



**Kardec and the laboratories of the
spirits: controversies, places of
production and inscriptions of an
“ungraspable” scientific object:
1857-1860.**

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A mi familia, por estar.

Resumen

La tesis reconstruye el complejo proceso de enunciación y de-nunciación de los espíritus en la modernidad en un contexto particular: la segunda mitad del siglo XIX en Francia y los años fundacionales del espiritismo. Específicamente, refiere a cómo su fundador, Allan Kardec, (pseudónimo de Hyppolite León Rivail) empleó una serie de estrategias retóricas para ensamblar los espíritus como un objeto científico. Basándose en el caso, ofrece una crítica a algunas de las narrativas de la modernidad como la secularización o el conflicto entre ciencia y religión. Adicionalmente, plantea la cuestión sobre la ontología de los objetos científicos.

Palabras clave: (Espiritismo, construcción de fronteras científicas, ontología de los objetos científicos, tecnologías literarias)

Abstract

The thesis reconstructs the complex process of enunciation and de-nunciation of spirits in modernity in a particular historical context: the second half of XIX century in France and the foundational years of spiritism. Specifically, it addresses how its founder, Allan Kardec (pseudonym of Hyppolite León Rivail) employed a series of rhetoric moves to assemble the spirits as a scientific object. Building on this case, it offers us a critique to some enduring narratives of modernity like the secularization or the conflict between science and religion. Additionally, it poses the question of the ontology of scientific objects.

Key Words: (Spiritism, construction of scientific frontiers, ontology of scientific objects, literary technologies)

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Kardec and the laboratories of the spirits: controversies, places of production and inscriptions of an “ungraspable” scientific object: 1857-1860

Introduction

The soul or the spirits are assumed today either as non-existing entities or possible agencies belonging to the domain of religious speculation. In any of these cases, not by a single minute, possible objects of scientific research. Still, in the second half of the nineteenth century, in a Europe convoluted by technical and political developments, various religious heterodoxies affirmed that they could legitimately make a science based on the belief and reality of spirits and their interaction with the world.

These are, off course, agents or entities of a polemical nature. They were also as polemical and contested then as they are today and in the assembling of their nature by different actors, this complex configuration was performed as an overlapping negotiation of frontiers among scientific and religious discourses mutually overlapping.

In this thesis, we will reconstruct this complex process of enunciation and de-nunciation of spirits in modernity in a particular historical context: the second half of XIX century in France. A moment in the history of European science that saw the emergence of so many “deviances” in scientific practice that challenged assumptions of what science should be, but also helped to canalize the development of new agreements and consensus among scientific groups and, thus, consolidate boundaries of what was defined as outside or inside science (Gieryn, 1983). Specifically, we will follow the scientific controversies surrounding the emergence in France of the spiritist movement, which aimed at a rational and serious approach to the supposed existence of spirits and their interaction with the human world. In this short period of time, french society participated in the practice of moving-tables, concretely in 1857, and it was from this point on that spiritism attempted to rationalize an approach to the belief in the communication with the spirits and the immortality of the soul.

When we refer to spirits or ghosts, the soul or the ancestors as possible interlocutors in an academic research, either we face the possible judgment of dealing with oddities, superstitions or wastes remaining from previous periods in the history of humankind, from a point of view in which these types of agencies no longer exist in nature and have been displaced to literature or american horror movies, where they inhabit as terrible fictions. Or these entities are taken as given, without any critical enquiry, in a vision possessed by the presumption that they exist. Then, having a position or just even a say about spirits or

the soul, faces the analyst with the methodological juggling of not being tempted by any of both ways of being possessed.

To address this challenge I think it is useful to acknowledge, before assuming any preliminar position, that spirits are brought here to the analysis in the general framework of an explanation of sociological order, that is, one that tries to give an account of their function as a social phenomena in broader cultural repertoires in which the spirits and other non-material agents reveal deep trends and tensions within society, and serve as prisms that can reveal important aspects of how their members live and perceive each others, so the way people interact with these agents has important implications to understand how they constitute their epistemic engagements with the world. Consequently, a social understanding of these agencies, more than defending or taking a stance for their epistemological status, it is attentive to the way this status has been constituted from different and polyvalent positions. In this sense, whether we describe the “modern world” as disenchanted or re-enchanted, the analyst must be ready to assume the contradictory situation of agents whose existence has been both proved and discarded. In a sense, they have existed and have not at the same time depending on who is the one that summons them to a certain religious or scientific explanation. Their nature is polemical and so the different positions about them.

In this analysis I am not aiming to present the arguments and positions in order to take a stance about the nature of the soul or the spirits. Not because the theological, scientific or philosophical stances that try to do so are naive, but because each explanation has to make explicit its analytical horizon and this is one in which no claim will be made for the empirical reality of the phenomena endorsed by the many believers it discusses, but it won't present them either as irrational delusions. Rather, it wants to reconstruct the multiple discursive repertoires, places of knowledge production, vital trajectories and clashes and controversies among intriguing individuals who in the “modern age” pronounced judgments, proves, facts, refutations and denunciations of an array of non-material entities, usually referred as the soul or the spirits, whose nature was in no small scale constituted through these multiple enunciations.

