he has been actively working on dismantling it. He has also been aware that this academic front has all too often acted as a cover for the immature emotionality and self-deception of academics. Morin breaks away forcefully from the reductive image of the intellectual as a disembodied brain with a huge ego (which goes unacknowledged, of course, given the stress on objectivity), and opens himself up to us in his work and in his actions, for scrutiny, exploration, and appreciation, showing himself to us in the full range of his life experiences. As Maturana and Varela (1987) remind us, everything that is said is said by *somebody*. In traditional academic discourse and inquiry, the focus was on the elimination of that "somebody" in search of the "God's eye view from nowhere." As we read Morin, he shows us who the "somebody" is, and provides us with an example of "embodied" inquiry and personal reflection. With Morin, the "somebody" is not hidden. The inquirer is not artificially excised from the inquiry—the inquirer is integrated in the inquiry.

The personal exploration of his journals have, at times, led us deeply into Morin's psyche in ways that would be inconceivable for most traditional social scientists, for whom vulnerability is not generally considered a virtue. After the death of his wife Edwige, following a period of mourning Morin wrote a long and extremely revealing book about their relationship, a last love letter that included personal notes, drawings they made for each other, and revealed an intimacy, self-disclosure and emotion one is not accustomed to seeing in academics, even in more autobiographical works, particularly from a man who at this point was in his eighties and considered a leading public intellectual (Morin, 2009a).[4]

---

[4] While Morin has always been very open to religious traditions and spiritual experience, he has also retained a considerable degree of skepticism about mysticism and spirituality. Reading his journals, one reads about experiences with altered states and moments of possession as well as transcendence, but they have not been addressed explicitly in his more scholarly work to any great extent. In an appendix to his *California Journal*, Morin discusses his reticence to write about what he describes as his "happiness" in California, attributing it to some extent to a cultural superstition about publicly discussing one's well-being. One also suspects that given the French intellectual climate, in which his journals were already viewed askance by some more traditional academics because of their very personal nature, Morin was perhaps concerned that an explicit discussion of his own personal experiences, or moving into a more transpersonal direction, might further marginalize him. Having said that, we find that throughout Morin's massive oeuvre there are the

Most social scientists, particularly those who express themselves only in the confines of a professional journal, are simply unable to give voice to the whole of their life and experience. It is generally not part of the education of the social scientist, of the researcher, to understand him or herself, to be able to explore his or her own personal involvement in the research, to document that process and reflect on it, to explore the extent to which the "subjective" and the "objective" co-create each other, let alone deeply question the underlying assumption of his or her work. Autobiography and self-reflection are an awkward endeavor in social science. They are often looked upon with suspicion mixed with grudging admiration. In his journals, Morin, inspired by among others Montaigne, is modeling a process of self-inquiry that is also always holographic because it always occurs within a planetary context—and one might paraphrase Morin by saying that he lives in a planetary culture, and the planetary culture lives inside him.

Social science is comfortable with the context of *justification*, not the context of *discovery* (Montuori, 2006). Social scientists present themselves by proposing a position, backed up with empirical data and/or a theoretical framework. We are usually not privy to the actual process of inquiry itself, to the ups and downs of the research, the blind alleys, the mistakes, the insights, dialogues, and the creative process, unless we read popular (auto)biographies. In *Journal d'un Livre* (Morin, 1994a), the journal Morin kept while writing *Pour Sortir du XX Siècle* (Morin, 1984), and earlier in *Le Vif du Sujet* (Morin, 1982b), we find insights into the creative process, and the life of a thinker, struggling to fight off the tendency for dispersion, to do, read, experience too much, lose direction in the process. And yet this dispersion, while at times painful for the author, is one of the things that makes Morin such an original thinker, through his ability to later integrate a broad range of experiences, theoretical perspectives, and insights and the way he shows us how to think about them.

Along with the deeply personal, Morin has also immersed himself in the profoundly public, through his closely followed public pronouncements on a variety of issues, whether his impassioned rejection of the Algerian war (Le Sueur, 2003), the events of 1968 in Paris (Morin et al., 1968), his advocacy for Turkey's entry into the European Union, or, more recently, his writings on the Israel-Palestine question (Morin, 2006) and his leading role in French environmentalism. His recent critique of Israeli policies toward the Palestinians led to several court cases triggered by lurid accusations of antisemitism, and an eventual exoneration. In 2006, this led to the publication of *Le Monde Moderne et la Question Juive* [*The Modern World and the Jewish Question*], in which, among other things, he stresses the importance of differentiating between antisemitism and critiques of the Israeli government's policies toward Palestinians (Morin, 2006b). Now in his early nineties, Morin is still very much a public intellectual, involved in television debates, publishing regular op-ed articles in France's leading newspapers, dialoguing with one of France's leading ecologists (Morin & Hulot, 2007), and also a member of the French president's prestigious committee on ecology. A few weeks after the election of Nicolas Sarkozy in 2007, Morin was invited to discuss France's environmental policy with him. The week before François Hollande was voted into government saw the publication of a book of dialogues between Morin and Hollande (Hollande & Morin, 2012). Morin is without question one of that dying breed, the *public intellectual*. In 2012 he co-authored, with the late Stéphane Hessel, what is sometimes called the new little red book of the *indignados* and the European Occupy movement, *The Path to Hope* (Hessel & Morin, 2012). Hessel, also a nonagenarian, is author of the best-selling *Indignez vous!* (Hessel, 2011), said to have been one of the sparks that lit the Arab Spring.

---

constant, recurring themes of wisdom, in the form of Complex Thought, and compassion, explicitly addressed as love, particularly in Volume 2 of *Method*. In *Homeland Earth* and elsewhere, he has discussed his appreciation of Buddhism, while distancing himself from beliefs in reincarnation, for instance. Readers with a transpersonal orientation may find that Morin's work resonates quite strongly with many of the world's wisdom traditions, and that many of his ideas can provide important insights into, for instance, concepts such as dependent co-arising. In a recent book-length interview (Morin, 2008b), Morin was unusually candid about his views on spirituality, even describing himself as a kind of mystic, as well as expressing his recent interest in ayahuasca.

Complexity

Morin's vital involvement in intellectual life has also occurred through a series of major conferences and dialogues with scientists, artists, and philosophers. Most notable perhaps is the conference documented in the three-volume *L'Unité de L'homme* [*Human Unity*] (Morin & Piattelli Palmarini, 1978), a multidisciplinary dialogue among primatologists, biologists, neuroscientists, anthropologists, cyberneticists, sociologists, and a variety of other natural and social scientists. Participants included systemic sociologist Walter Buckley, neuroscientist Jean-Pierre Changeux, ethologist Ireneus Eibl-Eibesfesdt, cyberneticist Heinz Von Foerster, Nobel Prize–winning biologists François Jacob, Jacques Monod, and Salvador E. Luria, neuroscientist Paul MacLean, biologist Humberto Maturana, social psychologist Serge Moscovici, semioticist Thomas Sebeok, and cognitive scientist Dan Sperber. The ensuing three volumes of articles and discussions were organized as follows: Volume 1 (The Primate and the Human), Volume 2 (The Human Brain), and Volume 3 (Towards a Fundamental Anthropology).

This extremely rich series of dialogues, orchestrated by Morin and the Italian cognitive scientist Massimo Piattelli-Palmarini, represents an important step toward Morin's transdisciplinary approach. It goes beyond interdisciplinarity, which involves using the methods of one discipline to inform another, to draw on multiple disciplines while actually challenging the disciplinary organization of knowledge, and the reductive/disjunctive way of thinking that make up what Morin was to call the "paradigm of simplicity." Several of Morin's books find him in dialogues with social and natural scientists, from astrophysicists to biologists to sociologists and philosophers.[5]

Le Paradigme Perdu [*Paradigm Lost*], published in 1973, represents the first step toward the integration of this transdisciplinary perspective that was later to culminate in *Method*. For Morin, healing the split between the natural and social sciences became essential after his California sojourn and presentations and dialogues conducted at the Human Unity Conference. His multidimensional approach to human nature—and to inquiry in general—could not abide with the human/nature split. In the social sciences there was either the quantitative approach found in sociology (what Pitirim Sorokin called "quantophrenia"), generally anemic attempts to copy the method of physics, or the more philosophically inclined tendency to reject anything associated with the natural sciences as reductive, as "scientism" or "biologism." In natural science the almost complete absence of reflection on the role of the inquirer created blind spots science itself was unable to address in its most rigid configuration. As Dortier (2006) points out, *Le Paradigme Perdu* was written before the emergence of sociobiology and evolutionary psychology, but deserves to be read not just out of respect and historical interest for a book that was ahead of its time, but because Morin outlined an important agenda and *a way of thinking* about the issues that is still extremely fruitful. And this is in many ways Morin's central contribution—to point out that there are problems, such as the human/nature or two culture split, that must be approached with a radically different way of thinking, a way of thinking that, as Morin states, is not disjunctive (either/or), but

---

[5] To give an idea of the breadth involved, Morin is featured prominently in books on the implications of the work of Ilya Prigogine (Spire, 1999), in a volume on complexity theory with Francisco Varela, Brian Goodwin, Stuart Kauffman and Prigogine, among others (Benkirane, 2006), debates with Réné Thom and Michel Serres (Morin, 1983), in a dialogue on memory and responsibility with the philosopher Emmanuel Levinas (de Saint Cheron, 2000), in dialogue with astrophysicists Michel Cassè (Cassé & Morin, 2003) and Hubert Reeves (Morin & Le Moigne, 1999), and most recently ecologist Michel Hulot (Morin & Hulot, 2007). I mention this in particular because of the recent perception in the United States that French intellectual "impostors" have misappropriated and misrepresented science (Sokal & Bricmont, 1998). In Morin's case, this is certainly not the case. In fact, we find that he actually contributes to the articulation of the implications of the new sciences for scientists themselves (Roux-Rouquié, 2002; Westbroek, 2004). The proceedings of the prestigious Colloque de Cerisy, a yearly symposium focused on the work of a single thinker, includes Henri Atlan, Cornelius Castoriadis, Gianluca Bocchi, Sergio Manghi, Mauro Ceruti, and Isabelle Stengers, among others, give further indication of Morin's breadth and influence (Bougnoux et al., 1990).

connects, without the Hegelian assumption that the dialectic will always lead to a new synthesis.

First in *Le Paradigme Perdu*, then in the massive *Method* (Morin, 1985, 1986, 1991, 1992a, 2003, 2006a), Morin tackles this "en-cyclo-pedic" task by literally circulating knowledge between the disciplines and opening up a new way of approaching inquiry and knowledge. Around the time *Le Paradigme Perdu* was being written, and until quite recently, postmodern thinkers like Lyotard, Habermas, and others were highly critical of the integration of the natural and social sciences and against systems theoretical approaches in particular (Lyotard, 1984). Lechte's summary of Lyotard's position is typical of the way systems theoretical approaches are summarily dealt with in much postmodern discourse (Lechte, 1994):

> For the systems theorist, human beings are part of a homogeneous, stable, theoretically knowable, and therefore, predictable system. Knowledge is the means of controlling the system. Even if perfect knowledge does not yet exist, the equation: the greater the knowledge the greater the power over the system is, for the systems theorist, irrefutable. (p. 248)

Morin saw the enormous potential of these new approaches while recognizing their limitations and misuses, refusing to be limited by ideological boundaries. In the process he developed his own complex interpretation of systems theory, information theory, and cybernetics designed to connect the various dimensions of human inquiry, separated as they were in their own worlds and disciplines, refusing to communicate with each other. *Method* begins with an extensive discussion of the relationship between order and disorder, the key role of emergence, unpredictability, and uncertainty in his approach to complexity, and the importance of the prefix *re-*, as in reorganization, rethinking, and so on, suggesting ongoing process and change (Morin, 2005). Morin could not be as easily dismissed as traditional sociological systems thinkers such as Talcott Parsons. In the United States, the very fact that he did not fit neatly into one camp and could himself not be reduced to some simple category (systems theorist, structuralist, postmodernist, poststructuralist) has led to any number of misinformed assessments of his work. This is also because until recently only a very small number of his books have been translated into English, giving a partial view of a multidimensional body of work produced through Morin's engagement with both quantitative and qualitative methods.

The six-volume *Method* is Morin's magnum opus. *Method* integrates the rich and diverse elements of Morin's journey and provides the reader with an alternative to the traditional assumptions and methods of inquiry of our time. Morin's method outlines a way of approaching inquiry that does not reduce or separate, and does justice to the complexity of life and experience. In his sociopolitical works, such as his prescient studies on the USSR and totalitarianism, on the nature and concept of Europe, and his "manifesto for the 21st century," *Homeland Earth* (Morin & Kern, 1999), Morin applied this method to the planetary crisis in what he calls this "planetary Iron Age."

This brief biography of Morin gives us an overview of his intellectual journey, and some of the motivations and sources for his work on Complex Thought. The next section will focus more on technical aspects of Morin's work that may be of particular interest to integral theorists in the United States. We should keep in mind that given Morin's social, political, and cultural context, the audience he has written for is in many ways quite different from the audience of many integral theorists today. It is interesting to note that when *On Complexity* was published in the United States, my introductory sketch of Morin for English-speaking readers in that volume was reprinted in the newsletter for the *Association for Complex Thought*. The editor prefaced it by saying that he felt it would be of interest to his readers because it presented a reading of Morin through an American lens! I mention this as a reminder that our cultural and intellectual contexts lead us to read authors in different ways, emphasizing different aspects of their work, and interpreting them based on those different contexts.

Morin's work has always stressed the importance of both the sociology of knowledge, emphasizing

the importance of both the author's historical, social, cultural, and political context as well as the reader's. An awareness of our "lenses," our own biases and interests and the often implicit matrices with which we construct our knowing, is an essential dimension of Complex Thought, our own knowledge of knowledge. I believe integral theorists will remain open to a complex reading of Morin, and will be appropriately skeptical of all-too-easy categorizations of Morin as a fundamentally Lower-Right quadrant thinker because of his use of systems theory, for instance. I would further invite them to explore the potential and possibilities of an integration of Morin's complex ideas in the rich and evolving matrix of Integral Theory.

Why is Morin Interesting for Integral Theorists?