The thesis will track the foundational years of spiritism (1857-1860) to see how its founder, Allan Kardec, (the pseudonym of Hyppolite León Rivail) employed a series of rhetoric moves to assemble the spirits through theories, techniques, instruments, audiences and places in the foundational literature of spiritism. To do so, in the first

chapter, we offer a reconstruction of the state of the art of the different bodies of literature to which this thesis wants to make a contribution or whose language and tools it wants to use: a) historical approaches to spiritualistic movements in the second half of the nineteenth century, b) analyses of scientific heterodoxies in the Social Studies of Science and Technology literature and c) literature on the places of knowledge production and visual representation in scientific practice. It will also make a plea for new ways to represent modernity beyond the traditional idea of the “disenchanted world”.

In the second chapter, we will develop the case of spiritism and how Kardec and his movement tried to create a science of spirits. In it, we will deal with how the spiritists managed to produce literary technologies to communicate the spirits’ traces, how they developed ideal witnesses of the phenomena they claimed and the type of answers they offered to the critiques they received.

We will conclude with a reflection on how this case raises questions for the experimental approach of science and will connect the historical case with preoccupation of the STS research field.

1. How to talk about spirits without being possessed

1.1. The narrative of a disenchanting world

One of the most influential descriptions of whatever is designed with the notion of “modern world” was pronounced by a German professor during the hard days of the Great War. A conflict fought with the instruments and technology so much praised by European intellectuals as a sign of development and enlightenment. His name was Max Weber and in the conference (most of his contributions were never written, but outspoken in a room full of students) he made reference to the notion of the disenchantment of the world, which he took from Friedrich Schiller as a sign of something characteristic of his time. Here his words, spelled in a Munich at war. (Germany didn't exist yet):

(...) it means that principally there are no mysterious incalculable forces that come into play, but rather that one can, in principle, master all things by calculation. This means that the world is disenchanting. One need not longer to have recourse to magical means in order to master or implore the spirits, as did the savage, for whom such mysterious powers existed. Technical means and calculations perform the service ... the fate of our times is characterized by rationalization and intellectualization and, above all, by “disenchantment of the world.” Precisely the ultimate and most sublime values have retreated from public life either into the transcendent realm of mystic life or into the brotherliness of direct and personal human relations (Weber, [1919]1991: 142).

For Weber the disenchantment of the world lay right at the heart of modernity. In many senses, in fact, it was definitive of his concept of modernity. Technical means, laws and processes were capable of replacing what in other times would have been a world embedded in phantasmagorical and spiritual presences. In a “modern world” all areas of human experience are understood as less mysterious and so, in principle, knowable and predictable. The way Weber labeled these characteristics might have been new, but the notion itself of a growing rationalization of society and the retreat of spirits and other “metaphysical” entities was already shared by a pleiad of thinkers and intellectuals before his conference.

In 1850, almost 70 years before, a time when just a few could imagine a war as cruel and disproportionate as the one that Weber had to witness, the editor of the *Magasin pittoresque*, the first journal in the history of the french press, wrote in his pages:

The belief in a supra-human world of spirits and ghosts can be found among all peoples and places: it raises out of the impatient aspiration that leads us to escape the real to tackle a wonderful universe where time and space no more exist. It has been sustained generation by generation thanks to the ignorance of natural phenomena. However, modern sciences have hit them in such a way that they will no longer recover from it. What was a faith, shared even by eminent spirits, it is today nothing more than a credulity barely excusable in weak or ignorant intelligences” (Quoted in Cuchet, 2012: 11).

Perhaps because he shared the same perception as this editor, George Templeton, the famous New Yorker lawyer wrote surprised in 1855 in his journal, concerned with the effervescence of the practice of spirits communication in United States and Europe: “What would I have told, say, six years earlier to someone telling me that before the end of XIX century, so proud of its lights, hundreds of thousands of people in this country would believe themselves capable of communicating the phantoms of their great-parents?” (Quoted in Moore, 1977: 4-5). None of this fitted the characterization made by Comte of the “three stages” of history and his conception of a mankind gradually moving toward epistemological and social advancement by successively abandoning the invented worlds of myth and metaphysics. In such a world there was no space for spirits or the notion of an immortal soul (Comte, 1995). Weber’s argument had then the weight of a tradition when it was formulated, even if formulated in a world where spirits were reluctant to disappear.

But I was surprised too, inversely, when I first read Weber’s description of a “modern world” in terms of disenchantment, because I couldn’t stop thinking at the same time of the last occasion in which a relative went to see a man wearing a sort of african sackcloth, gold and green colored, in Granada, a small town in the eastern region of Colombia, to receive a spiritual/medical diagnosis. The prescriptions were inspired, among others, by the spirit of the Venezuelan doctor José Gregorio Hernández, dead almost a century ago. His medical labor turned him into a saint in many Latin-American countries, impatient with the long and bureaucratic canonization processes of the Catholic Church. I also thought in my grandpa, who in no small occasions went to centers distributed all over the country where people would gather around a medium, who was supposedly gifted with the

capacity to serve as a loudspeaker of messages from beyond the grave. He went there to receive messages directed to him and the occasion came when, after his death, he too addressed his family with a farewell speech.

When I read Weber I had the sensation of not fully recognizing his world made of laws, calculus and disenchanted provisions that he would describe with a certain pride. Either his supposed “modernity” had ended too soon, swallowed by a second and more deadly war, or Colombia and Latin America in general were no fertile ground for his disenchantment. Very widespread imaginaries of this region would vindicate this second hypothesis. Expressions such as “Magic Realism”, the “enchanted world”, “eccentric modernities”, “hybrid peripheries”, among others, are usually composed names, sometimes oxymorons used in literary and academic scenarios precisely to point out this general perception of a not fully developed modernity in Latin America. Here we didn’t just had to deal with the living, sufficiently demanding, but also to coexist with the dead.

But it is this re-enchanted or “never disenchanted” situation what gives Latin America and perhaps all other “modern” peripheries their distinctive characteristics? What about the practices of spirits communication that surprised Templeton in his personal notes from 1855? While Comte was thinking in his religion of humanity as a secular replacement to traditional religions and the editor of the *Magasin pittoresque* was writing his eulogy to modern sciences, a huge amount of people were at the same time trying to communicate their dead relatives through mediums and other techniques and mechanisms. It was not just a “French folly”. It happened all over Europe and United States. Perhaps the supposed disenchanted world described by Weber did not exist in the northern hemisphere either. If the nexus between “modernity” and the alleged rational view of the world is taken as inevitable, then what comes under question with these “anomalies” is the very idea of a “modern world”. We have never been modern (Latour, 1993). Or, in other terms, we (an extended we) have never been disenchanted.

This is what Jenkins (2011) suggests when he points out that disenchantment has, at best, proceeded unevenly, and, at worst, not at all. First, because formal-rational logics and processes have been, and necessarily are subverted and undermined by a diverse array of oppositional (re) enchantments. Among others, everyday explanatory frameworks of luck and fate; long-established or “traditional” spiritual beliefs and “alternative” or “new age” beliefs. Second, because the formal-rational logics and processes can themselves be re-enchanted from within, or become the vehicles of re-enchantment. “In politics there

is the ritual, symbolism and theatre of nation, the show-business glitz of party conferences, while in the organized production and consumption of culture everything from the entertainment industries to galleries, museums and exhibitions show that re-enchantment can be a thoroughly rationally organized business” (12-13).

Closely related is Berger’s sociological panorama of belief at the end of twentieth century. He, previously a contributor to the body of literature loosely labeled as “secularization theory”, says that the notion we live in a secularized world is false. Secularization understood as a positive correlation between modernization and a decline of religion, both in society and in the minds of individuals has turned out to be wrong. Even if certain religious institutions have lost power and influence in many societies, religious beliefs and practices have nevertheless continued in the lives of individuals, sometimes taking new institutional forms (Berger, 1999: 2).

Then, the narrative of a “modern world” as a net separation between a realm of logic and reason and a religious world, enchanted and full of agencies is hardly verifiable even in the times of Weber’s Munich. As Berger himself would express: there is still a rumor of angels. In his persuasive book *We have never been modern* (1993) Latour defines precisely what modernity implies, despite all of the versions there are of its meaning, as the separation between two different set of practices: one that creates mixtures between entirely new types of beings, hybrids of nature and culture, and a second which creates entirely distinct ontological zones: that of nature on one hand, that of society on the other. As long as we consider these two practices separately, we are truly modern (Latour, 1993: 10-11). The idea of the disenchantment of the world would be just one way to express this strategy of separation between the moderns and the others. This is why each time the world “modern”, “modernization” or “modernity” appears, it is defining its opposite, an archaic and stable past. “Modern” is thus doubly asymmetrical: it designates a break in the regular passage of time, and it designates a combat in which there are victors and vanquished” (Latour, 1993: 10). If we feel less confident today in our ability to maintain that double asymmetry is because we are increasingly aware that we can no longer point to time’s irreversible arrow nor we can praise ourselves, (moderns?) of being winners. Climate change or global warming as well as the persistence of religious institutions and practices, both so prominent in our time, question the enthusiasm with which “modernity” as a separate ethos was proclaimed as victorious over nature, God or superstition.

Consequently, another pivotal modern strategy of separation has been the assumption of science and religion as two very different epistemic and sociological realms. In studying the complex process of the construction of spirits' nature we will try to argue that it is better described in terms of hybrid networks rather than in an allegedly opposition between scientific skeptics aiming to disprove the spirits and religious believers trying to defend them.

1.2. Beyond the science and religion separation

Conventionally, this modern separation strategy assumes that religion and science are confronted because science makes progress that provide benefits to humankind while religion is dangerous, because it keeps individuals attached to superstitious, and ultimately, false beliefs. This narrative line can be traced as a history of successive settings and impositions. Many of the contributions that helped to consolidate this notion of conflict were held in the second half of the XIX century.

John William Draper, head of the Department of Medicine in the University of New York wrote the highly successful book *The History of the Conflict between Religion and Science* (1871), which had fifty consecutive editions and was translated into ten languages. This work is conventionally mentioned as one of the texts that strengthens the notion of an irreversible conflict. In his words:

Whatever is resting on fiction and fraud will be overthrown. Institutions that organize impostures and spread delusions must show what right they have to exist. Faith must render an account of herself to Reason. Mysteries must give place to facts. Religion must relinquish that imperious, that domineering position which she has so long maintained against Science... the ecclesiastic must learn to keep himself within the domain he has chosen, and cease to tyrannize over the philosopher, who, conspicuous of his own strength and the purity of his motives, will bear such interference no longer (Draper, 1871: 367).