We sense that we are approaching a considerable revolution (so considerable that perhaps it will not take place) in the great paradigm of Western science. What affects a paradigm, that is, the vault key of a whole system of thought, affects the ontology, the methodology, the epistemology, the logic, and by consequence, the practices, the society, and the politics? The ontology of the West was founded on closed entities such as substance, identity, (linear) causality, subject, object. These entities do not communicate amongst themselves. Oppositions provoke repulsions or canceling of a concept by another (e.g., subject/object). "Reality" could be grasped by clear and distinct ideas.

In this sense, scientific methodology was reductionist and quantitative. The logic of the West was a homeostatic logic and destined to maintain the equilibrium of the discourse by banning contradiction and deviation. Imagination, illumination, and creation, without which the progress of science would not have been possible, only entered science on the sly. They could not be logically identified, and were always epistemologically condemnable. They are spoken of in the biographies of great scientists, but never in manuals and treatises … it is obviously the whole structure of the system of thought that is finding itself thoroughly shaken and transformed. (Morin, 2008, pp. 34-35)

I will now focus specifically on contributions that may be of the greatest interest to Integral Theory. First of all, we find the quest for Complex Thought. This requires some initial clarifications. While Morin does draw on elements on what is now known as complexity theory, including systems theory, cybernetics and information theory, his efforts at articulating Complex Thought began considerably earlier than the rise of complexity theory. The first volume of *Method* was published in 1977, and as the biographical sketch suggests, Morin's interest in, and application of some of these key ideas goes back to his first major work, *L'Homme et la Mort*, and his early reading of Hegel (Morin, 1994, 2012). While there is some obvious overlap with complexity theorists, Morin's work is a much broader philosophical effort to, in his words (Morin, 2007), develop a "reform of thought." Morin refers to mathematical approaches to complexity that still draw on a classical epistemology as "restricted complexity." This is contrasted with "general complexity," which requires a fundamental rethinking of what we consider knowledge and of how we think. We should therefore not think of this as an attempt to use "complexity theory," as it is known in the United States, to address issues in the sciences or philosophy, even if we can find some conceptual parallels, not the least of which are the critique of reductionism and disciplinary fragmentation (Taylor, 2003; Urry, 2005; Waldrop, 1992; Wells, 2013).

As the quotation above indicates, Morin is fundamentally critiquing the foundations of scientific and philosophical inquiry. He critiques what might be called a paradigm of simplicity, drawing on Descartes's focus on simplification and clear and simple ideas. One way to illustrate this effort is through his critique of disciplinarity. Disciplinarity reflects a way of thinking, and also a way of *organizing* knowledge in the form of ever-greater specialization in disciplines that are generally closed to each other. Morin (2008c) writes that: "The deep cause of error is not error of fact (false perception), or error of logic (incoherence), but rather the

way we organize our knowledge into a system of ideas (theories, ideologies)" (p. 2).

Economists can make pronouncements about a society's economy without reference to psychology, sociology, or any other discipline, and concepts like development were articulated drawing mostly on quantitative indicators such as GDP and GNP. Even within a discipline such as psychology, we find that personality psychologists and social psychologists, for instance, mostly do not communicate, and if they do, it is mostly to dismiss each other's views. In fact, we can see in the history of thought how many of the main movements have defined themselves in opposition to each other (Collins, 1998), starting with science defining itself in opposition to religion, and underlying these movements we have large dualisms in the form of C.P. Snow's two cultures, as well as realism/idealism, spiritual/material, nature/nurture, and subjective/objective, for instance.

In the tradition of Bachelard (2002), Bateson (2002), and others (Capra, 1996; Taylor, 2003), Morin's work is a sustained epistemological reflection on the implications of the scientific and cultural revolution of the 20th century for our organization of, and relationship with, knowledge. Morin (Morin & Kern, 1999) writes:

> The reductionist approach, which consists in relying on a single series of factors to regulate the totality of problems associated with the multiform crisis we are currently in the middle of, is less a solution than the problem itself…. Intelligence that is fragmented, compartmentalized, mechanistic, disjunctive, and reductionistic breaks the complexity of the world into disjointed pieces, splits up problems, separates that which is linked together, and renders unidimensional the multidimensional… The more problems are multidimensional, the less chance there is to grasp the crisis. The more problems become planetary, the more unthinkable they become. Incapable of seeing the planetary context in all its complexity, blind intelligence fosters unconsciousness and irresponsibility. It has become the bearer of death. (p. 1)

Morin is critical of the great fragmentation in the way we have organized knowledge, with specialists in a huge number of disciplines and sub-disciplines each working on their problems in splendid isolation. The notion of transdisciplinarity therefore emerges as an attempt to not only connect the various forms of knowledge pertinent to a specific problem, but also to propose a different way of thinking:

> We need a kind of thinking that relinks that which is disjointed and compartmentalized, that respects diversity as it recognizes unity, and that tries to discern interdependencies. We need a radical thinking (which gets to the root of problems), a multidimensional thinking, and an organizational or systemic thinking (Morin & Kern, 1999, p. 130).... The reform in thinking is a key anthropological and historical problem. This implies a mental revolution of considerably greater proportions than the Copernican revolution. Never before in the history of humanity have the responsibilities of thinking weighed so crushingly on us. (*Ibid*, p. 132)

One of the patterns that connects Morin's considerable contributions in such varied fields as biology and cinema, sociology and ecology, is the quest for a generative way of approaching the subject matter that accounts for its complexity, for what is woven together, for patterns, relationships, interactions, disorder, and noise. It is not a method in the sense of a new research method like action research. What Morin calls method, understood in the broadest sense of the word, as a "way" or "path laid down in walking." As the noted Italian family systems therapist Mara Selvini Palazzoli (1990) argues: "As Edgar Morin has put it so shrewdly, 'the method emerges from the research.' Originally, he points out, the word *method* meant *path*; it is only in traveling that the right method appears" (p. xiv).

How do we engage in inquiry? How do we think about the world, and more specifically, how do we approach research? Above all, how do we organize knowledge? How can we live and think in a pluralistic universe, with complexity, uncertainty, and ambiguity? Here we find an important entry point for the Integral model. While Integral Theory has sought to bring together the most relevant and important research to provide maps and frameworks that are as comprehensive and up to date as possible, and to remedy the partial nature of individual perspectives, Morin reminds us that even our best efforts in this direction themselves do not escape incompleteness, partiality, error, and illusion. Morin challenges us therefore to integrate this uncertainty and incompleteness in our knowing and being, and invites us to retain an ongoing critical self-reflection, cultivating a spirit of openness to learning from other traditions and perspectives, and also consider the embodiment of knowledge in the moment, with its inevitable uncertainties, dilemmas, and opportunities.

Iain Chambers (1993), who has written extensively on the subject of cultural complexity, writes:

> The idea of both lived and intellectual complexity, of Edgar Morin's '*la pensée complexe*', introduces us to a social ecology of being and knowledge. Here both thought and everyday activities move in the realm of uncertainty. Linear argument and certainty break down as we find ourselves orbiting in a perpetual paradox around the wheel of being: we bestow sense, yet we can never be certain in our proclamations. The idea of cultural complexity, most sharply on display in the arabesque patterns of the modern metropolis—and that includes Lagos as well as London, Beijing, and Buenos Aires—weakens earlier schemata and paradigms; it destabilizes and decenters previous theories and sociologies. Here the narrow arrow of linear progress is replaced by the open spiral of hybrid cultures, contaminations, and what Edward Said recently referred to as 'atonal ensembles'. The city suggests creative disorder, an instructive confusion, an interpolating space in which the imagination carries you in every direction, even towards the previously unthought. (p. 189)

The key elements of the organization of knowledge in the West go far back in history and the work of Aristotle and Descartes is central (Gembillo, 2008). Aristotle developed a "logic," providing us with the laws of identity and the excluded middle. In his *Discourse on Method*, Descartes (1954) explored the basic laws of thinking, and fashioned them into the foundations for inquiry. Descartes spoke of a "method," and of "rules for the direction of the mind." In other words, Descartes was providing us with an orientation for the way we think, a focus on reduction, simplification, and clarity. What Descartes proposed as rules for the direction of mind has, coupled with Aristotle's logic, become the foundation for "good thinking" institutionalized in the organization of universities. There we find the same increasing specialization in departments, literally a splitting up into the smallest possible parts, and the creation of strong boundaries based on three axioms of classical logic (Nicolescu, 2002). Morin's effort arguably involves a revision of these age-old foundations that integrates them into a broader "method" based on complexity.

Morin's Complex Thought critiques what has been thought of as "good" thinking, and takes us to the heart of the what for him is the problem, namely reduction, disjunction, and abstraction: inquiry decontextualizes, simplifies, and functions on a logic of either/or. How are we to address this? Morin articulates an alternative that emphasizes complexity, from the Latin *complexus*, or that which is woven together. That which is woven together cannot be torn apart without losing the overall pattern, without losing the connection, the interrelationships, the interactions, the emergent properties.

One of the recurring quotations we find in Morin's work is from Pascal (Pascal et al., 1905) articulating the relationship between parts and wholes:

> All that exists then is both cause and effect, dependent and supporting, mediate and immediate, and all is held together by a natural though imperceptible bond, which unites things most distant and most different. I consider it impossible to know the parts without knowing the whole, or to know the whole without knowing the parts. (p. 25)

This is articulated by Morin in an extensive discussion of the relationship of part to whole, including a critique of holism, and reflects his effort to go beyond such polarizations in the history of thought (Morin, 2008c).[6] In fact, Complex Thought informs a reframing of such legendary conceptual duets as unity and diversity, order and disorder, unity and multiplicity, the one and the many. Of particular interest for integral theorists, I believe, is the way Morin helps to think through the relationships and interactions *between* the four quadrants, for instance between brain and mind, individual and culture, and so on.

Morin draws extensively on systems theory, but it must be understood that this is not part of an effort to "map" the environment, something many systems theorists have attempted to do. Morin is interested in a crucial aspect of the original mission of system and cybernetic theories, namely the development of a transversal approach that can prove a way to think across disciplinary specializations and connect rather than separate (Bateson, 2004; Heims, 1991).

One area where Morin's work is of great interest is in the articulation of the relationship between the individual and society, and particularly the role of culture, and relationship between culture and the individual—dimensions that have perhaps been given less attention in Integral Theory. Morin draws extensively on systems theory and cybernetics, but not in an effort to map so much as to articulate the nature of interactions and the circularity and recursive nature of processes. He focuses for instance on the way individuals are in society but society is also in individuals, and the way human beings create culture that in turn creates human beings. These complex, circular processes provide an alternative to the historical tendency of reductive and disjunctive thought to focus on either individual (methodological individualism) or social/cultural (methodological holism).

For Morin the issue is addressing the problems of thinking, and this is where his work begins to show considerable parallels with efforts to articulate post-formal ways of thinking, offering a bridge to integral theorists.[7] Herbert Koplowitz (1984) argues strongly for the relationship between general system theory and post-formal thought: "Formal operational thought is dualistic. It draws sharp distinctions between the knower and the known, between one object (or variable) and another, and between pairs of opposites (e.g., good and bad)." Elsewhere Koplowitz states, "In post-formal operational thought, the knower is seen as unified with the known, various objects (and variables) are seen as part of a continuum, and opposites are seen as poles of one concept" (as cited in Kegan, 1982, p. 32).

In *Method* we see Morin articulating at considerable length some of Koplowitz's key principles, also applying them to systems theory and cybernetics. Particularly in the first volume of *Method*, dating back to 1977, we find, among many other topics, extensive discussions of the Second Law of Thermodynamics and the relationship of order and disorder, culminating in Morin's tetragram of order/disorder/interactions/organization (Morin, 1999); the development of Angyal's (Angyal, 1941) notion of *unitas multiplex* in terms of the relationship between part and whole, as well as unity and diversity; the systems dictum that the whole is more than the sum of the parts, complexified to recognize that the whole can also be *less* than the sum of the parts (Morin, 1992a); articulating the notion of autonomy, particularly in relationship to dependence, normally

---

[6] The interested reader is referred to Brian Fay's illuminating work on the philosophy of social science (Fay, 1996) in which, inspired by Robert Kegan's work (Kegan, 1982, 1998), he outlines a series of such polarizations in the history of ideas (including atomism versus holism).

[7] Morin himself has not addressed these similarities and has not, as far as I am aware, ever discussed post-formal thought. I want to be clear that this my effort to bridge Morin's work with Integral Theory, and Morin himself is not explicitly attempting to articulate postformal thought or vision-logic.

viewed as opposite, recontextualized, and recomplexified by Morin to show their interrelationship (Morin, 1982a); an effort to ground the notion of the subject in the logic of the living, rather than in metaphysics (Morin, 1981); the importance of contextualization, adding the prefix -*eco* to self-organization, leading to the term *self-eco-organization* and an increased awareness of the role of the environment (Morin, 2008c); and as always, the continuous epistemological reflection that integrates the observer, the context, and recognizes the incompleteness of any perspective and any system of categories.

Morin (1992b) has called his approach "en-cyclo-pedic," but he points out that this is not in the sense of providing the final word on a catalog of topics, presenting a totalizing picture of the world as it "really" is. He has called his approach en-cyclo-pedic in the sense of reconnecting that which has been disconnected, and as with so much of his work we also find multiple plays on words here because there is also a reference to the cycles and recursivity of cybernetic thinking. The use of a systems/cybernetic context should be of particular interest to integral theorists, particularly in the articulation of postformal thinking and vision-logic.

Thinking Complexity

Yan and Arlin (1999) write that

> [I]n Piaget's theory of cognitive development, equilibration is the goal of development. Formal reasoning is considered the final equilibrium. The major characteristic of formal reasoning is the ability to engage in abstract logical thinking, which includes the features of hypothetico-deductive reasoning, thinking in terms of propositions, and making logical inferences. Generally speaking, formal reasoning operates on well-defined problems that can be presented by closed systems. For well-defined problems, all the information necessary to produce a solution is given or can be derived from what is given. In this case it is possible to produce one or a few solutions and creativity is not required in the process. (p. 550)

Piaget (1970) himself stated that formal operational thinking constitutes the "essence of the logic of educated adults, as well as the basis of the elementary forms of scientific thought" (p. 6).