Also in the United States, the first president of Cornell University, Andrew Dixon White made a statement with a very similar title, in favor of condemning theology from the point of view of an enthusiastic secularism. He saw his work as a continuation of Draper's but

rather focused in a view of conflict not so much between science and religion, but between science and dogmatic theology:

In all modern history, interference with science in the supposed interest of religion, no matter how conscientious such interference may have been, has resulted in the direst evils both of religion and to science, and invariably; and, on the other hand, all untrammelled scientific investigation, no matter how dangerous to religion some of its stages may have seemed for the time to be, has invariably resulted in the highest goof both of religion and science (Dixon White, 1897: viii).

These examples of the confrontation hypothesis seem particularly familiar to the contemporary reader precisely because they have found an echo in recent very skilled and influential science popularizers. Among them, Carl Sagan, Stephen Hawking or Richard Dawkins: an astronomer, a physicist and a biologist, all forming a triad against religion and superstition in defense of science. Against them, historians of science have shown how hard it is to find this opposition in an meticulous analysis of concrete historical episodes. John Brooke, historian, has explained precisely this point:

Members of christian churches have not always been obscurantists; many prestigious scientist professed a religious faith, even when their theology was at times suspicious. The supposed conflicts between science and religion have resulted in tensions between rival scientific interests or, on the contrary, between rival theological factions. Questions of political power, social prestige and intellectual authority have been present in numerous occasions (Brooke, 1991: 5).

These historical revisions can potentially make far more complex representations, as Pohl Valero explains following Brooke, because they don't think religion and science as fixed singulars but articulate subtler interactions between rival scientific theories and religious positions. (Pohl Valero, 2001: 52).

Gary Ferngren has resumed the contributions made by historiography on the relationships between science and religion showing how it has closed doors against two tendencies: presentism and essentialism. Presentism as the tendency to model the past employing definitions and modern beliefs, and essentialism as the supposition that ideas or disciplines are basically the same in all times. On the contrary, historiographical accounts have defended that science and religion have had very different meanings all along the

history in no small measure because the frontiers between the contents and discussions purely scientific are so malleable that they cannot be defined in any case by what a contemporary scientist would define as adequate (Ferngren, 2002: ix).

In the same spirit, departing from a sociological analysis, there are also suspicions about the pretheoretical assumption of a conflict between religion and science. Olga Restrepo has revisited episodes where there was a tension between darwinism and religion, and she comments how when analyzing demarcation processes is not methodologically convenient to employ a normative definition of science and religion and derive from it the nature of their relationships. Instead, it is more adequate to study how in different moments and contexts certain actors have participated in a collective enterprise of producing, negotiating and even imposing of modes of defining the differences and the frontiers between these two types of activities (Restrepo, 2007: 244).

Since the type of relationship established between science and religion varies according to the episode, the actors configure with their interventions and acts the different correspondences in each one of them. Again Olga: “the distinction between the outside and inside, between science and non-science, between science and religion and non-science and religion, is as solid and fragile as the chains that support them” (Restrepo, 2002: 44). If actor’s contingent positions are the ones that weave the frontiers between what is properly scientific or religious, does it mean that it is not possible to characterize the type of relationships between science and religion because such a categorization would pass over its complex configuration in local contexts? Ian Barbour thinks otherwise. He proposed an influential fourfold typology as an aid to sorting out the great variety of ways in which people have related science and religion: conflict, independence, dialogue and integration. Although he is aware that the interactions vary a lot between different historical periods or scientific disciplines to present a general pattern, he was criticized by Wentzel van Huyssteen precisely in this regard:

The only way in which this complex but important relationship can really be adequately approached would be by looking at how it plays out contextually. This is also the reason why Ian Barbour’s well-known, and helpful, fourfold taxonomy for relations religion and science through either conflict, dialogue, independence or integration may now be too generic, too universal as categories that intend to catch the complexity of the ongoing exchange between these two dominant forces in our culture (Van Huyssteen, 1998: p 3).

Despite the critique, I think we can retain Barbour’s categorization as a guide to the exploration of our case of study rather than a substitute of a first-hand exploration of it. The case of the long and complex configuration of the soul and the spirits will show the extent to which scientific and religious arguments and stances were hybrid. Complex enough to be reduced to any general pattern or world-image of an epistemic separation such as the disenchanting world an insurmountable opposition between religion and science.

Before doing so, it is necessary to put feet on the ground and have an overview of the field of historical and sociological contributions regarding modern spiritualism and spiritism as two of the major cultural movements which tried to preserve the idea of the spirit and the soul in “modernity”. Having done so I will satisfy one of the most important formalities expected from an academic novice, that is, a training in the persuasive art of situating its own work in a determined field of study and thus reclaim a position within it (Restrepo, 2004: 255). It won’t be the only field in which I will reclaim a place. I will do it respectively in the literature of Social Studies of Science about scientific controversies, specially regarding the ones in which a constitution of borderlines between science and deviant science is at stake and in the sub-group that has been concerned with the role of inscriptions and places in the production of scientific knowledge. These rhetorical attempts will divide the next three sections of the present chapter.

1.3. Historical approaches to modern spiritualism and spiritism as major cultural movements

1.3.1. The spiritual footprint of the long 19th century: the beginnings of modern spiritualism in the United States and Europe

Historiographical accounts on modern spiritualism, spiritism and “magnetic phenomena” used to be very limited to just a few authors, usually a literature produced by insiders, with a very strong inclination to produce confessional and hagiographical histories of their movements, contributions and relevance. These subjects had not retained much of the attention of academic researchers in social sciences. As Cuchet explains in one of the most relevant historical accounts of Spiritism: “it floated over the subject a smooth stench of infamy: mental aberration for some, “superstition” or trickery for others, it seemed difficult to elevate to the dignity of a scientific object such phenomena, without falling into

an historiography of the strange or esoterism, academically dangerous and of very limited scientific interest” (Cuchet, 2012: 12).

This academic position, or we could perhaps describe it as a possession, has considerably changed at least in the last twenty years. Many investigators, among them ethnologist, anthropologist, but mainly historians and sociologists, have stepped out of the prejudice of a conflict between science and religion in “modernity” and have preferred to investigate precisely the game of shadows between reason and faith that lies upon a period of time that stretches from the end of eighteenth century, with the event in France of the fall of the Ancient Régime and in the United States with the consolidation of the independent Republic, to the beginnings of the twentieth century. This is done, following the patterns of intellectual evolution of the mesmerist movement as well as the heterodox intellectual movements of what has been called the “dark enlightenment” or the “romantic enlightenment”, through the successive metamorphosis of them in modern spiritualism and spiritism. We can think of it as an historiography searching for the heterodox spiritual footprint of Hobsbawm’s long 19th century. I’m going to present some of the most relevant contributions of which I am aware in this literature dividing them according to the period they cover among these years. This will serve me to locate the specificity of my own contribution. The first period puts us in the United States in the 1840s and has to do with the so called movement of modern spiritualism.

Modern spiritualism is usually referred as a cultural movement that includes all the believers in a series of strange phenomena called with different names at the time: spirit rappings, the Rochester knockings, mysterious noises, spiritual manifestations or spiritual telegraph. The term itself was used for the first time by Horace Greeley in the New York Tribune in may 15, 1852 to denominate all these individuals who had in common the belief that they could contact the souls of the dead.

This general belief emerged from a rather humble event that has been described and studied by the pioneer work of Moore (1977) and Braude (1989). Other accounts have deepened the analysis Monroe (2008); Cuchet (2012). Early in 1848, Kate and Maggie Fox, two young sisters in rural New York State, began to receive mysterious communications from the beyond. These took the form of “spirit raps,” sharp sounds that emanated from walls, furniture, or any other hard surface. Shortly after the raps first occurred, members of the Fox family started to ask questions of the unseen force that produced the noises. Initially, the answers were simple: a single tap for “yes,” silence for

“no.” Using this unwieldy method, the Foxes and their growing circle of guests determined that the soul of a murdered peddler produced the “raps.” (Monroe, 2008: 15). Later, the sister eventually found they could summon these noises at will, in any location, and that a tremendous variety of spirits heeded their calls. The novelty of these manifestations spread quickly. The spirits could manifest themselves but only if there were present gifted individuals, like the Fox sisters, in order to establish the connection. The faithful called these privileged intermediaries “mediums.” During the late 1840s and early 1850s the practice and belief of communication with the spirits grew rapidly and the social figure of the medium acquired great prominence.

The historians and sociologists that have analyzed this movement have tended to locate spiritualism as a distinctively American religious movement. As Monroe has explained (2015: 249-250) their efforts to do so have taken at least three major forms. First, emphasizing the spiritualism’s connection with the women’s rights, precisely because most of the mediums were women so the movement helped to create a new social space for them to acquire a public voice (Braude, 1989) to defend abolitionism (Moore, 1977). Second, they have also placed spiritualism in the landscape of the broadly Protestant diversity that characterized the United States before the Civil War, alongside with Swedenborgianism, Universalism, Quakerism, Unitarianism, Mormonism, and so on (Albanese, 2007; Braude, 1989; Moore, 1977). Cuchet has precisely explained how important was the religious American landscape, constituted by many liberal and heterodox movements, to provide a great deal of the doctrinal substance to modern spiritualism. For instance, the ideas of Swedenborg had a decisive influence in Andrew Jackson Davis, who was one of the major figures in the history of the American modern spiritualism (2012: 43). Third, an approach grounded in cultural history, emphasizing the way spiritualism reveals specifically American changes in practices of mourning, ambivalence about race, and broader efforts at national-cultural self-definition (Cox 2003; McGarry 2008; Gutierrez 2009).

Within few years of its emergence in United States, modern spiritualism as a practice of communication with the dead, traveled to Europe. It spread to Great Britain in late 1852, after the arrival of the American medium Mrs. W.R. Hayden (Goldfarb and Goldfarb 1978: 68–87). In France it was in mid-June of 1853 that the fashion of making the table move through the imposition of hands became a societal frenzy. The mode of the tables tournantes, explains Cuchet, was one of the first importations of cultural practices from

America to the European culture (Cuchet, 2012: 55). Although the cases of Great Britain (Owen, 2004) and France (Cuchet, 2012) have been the most documented, by spring 1853, the fascination with table-moving had ignited the replication of its practice also in Germany, Italy and Russia (Biondi, 1988; Treitel, 2004; Vinitisky, 2009) among other places that need to be studied thoroughly. It had become a transnational phenomenon. Thanks precisely to this transnational character of the table-moving practice, Monroe has promoted recently an appeal to study Modern Spiritualism and Spiritism from a transnational approach, that is, not just focused on how each nation-state structured in a particular way the ensemble of practices, but also concerned with the study of exchanges and relations of contact between the parties (Monroe, 2015: 249-251).