It is therefore interesting to note that one of Morin's central criticisms of traditional "simple" thought is precisely that it assumes closed systems (recall the disciplines closed to each other, isolating variables, etc.) (Morin, 2008c). In *Method*, Morin articulates the importance of the notion of open system. He spends several hundred pages outlining the quite dramatic implications of a concept that is all-too often taken as a foundation of systems thinking, but largely undertheorized. Morin critiques systems theory approaches extensively, and points to the problematic nature of discussing open and closed systems as opposites when in fact every open system is also, to some extent closed. The complexity of open systems leads him to questions such as how an open system is also closed, the crucial nature of a system's relationship with the environment, the nature of autonomy, the opposition between reductionism and holism, the possibility of emergence, and self-organization, or as Morin revisions it, self-eco-organization (Morin, 2008c).

Yan and Arlin point out that formal reasoning does not work well with problems that are not well defined, and we should add that it is also deeply problematic working with contingency and the unexpected. Myron Kofman (1996) writes that

> Morin's approach is in harmony with a new culture of uncertainty as instanced in the literary and philosophic writings of Derrida, Levinas, or Deleuze. But unlike his fellow travelers Morin has been alone in daring to attempt a method which connects sciences and philosophy through complexity.

Uncertainty and disorder are central to Morin's world, and indeed he uses the term *chaosmos* to great effect, articulated in his tetrad of Order/Disorder/Interaction/Organization. If the paradigm that is now crumbling was based on the assumptions of order and certainty, with disorder as the enemy (Toulmin, 1992), Morin is certainly not promoting a world of chaos and nihilism. On the contrary, his focus is on acknowledging the existence of disorder, and illuminating its generative role. We can see the focus on order, certainty, and control in modern science as well as in management theory's roots (Morgan, 2006). We learn from Morin to see these key, dominant concepts that have guided and informed our thinking, and throughout his work we spend considerable time exploring these concepts in great depth to come out the other side with more complex concepts that do not reject uncertainty and disorder, for instance, but acknowledge and incorporate them.

Morin's new introduction to the French boxed set of his *Method* is titled "Mission Impossible." Morin starts with the assumption that there is no way to completely escape error, uncertainty, and illusion, and that any effort such as his to reconnect, as he attempts in *Method*, is hopeless. For Morin, "We are condemned to uncertain thought, a thought riddled with holes, a thought that has no foundation of absolute certainty" (p. 46). Yet we have to think, and we have to live, and despite the impossible nature of his mission, Morin has proceeded. And the mission then becomes, to some extent, how to learn to live despite, and with, uncertainty, and also how to turn uncertainty into an opportunity for creativity. There is therefore the continuous stress on the incompleteness of every point of view, which leads to continuous self-scrutiny, and the integration of the observer in the observation. Morin is critical of the partial nature of much thinking and many approaches, but recognizes the inevitably partial nature of his own work, again inviting efforts to address this while not harboring the illusion one can completely overcome it.

Morin therefore places great emphasis on the continuous need for self-awareness, for the pitfalls of hubris, self-deception, projection, and other processes in the inquirer him- or herself. We also see constant warnings about *idealization*, or the idea that the real can be captured in an idea, which is more real than the real; in *rationalization*, or the desire to enclose reality in the order and coherence of a system, without letting anything exist outside the system; and *normalization*, or removing all unknowns, mysteries, anything which cannot be explained.

The participation of the observer in every observation, the role of self-reflection and self-inquiry in inquiry, the dangers of reduction and disjunction, and the often hidden motives of the quest for certainty will be central and recurring themes in all of Morin's work. As Mara Selvini Palazzoli (1990) writes:

> Since, in the relationship between observing and observed system, the observer is as much part of the observed system as the observed system is part of the intellect and culture of the observing system, Morin finds that the observer observes himself while he observes the system. (p. 128)

This epistemological position integrating the inquirer in every inquiry is central to Morin's work, and can be found in his philosophy of science as well as being a cornerstone for his ethics, developed in the sixth and final volume of *Method*. For Morin this means constant vigilance, self-examination, self-criticism, what he refers to as an ongoing effort on "psychic culture," in order to avoid phenomena such as self-deception, projection, and groupthink (Morin, 2004b).

Morin's effort to remain constantly vigilant and self-critical, in tandem with his often repeated dictum from Adorno, "totality is untruth," reminds us of the importance for any integral effort to be wary of totalization, of idealization, normalization, rationalization, and self-deception. It is a reminder of the ways in which human beings use, misuse, and mutilate knowledge for their own purposes, and at the same time the way in which inquiry can become a practice of ongoing self-examination and a way to embrace uncertainty and contingency in our thinking and living. It is also a reminder that thought is not an abstract category that can be

separated from our psyche (from our emotions, needs, and desires) and from our environment (the sociology of knowledge, the planetary era).

Morin himself is a "complex" thinker not only in terms of his life's work of developing Complex Thought, but also as an embodiment of complexity himself, with his diverse background, his critical and creative use of sources, his development of a radical approach to inquiry, and its application to politics, environmental issues, the arts, ethics, and biology, among others. To that extent, through a partial reading he can easily be misrepresented and "reduced" to a systems thinker or a visual anthropologist or a leftist French thinker, categorized in this way or that, on the basis of a limited (and what he would call "mutilating" reading).

For integral theorists in the United States, Morin presents a very different approach to the development of a more comprehensive, transdisciplinary approach, drawing on sources that are perhaps less common in integral circles, such as Heraclitus, Montaigne, Pascal, Spinoza, Rousseau, the Frankfurt School, Bergson, Bachelard, Von Neumann, Von Foerster, Bateson, and the philosophers of science Popper, Lakatos, and Holton. Morin reminds us that every form of knowledge, every theory, and particularly any effort to develop an integrative perspective such as Integral Theory is a construction, which draws on specific sources (and not others) as a result of choices, but also because of historical contingencies and the personal preferences of the theorists. This process of construction gives us an indication of the limitations of any view, no matter how capacious and integrative it is, but also points to the openness of the creative process that is involved in any such construction—the ongoing dance of constraints and possibilities that marks all paths of inquiry (Ceruti, 1994).

REFERENCES

Angyal, A. (1941). *Foundations for a science of personality*. New York: Viking.

Anselmo, A. (2005). *Edgar Morin e gli scienziati contemporanei [Edgar Morin and contemporary scientists]*. Soveria Mannelli: Rubbettino.

Anselmo, A. (2006). *Edgar Morin: Dalla sociologia all'epistemologia. [Edgar Morin: From sociology to epistemology]*. Soveria Mannelli: Rubbettino.

Bachelard, G. (2002). *The formation of the scientific spirit*. Manchester: Clinamen Press.

Banywesize, E.M. (2007). *Le complexe: Contribution à l'avènement de 'l'organisaction' chez Edgar Morin*. Paris: Harmattan.

Bateson, G. (2002). *Mind and nature: A necessary unity*. Cresskill, NJ: Hampton Press.

Bateson, M.C. (2004). *Our own metaphor: A personal account of a conference on the effects of conscious purpose on human adaptation*. Cresskill, NJ: Hampton Press.