Most of this transatlantic analysis of spiritualism has referred to transactions between the American and the French context. This is so because there is in both nations a hugely documented literature that charts precisely the specific unfolding of these ideas in them. The investigation in the French case owes a great deal to the pioneer work of the historian Nicole Edelman (1995) *Voyantes, guérisseuses et visionnaires en France. 1785-1914*. (1995) showing how the practice of table-moving in France was an epitome of previous spiritual and philosophical concerns from the Ancient Régime onwards. The frenzy of 1853 was not, then, a point of departure but a point of arrival (Edelman, 1995: 77).

Lynn Sharp, for example, in a work dedicated to explore how spiritism created new combinations of spirituality, reason, and romantic outlooks that refused to give absolute primacy to either enlightenment materiality or to the narrow religiosity of the Catholic church, shows how the apparently original ideas of reincarnation that spiritism promoted, had a previous intellectual niche in the romantic socialism of the 1830s. To do so, she introduces two key characters, Jean Reynaud and Pierre Leroux. Sharp explains how these eager young idealists worked together trying to spread social-democratic ideas as a means to social and political reform. Building on Catholic thinker Pierre-Simon Ballanche, Reynaud and Leroux argued that the soul evolved through a series of lives, either on this earth or on other planets. They were members of the radical utopians, the Saint-Simonians, in the 1820s, and shared Saint-Simonian ideas of progress, romantic preoccupations with death and new explorations in "oriental" literature with religious ideas like reincarnation (Sharp, 2006: xviii). Particularly intriguing is how they nationalized these ideas by arguing that the early Gallic druids had believed in reincarnation and bequeathed it to their descendants in the nineteenth century.

For its part, Monroe follows the traces of subsequent French spiritualists like Louis-Alphose Cahagnet who is described as an idiosyncratic mesmerist practitioner (or magnétiseur) who developed a cosmology in the vein of the swendenborgian approach of the American seer Andrew Jackson Davis inspired by a world-picture that emphasized the connections between the terrestrial and the beyond. In early 1848, he published the initial volume of *Arcanes de la Vie Future Devoilés*, a vast compilation of transcribed conversations between spirits and somnambulists. The claims defended there: a life after death, individual souls engaged in a dynamic process of improvement, first ‘purifying’ themselves of the residual evils of material existence, then progressing—albeit at varying rates—towards an ultimate state of communion with the divine. This tenets would have been easily recognized by mid-nineteenth-century french readers familiar with this cosmology’s roots in the various strains of romantic socialist thought (Monroe, 2008: 254). Specially interesting in Monroe’s account is how he describes this French pre-spiritist Spiritualism as being at the crossroads between Modern American Spiritualism and Mesmerism, which had already a long pedigree as an occult science in France. Cuchet expands this context by describing what he calls the “period of incubation” of spiritism, which not only included the intellectual contributions of mesmerists, French spiritualist and romantic socialists, but also aristocrats such as the baron Louis de Guldenstubbé who wrote about animal magnetism and esoterism or even the famous writer Victor Hugo, who participated in a series of spiritual séances first with the intention of communicating his deceased daughter and then to accomplish the prophetic mission of redacting a new bible de l’humanité (Cuchet, 2012: 109-130).

Both authors, Moore and Cuchet, detail how all of these complex and heterodox figures and doctrines were received by the press, the governmental authorities, the catholic church and, with a particular interest for our study, the scientific community. In the French case, this has to do specially with a series of debates held by the Académie des Sciences precisely trying to give an account of the phenomena of moving tables. The hypothesis ranged from physiological explanations— that their rotation was the product of imperceptibly tiny muscular tremors produced by séance participants to a sort of synthesis that dealt with the case in at least partially psychological terms (Monroe, 2008: 38).

When Hippolyte-Léon-Denizard Rivail attended his first séance, in May 1855, the philosophical principles of American Spiritualism had been circulating in France for a little

while embedded now in a very particular cocktail of mesmerist, socialist and republican ideas and opposed to certain scientific and political trends advocating for empiricism, positivism and naturalistic accounts of the world. He would try to make an apparently impossible synthesis between them. This attempt is what receives the name of spiritism.

1.3.2. The first years of spiritism

The unsettled intellectual climate in which H.L.D. Rivail began his own studies of séance phenomena was one in which small groups of writers were adapting american spiritualist ideas to the french context by subjecting them to a variety of strategic modifications, often seeking either to associate them with the most radical currents of 1848 or to assimilate them into a Catholic framework. Rivail was not exclusively drawn to either of these points of view. Instead, his temperament and background seem to have disposed him to search for a new type of synthesis. Drawing on a training in the ‘experimental method’, he devised a series of linked queries in advance of each meeting, and posed them in a sober, methodical way, “not accepting an explanation as valid until it resolved all the difficulties of the question.” (Monroe, 2015: 258-259) Doing so, he was able to build, with the help of mediums, a rigorous and rational doctrine of spirits and their contact with the living.

The historiographical accounts of spiritism (See Sharp, 2006; Monroe, 2008; Cuchet, 2012, Laplantine, 1990; Brower, 2010; Edelman, 1995) all agree in locating the beginnings of the movement precisely with the figure of Hippolyte Rivail, or as he is widely known, Allan Kardec, a name that was suggested to him by a spirit in a séance, arguing that it had been his name in a previous reincarnation in which he was a druid priest. He began his career as the “codifier” of the spirits doctrine very late in his life, at 51. Previously he had a certain interest in mesmerism, which he had begun to explore in the 1820s, but he remained skeptical of the 1853 vogue for table turning until his mind began to change when he had a conversation in 1855 with a M. Pâtier, “a public official, of a certain age, a very ‘well-educated man, with a cool, grave character,” (Kardec 1978: 241). The way he describes him gives us an idea of his own attitude towards the phenomena. After this conversation he agreed to participate in a séance in which he was finally convinced of the reality of spirits and the communication with the beyond.

From this point onwards, Kardec began working on the composition of *The Book of the Spirits*, which was finally published in 1857. All of the Historians and analysts have pointed out the reasons why Kardec's book was especially successful, taking into account that his was just one amongst a burst of french-language texts on spiritualism published at more or less the same time. Monroe highlights the literary fact of a distinction in terms of style. Where earlier spiritualist books in French had tended to be digressive, loosely organized compilations of anecdotes and speculations, Kardec's spirits conveyed their ideas in simple terms, responding directly, catechism-fashion, to clearly stated questions. Perhaps even more important, the responses the spirits provided were notable for their lack of originality. Instead of exploring uncharted, fanciful-seeming intellectual territory, the communications in the *Livre des Esprits* synthesized select elements from the diverse systems that had emerged in earlier French spiritualist texts (Monroe, 2015: 260). It was, then, more accessible, especially to the progressive, left-leaning urban middle class because it resonated with their convictions and political, religious and scientific concerns. For his part, Cuchet notices Kardec's linguistic canniness when in the *Livre* he precisely proposes the term “spiritism” to separate what his doctrine entailed from the American spiritualism, the modern spiritualism or the magnetic phenomena (Cuchet, 2012: 21). He wanted to separate spiritualism, which was generally taken as a belief in the existence of agencies, entities or realms of the experience not only in materialistic terms, from his more radical doctrine, which additionally implied the belief in the doctrine of reincarnation and the possibility of communicating the souls of dead relatives and other spirits.

Monroe states succinctly what Kardec's spiritism implied and why it had such an enormous success in the French context:

Based on an adaptation and alteration of American ideas distinctively suited to the requirements of the context in which he found himself in the late 1850s and early 1860s, one defined by four elements very different from those present in the United States or Great Britain: a legacy of visionary cosmological and moral thought derived from the writings of French romantic socialists such as Charles Fourier, Pierre Leroux, and Henri Reynaud; a conception of teleological historical development and the value of empiricism rooted in the positivism of Auguste Comte; an orthodox religious landscape dominated by the Catholic Church, which retained close ties to the state; and an authoritarian government that imposed strict legal controls on public speech, especially concerning matters of politics, economics, and religion (Monroe, 2015: 251-252).

This description can be complemented by Cuchet's commentary on the doctrine deployed in the *Livre des Esprits* by saying that its anthropology came from animal magnetism, its religious ideas from thinkers like Fourier or Reynaud, its epistemology from a positivism reduced to the principle of experimental confirmation, and the forms of its religiosity from catholicism, while its morality had a lot in common with liberal protestantism (Cuchet, 2012: 170).

Kardec's grandiose vision of his doctrine's significance did not just stop with the publication of the *Livre*, he also participated in the constitution of the social component of the doctrine, creating an institutional platform for it in order to give shape to a coordinated movement. Kardec accomplished this task, first, by founding a journal, the *Revue Spirite*, devoted to the study of communications with the beyond and also a place where he would pronounce his thoughts on certain doctrinal ambiguities and engage in debates and controversies of the social, religious and scientific kinds. Second, he made numerous travels to different cities around France, specially Lyon and Bordeaux, where spiritism cultivated lots of adherents. Finally, he became a tireless propagandist for his ideas and defined the role of mediums, participants and doctrinal adjustments through the foundation of a society devoted to the holding of séances. Cuchet is particularly helpful in identifying the geographical, economical and religious origins of the movement (Cuchet, 2012: 215-259). Sharp emphasizes how the movement functioned as a site for democratic activity and self-expression and, in this sense, of possible political critique (Sharp, 2006: xix).

Precisely because of the emphasis that Kardec placed on doctrinal coherence, the French spiritism acquired a very different shape from the predominantly individualistic ethos of American spiritualism, where contradictions and inconsistencies were not necessarily avoided or confronted. This too placed Kardec himself at odds with other spiritists who were uncomfortable with his push to codify. Among his opponents, the most relevant figure was perhaps Zéphyre-Joseph Piérart, former editor-in-chief of the *Journal du Magnétisme*, France's leading mesmerist periodical. Shortly after the *Revue Spirite* made its debut, Piérart founded a competing journal named the *Revue Spiritualiste*. Cuchet has explored some of the doctrinal differences between Piérart and Kardec as well as some other figures of what he calls "the independent spiritisms" (Cuchet, 2012: 193- 200).