Bianchi, F. (2001). *Le fil des idées. Une éco-biographie intellectuelle d'Edgar Morin. [The thread of ideas. An intellectual eco-biography of Edgar Morin]*. Paris: Seuil.

Bocchi, G., & Ceruti, M. (1997). *Solidarity or barbarism: A Europe of diversity against ethnic cleansing*. New York: Peter Lang.

Bocchi, G., & Ceruti, M. (2002). *The narrative universe*. Cresskill, NJ: Hampton Press.

Boorstein, D. J. (1992). *The image: A guide to pseudo-events in America*. New York: Vintage.

Byers, W. (2007). *How mathematicians think: Using ambiguity, contradiction, and paradox to create mathematics*. Princeton, NJ: Princeton University Press.

Capra, F. (1996). *The web of life*. New York: Anchor.

Celeste, G. (2009). *Edgar Morin: Cultura e natura nella teoria della complessità*. Saonara: Il prato.

Ceruti, M. (1994). *Constraints and possibilities. The evolution of knowledge and knowledge of evolution* (A. Montuori, Trans.). New York: Gordon & Breach.

Chambers, I. (1993). Cities without maps. In J. Bird (Ed.) (pp. 188-197). New York: Routledge.

Ciurana, E.R. (1997). *Edgar Morin. Introduccion al pensiamento complejo*. Valladolid, Spain: Secretariado de Publicaciones e Intercambio Cientifico. Universidad Valladolid.

Collins, R. (1998). *The sociology of philosophies: A global history of intellectual change*. Cambridge: MA: Belknap.

Coser, L. (1997). *Men of ideas.* New York: Pocket.

De Siena, Santa. (2001). *La sfida globale di Edgar Morin*. Nardò (Lecce): BESA.

Descartes, R. (1954). *Philosophical writings.* London: Open University Press.

Drake, D. (2002). *Intellectuals and politics in post-war France*. New York: Palgrave Macmillan.

Eliade, M. (1978). *Occultism, witchcraft, and cultural fashions: Essays in comparative religions*. Chicago: University of Chicago Press.

Fages, J.B. (1980). *Comprendre Edgar Morin [Understanding Edgar Morin]*. Toulouse: Privat.

Fay, B. (1996). *Contemporary philosophy of social science. A multicultural approach*. New York: Blackwell.

Fortin, R. (2002). *Comprendre la complexite. introduction a la methode d'Edgar Morin [Understanding complexity. Introduction to Edgar Morin's method]*. Paris: L'Harmattan.

Gembillo, G. (2008). *Le polilogiche della complessità. Metamorfosi della Ragione da Aristotele a Morin. [The polylogics of complexity. Metamorphosis of reason from Aristotle to Morin.]*. Firenze: Le Lettere.

Green, A. (2005). *Key ideas for a contemporary psychoanalysis: Misrecognition and recognition of the unconscious*. New York: Routledge.

Heims, S. J. (1991). *The cybernetics group*. Cambridge, MA.: MIT Press.

Hessel, S. (2011). *Time for outrage: Indignez-vous!* New York: Twelve.

Hessel, S., & Morin, E. (2012). *The path to hope*. New York: Other Press.

Hollande, F., & Morin, E. (2012). *Dialogue sur la politique, la gauche et la crise [Dialogue on politics, the left, and the crisis]*. Paris: Editions de l'Aube.

Kegan, R. (1982). *The evolving self*. Cambridge, MA: Harvard University Press.

Kegan, R. (1998). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press.

Kelly, S. M. (2010). *Coming home: The birth and transformation of the planetary era*. Great Barrington, MA: Lindisfarne Books.

Kofman, M. (1996). *Edgar Morin: From Big Brother to fraternity.* London: Pluto Press.

Koplowitz, H. (1984). A projection beyond Piaget's formal-operations stage: A general system stage and a unitary stage. In M.L. Commons, F.A. Richards, & C. Armon (Eds.), *Beyond formal operations. Late adolescent and adult cogntivie development* (pp. 272-295). New York: Praeger.

Kristeva, J. (1997). *The portable Kristeva*. New York: Columbia University Press.

Le Sueur, J.D. (2003). Decolonizing "French Universalism": Reconsidering the impact of the Algerian war on French intellectuals. In J.D. Le Sueur (Ed.), *The decolonization reader* (pp. 103-118). New York: Routledge.

Lemieux, E. (2009). *Edgar Morin l'indiscipliné*. Paris: Seuil.

Luhmann, N. (1995). *Social systems*. Palo Alto, CA: Stanford University Press.

Manghi, S. (2009). *Il soggetto ecologico di Edgar Morin : verso una società-mondo*. Gardolo: Erickson.

Montuori, A. (2005). Gregory Bateson and the challenge of transdisciplinarity. *Cybernetics and Human Knowing*, *12*(1-2), 147-158.

Morgan, G. (2006). *Images of organization*. Thousand Oaks, CA: Sage.

Morin, E. (1970a). *L'homme et la mort*. Paris: Éditions du Seuil.

Morin, E. (1970b). *The red and the white. Report from a French village.* New York: Pantheon Books.

Morin, E. (1979). *Le paradigme perdu [Paradigm lost]*. Paris: Seuil (Original publication date, 1973).

Morin, E. (1981). Self and autos. In M. Zeleny (Ed.), *Autopoiesis: A theory of living organization.* New York: Elsevier.

Morin, E. (1982a). Can we conceive of a science of autonomy? *Human Systems Management, 3*(3), 201-206.

Morin, E. (1982b). *Le vif du sujet* Paris: Seuil (Original publication date 1969).

Morin, E. (1984). *Pour sortir du XXe siècle*. Paris: Seuil.

Morin, E. (1992a). From the concept of system to the paradigm of complexity. *Journal of Social and Evolutionary Systems, 15*(4), 371-385.

Morin, E. (1992b). *Method: Towards a study of humankind. The nature of nature.* New York: Peter Lang.

Morin, E. (1992c). *Viaggio in Cina [Voyage to China]*. Bergamo: Moretti & Vitali.

Morin, E. (1993). For a crisiology. *Industrial & Environmental Crisis Quarterly, 7*, 5-22.

Morin, E. (1994a). *La complexité humaine. [Human complexity]*. Paris: Flammarion.

Morin, E. (1994b). *Mes demons [My d(a)emons]*. Paris: Stock.

Morin, E. (1994c). *Sociologie [Sociology]*. Paris: Seuil.

Morin, E. (1999). Organization and complexity. *Annals of the New York Academy of Sciences, 879*(1), 115-121. doi: 10.1111/j.1749-6632.1999.tb10410.x

Morin, E. (2004a). *Autocritique [Self-critique]*. Paris: Seuil (Original publication date, 1959).

Morin, E. (2004b). *Ethique*. Paris: Seuil.

Morin, E. (2005). *The cinema, or the imaginary man*. Minneapolis, MN: University of Minnesota Press.

Morin, E. (2006). *Le monde moderne et la question juive [The modern world and the Jewish question]*. Paris: Seuil.

Morin, E. (2007). Restricted complexity, general complexity. In C. Gershenson, D. Aerts, & B. Edmonds (Eds.), *Worldviews, science, and us: Philosophy and complexity*. New York: World Scientific Publishing.

Morin, E. (2008a). *California journal*. Brighton: Sussex Academic.

Morin, E. (2008b). *Mon chemin. Entretiens avec Djénane Kareh Tager*. Paris: Fayard.

Morin, E. (2008c). *On complexity*. Cresskill, NJ: Hampton Press.

Morin, E. (2008d). The reform of thought, transdisciplinarity, and the reform of the university. In B. Nicolescu (Ed.), *Transdisciplinarity: Theory and practice* (pp. 23-32). Cresskill, NJ: Hampton Press.

Morin, E. (2009a). *Edwige, l'inséparable*. Paris: Fayard.

Morin, E. (2009b). *Vidal and his family: From Salonica to Paris: The story of a Sephardic family in the Twentieth Century*. Brighton, UK: Sussex Academic Press.

Morin, E. (2012). *Mes philosophes*. Paris: Germina.

Morin, E., & Kern, B. (1999). *Homeland Earth: A manifesto for the new millennium*. Cresskill, NJ: Hampton Press.

Morin, E., Lefort, C., & Castoriadis, C. (1968). *Mai 1968: La brèche: Premières réflexions sur les événements. [May 1968: The breach: First reflections on the events]*. Paris: Fayard.

Morin, E., & Piattelli-Palmarini, M. (Eds.). (1978). *L'unité de l'homme [Human unity]* (Vols. 1-3). Paris: Seuil.

Mortimer, L. (2001). We are the dance: Cinema, death, and the imaginary in the thought of Edgar Morin. *Thesis Eleven*, *64*(77), 77-95.

Mukungu Kakangu, M. *Vocabulaire de la complexité: Post-scriptum à La Méthode d'Edgar Morin [Dictionary of complexity: A postscript to Edgar Morin's method]*. Paris: L'Harmattan.

Nicolescu, B. (1997). Levels of complexity and levels of reality: Nature as trans-nature. In B. Pullman (Ed.), *The emergence of complexity in mathematics, physics, chemistry, and biology* (pp. 393-410). Princeton, NJ: Princeton University Press.

Nicolescu, B. (2002). *Manifesto of transdisciplinarity*. Albany, NY: SUNY Press.

Pascal, B., Molinier, A., & Paul, C.K. (1905). *The thoughts of Blaise Pascal*: G. Bell and Sons.

Paz, O. (1986). *One earth, four or five worlds: Reflections on contemporary history*. New York: Harvest/HBJ.

Piaget, J. (1970). *Genetic epistemology*. New York: W.W. Norton and Company.

Roux-Rouquié, M. (2000). Systemic modeling of biological functions. Application to the development of the GENINTER software dedicated to the compilation of interrelationships between genes and/or gene products. In H. Greppin (Ed.), *Advanced studies in plant biology: Integrating plant systems* (pp. 1-24). Geneva, Switzerland: University of Geneva.

Roux-Rouquié, M. (2002). *Le concept de Vie chez Edgar Morin. Une biologie pur le XXIe siècle. [Morin's concept of life. A biology for the 21st century]*. Paper presented at the 3rd Conférence d'Epistémologie et de Philosophie, Viseu, Portugal. Available at: http://www.mcxapc.org/docs/ateliers/rouquie.htm.

Selvini Palazzoli, M. (1990). *The hidden games of organizations*. New York: Routledge.

Sokal, A.D., & Bricmont, J. (1998). *Fashionable nonsense: postmodern intellectuals' abuse of science*. New York: Picador.

Taylor, M. (2003). *The moment of complexity. Emerging network culture*. Chicago, IL: University of Chicago Press.

Toulmin, S. (1992). *Cosmopolis. The hidden agenda of modernity*. Chicago, IL: University of Chicago Press.

Ungar, S. (2003). The thick of things: Rouch and Morin's Chronique d'une été reconsidered. *French Cultural Studies*, *14*(5), 5-22.

Urry, J. (2005). The complexity turn. *Theory, Culture, and Society*, *22*(1), 1-14.

Waldrop, M. M. (1992). *Complexity: the emerging science at the edge of order and chaos*. New York: Simon & Schuster.

Watzlawick, P. (1977). *How real is real?* New York: Vintage.

Wells, J. (2013). *Complexity and sustainability*. London: Routledge.

Wilshire, B. (1990). *The moral collapse of the university: Professionalism, purity, and alienation*. Albany, NY: SUNY Press.

Winston, B. (1995). *Claiming the real. The documentary film revisited*. London: British Film Institute.

Yassine, A. (2000). *Winning the modern world for Islam*. New Britain, PA: Justice and Spirituality Publishing.

Young, T. (2002, November 30). Twilight of the idols. *The Spectator*.

Suggested Reading for an Introduction to Morin's Work

Books

Morin, E. (2007). *On Complexity*. Cresskill, NJ: Hampton Press.

- A collection of essays outlining the main themes of Morin's work on complexity.

Morin, E., & Kern, B. (1999). *Homeland Earth: A manifesto for the new millennium*. Cresskill, NJ: Hampton Press.

- An application of Morin's ideas to the future of humanity.

Journal Articles

Morin, E. (1992). From the concept of system to the paradigm of complexity. *Journal of Social and Evolutionary Systems, 15*(4), 371-385.

Morin, E. (1999). Organization and complexity. *Annals of the New York Academy of Sciences, 879*(1), 115-121.

Morin in English

Ceruti, M. (1994). *Constraints and possibilities. The evolution of knowledge and knowledge of evolution* (A. Montuori, Trans.). New York: Gordon & Breach.

- Mauro Ceruti is a close collaborator of Morin's who introduced complexity in Italy where he is a leading intellectual. Ceruti is a philosopher of science with a strong background in Piagetian genetic epistemology, having studied and taught in Geneva. This short volume is an extremely sophisticated discussion of epistemology and philosophy of science that is inspired by Morin and closely follows his interests and orientations.

Kofman, M. (1996). *Edgar Morin. From Big Brother to fraternity.* London: Pluto Press.

- Kofman's thoughtful volume has a more political slant, with a particular focus on Morin's Hegelian/Marxist origins, but remains a worthwhile introduction.

Morin, E. (1970). *The red and the white*. New York: Pantheon Books.

Morin, E. (1981). Self and autos. In M. Zeleny (Ed.), *Autopoiesis: A theory of living organization.* New York: Elsevier North Holland.

Morin, E. (1971). *Rumor in Orleans*. New York: Blond.

Morin, E. (1982). Can we conceive of a science of autonomy? *Human Systems Management, 3*(3), 201-206.

Morin, E. (1983a). Beyond determinism: The dialogue of order and disorder. *SubStance*, *40*, 22-35.

Morin, E. (1983b). Social paradigms of scientific knowledge. *SubStance, 39*, 3-20.

Morin, E. (1984). The fourth vision: On the place of the observer. In P. Livingston (Ed.), *Disorder and order: Proceed-*

ings of the Stanford International Symposium, September 14-16, 1981 (pp. 98-108). Palo Alto, CA: Anma Libri.

Morin, E. (1987). What could be a mind able to conceive a brain able to produce a mind? In J.E. Charon (Ed.), *The real and the imaginary*. New York: Paragon Press.

Morin, Edgar. (1991). The Anti-totalitarian revolution. *Thesis Eleven*, *30*(1), 1-16.

Morin, E. (1992a). *Method: Towards a study of humankind. The nature of nature.* New York: Peter Lang.

Morin, E. (1992b). From the concept of system to the paradigm of complexity. *Journal of Social and Evolutionary Systems, 15*(4), 371-385.

Morin, E. (1993). For a crisiology. *Industrial and Environmental Crisis Quarterly, 7*, 5-22.

Morin, E., & Kern, B. (1999). *Homeland Earth: A manifesto for the new millennium*. Cresskill, NJ: Hampton Press.

Morin, E. (1999). Organization and complexity. *Annals of the New York Academy of Sciences, 879*(1), 115-121. doi: 10.1111/j.1749-6632.1999.tb10410.x

Morin, E. (2001). *Seven complex lessons in education for the future*. Paris: UNESCO.

Morin, E. (2005). *The stars*. Minneapolis, MN: University of Minnesota Press.

Morin, E. (2005). *The cinema, or the imaginary man*. Minneapolis, MN: University of Minnesota Press.

Morin, E. (2005). Re: From prefix to paradigm. *World Futures: The Journal of General Evolution*, *61*, 254-267.

Morin, E. (2006). Realism and utopia. *Diogenes, 53*(1), 135-144.

Morin, E. (2007). *On complexity*. Cresskill, NJ: Hampton Press.

Morin, E. (2007). Restricted complexity, general complexity. In C. Gershenson, D. Aerts, & B. Edmonds (Eds.), *Worldviews, science, and us: Philosophy and complexity*. New York: World Scientific Publishing.

Morin, Edgar. (2008). *California Journal*: East Sussex, United Kingdom: Sussex Academic Press.

Morin, E. (2008). The reform of thought, transdisciplinarity, and the reform of the university. In B. Nicolescu (Ed.), *Transdisciplinarity: Theory and practice* (pp. 23-32). Cresskill, NJ: Hampton Press.

Morin, E. (2009). *Vidal and his family: From Salonica to Paris: the story of a Sephardic family in the twentieth century*. East Sussex, United Kingdom: Sussex Academic Press.

Hessel, S., & Morin, E. (2012). *The path to hope.* New York: Other Press.

Morin Selected Bibliography

Morin, E., Lefort, C., & Castoriadis, C. (1968). *Mai 1968: La brèche: Premières réflexions sur les événements [May 1968: The breach: First reflections on the events]*. Paris: Fayard.

Morin, E., & Piattelli-Palmarini, M., Eds. (1978). *L'unité de l'homme [Human unity]* (Vols. 1-3). Paris: Seuil.

Morin, E. (1979). *Le paradigme perdu [The lost paradigm]*. Paris: Seuil (Original publication date, 1973).

Morin, E. (1981). *La méthode. 1. La nature de la nature [Method. 1. The nature of nature]*. Paris: Seuil.

Morin, E. (1982). *Le vif du sujet.* Paris: Seuil (Original publication date 1969).

Morin, E. (1985). *La méthode, tome 2. La vie de la vie [Method, volume 2. The life of life]*. Paris: Seuil.

Morin, E. (1986). *Metodo: 3 La conoscenza della conoscenza. [Method, volume 3. Knowledge of knowledge]*. Milano: Feltrinelli.

Morin, E. (1990). *Science avec conscience [Science with conscience]*. Paris: Seuil.

Morin, E. (1991). *Le idee: habitat, vita, organizzazione, usi e costumi. [Method, volume 4. Ideas: Habitat, life, organization, use, and customs]*. Milano: Feltrinelli.

Morin, E. (1994). *Journal d'un livre/juillet 1980-aout 1981 [Diary of a book/July 1980-August 1981]*. Paris: Interéditions.

Morin, E. (1994). *La complexité humaine [Human complexity]*. Paris: Flammarion.

Morin, E. (1994). *Sociologie [Sociology]*. Paris: Seuil.

Morin, E. (1996). *Vidal et le siens [Vidal and his people]*. Paris: Seuil.

Morin, E., & Nair, S. (1997). *Une politique de civilisation [A politics of civilization]*. Paris: Arléa.

Morin, E. (1999). *Introduction à une politique de l'homme [Introduction to a human politics]*. Paris: Seuil. (Original publication date 1965).

Morin, E., & Le Moigne, J.-L. (1999). *L'intelligence de la complexité*. Paris: L'Harmattan.

Morin, E., Ed. (1999). *Relier les conaissances: Le défi du XXIe siècle [Reconnecting knowledge: The challenge of the 21st century]*. Paris: Seuil.

Morin, E. (February 2000). Pardonner, c'est resister à la cruauté du monde [Forgiving is resisting the world's cruelty]. *Le Monde des Débats*.

Morin, E. (2001). *Journal de Plozevet*. Paris: Editions de l'Aube.

Morin, E. (2001). *Seven complex lessons in education for the future*. Paris: UNESCO.

Morin, E. (2003). *La Méthode, l'humanité de l'humanité, tome 5 : L'Identité humaine [Method, humanity of humanity, volume 5. Human identity]*. Paris: Seuil.

Morin, E. (2004). *Autocritique [Self-criticism]*. Paris: Seuil (Original publication date, 1959).

Morin, E. (2004). *Pour entrer dans le XXIe siècle [Entering the 21st century]*. Paris: Seuil.

Morin, E. (2006). *La Méthode, time 6. Ethique [Method, volume 6. Ethics]*. Paris: Seuil.

Morin, E. (2006b). *Le monde moderne et la question juive [The modern world and the Jewish question]*. Paris: Seuil.

Morin, E. (2007). *On complexity*. Cresskill, NJ: Hampton Press.

Morin, E., & Hulot, E. (2007). *L'an I de l'ère écologique, et dialogue avec Nicolas Hulot [Year 1 of the ecological era and dialogue with Nicolas Hulot]*. Paris: Tallandier.

Morin, E. (2011). *La voie : pour l'avenir de l'humanité*. Paris: Fayard.

ALFONSO MONTUORI, Ph.D., is a graduate of the University of London and Saybrook Institute. He has been Distinguished Professor in the School of Fine Arts at Miami University of Ohio, and from 1985 to 1986 he taught at the Central South University in China. Alfonso is on the board of numerous academic journals, the Associate Editor of *World Futures: The Journal of Global Education*, and editor of the series *Advanced Systems Theory, Complexity and the Human Sciences* for Hampton Press. Alfonso's books include *Evolutionary Competence* (Gieben, 1989); *From Power to Partnership*, co-authored with Isabella Conti (Harper San Francisco, 1993); *Creators on Creating*, co-edited with Frank Barron and Anthea Barron (Putnam, 1997); and *Social Creativity*, *Vols. 1-2*, co-edited with Ronald E. Purser (Hampton Press, 1999). Alfonso is a dual American and Italian citizen. He was born in Holland, grew up in Lebanon, Greece, and England, and immigrated to the United States in 1983. In London, Alfonso worked as a professional musician performing on saxophone and flute, and today continues his passion for music through his collaboration with his wife, jazz singer Kitty Margolis. He is a voting member of the U.S. National Academy for Recording Arts and Sciences.