1.3.3. Spiritism and spiritualism after Kardec: 1869-1890

After his sudden death in 1869, spiritism had to face many uncertainties. The times were changing for them. The Second Empire had collapsed after the defeat at the hands of the Prussians and paved the way for the consolidation of a new republic in 1871, with a clear conservative and catholic tendency. What had been before a reluctant if not indifferent attitude of governmental authorities towards the activities of spiritists, was transformed into a hostile attitude coming from the catholic church and the government. The historiography has a consensus about the growing difficulties that the movement faced during these years. Among them a major figure in the spiritist movement is Pierre-Gaëtan Leymarie, Kardec's successor. As Monroe explains, while Kardec had been a formally educated political moderate, descended from the professional bourgeoisie. Leymarie, in contrast, was a lower-middle-class autodidact and radical. Spiritism began to bend towards the democratic left, much to the concern of the authorities of the day (Monroe, 2008: 154). Monroe dedicates a very interesting analysis of what can be perhaps the episode that best epitomizes this growing aversion: a highly publicized trial that took place in 1875, in which several spiritists, among them Leymaire, were convicted of producing and marketing false spirit photographs, a technology which Leymaire believed could provide safe and indisputable evidence to prove the material presence of disembodied souls in a time of growing uncertainty.

Precisely at the same time spiritism was facing many challenges in France, there was a growing interest by well-known British scientists in the experimental investigation of psychical phenomena, with the aim of definitively proving or disproving the “spirit hypothesis.” Analogous to the role Edelman played in French history of spiritism, Janet Oppenheimer with her influential *The Other World: Spiritualism and Psychical Research in England, 1850–1914*, paved the way for the investigation of these figures, among them, the chemist William Crookes, discoverer of thallium and fellow of the Royal Society, who published a series of articles in the prestigious *Quarterly Journal of Science* describing his experiments with Daniel Dunglas Home, the most famous medium of that epoch, claiming the authenticity of the phenomena the medium produced. Also, the naturalist Alfred Russell Wallace, coauthor with Charles Darwin of a crucial paper on the theory of natural selection, who published an ardent “defense of Spiritualism.” Other major figures in English intellectual life followed the paths of Crookes and Wallace, including the Cambridge moral philosopher Henry Sidgwick, one the most important British thinkers of the period and the famous Scottish writer Arthur Conan Doyle who even wrote a *History of Spiritualism* (Oppenheimer, 1985). Subsequent works have explored different aspects of

this period. Owen (2004) on the place of women in spiritualists movements, and Monroe (2008) on the way this scientific literature was appropriated by spiritist in France. Previous works in the history of science in the victorian age have also made contributions, especially to the understanding of the complex configurations between spiritualism and science in specific thinkers including Malcolm Jay Kottler on Russell Wallace (1974) and Collin Russell on Michael Faraday (2000).

Another important transformation in the spiritist movement came during these years of crisis in France when the literature, doctrine and mediums travelled abroad. Particularly well- documented is the case of Brazil, around the year of 1865, when the first spiritist sessão was held in Salvador de Bahia in a cultural landscape already familiar with mesmerist and homeopathic doctrines. There the movement, long after it had lost much of its religious and philosophical durability and strength in France, became one of the most relevant and influential doctrines in the religious landscape of the country. The key work that has documented this process of transformation between french and Brazilian spiritism is the ethno-anthropological study of Laplantine and Aubrée: *La table, le livre et les esprits. Naissance, évolution et actualité du mouvement spirite entre France et Brésil* (1990). Especially rich is their analysis of how the practices differed in the two locations since spiritism, more than just a doctrine or an unified movement is an heterogeneous group of practices. David Hess (1987) has done a comparative analysis between psychical research and institutions in Brazil and other locations, mainly the United States and Europe, which deserves our special attention since it uses, perhaps for the first time, problems and concepts from the Social Studies of Science to address the case. More recently, there has been an outburst of research about spiritism in Brazil as a doctrine and about their local debates with other sciences, especially psychiatry (Gulão Pimentel, 2014; Moreira Almeida & Lotufo, 2005).

Other locations where spiritism migrated to have been less studied and there is an enormous opportunity to enquiry about these translations. Chile's case has been investigated in the work of Yerko Muñoz Salinas (2012) and Manuel Vicuña (2006). In Colombia, work exploring the connections between spiritism, journalism and artisan literature in Santa Fé de Bogotá during the second half of the XIX century has been done by Loaiza Cano (2009) but these are disconnected from the rest of the contributions in the field because of the attention paid to the political side of the spiritist literature, leaving many other areas unexplored. A comparative literature of different transnational spiritisms has yet to be undertaken.

1.3.4. Diffuse spirituality at the end of the century

During the period that ranges from 1890 to 1914, research about the transformation of Spiritism and Modern Spiritualism is less abundant, mainly because both movements became involved in new spheres of discourse and acquired a more diffuse identity.

Monroe has explained the complex role of Spiritism and Spiritualism, first, in the influential Fourth International Congress of Psychology, which is usually held as among the most important of these gatherings, both for its size and position in the larger history of the field. This congress cemented the idea of a psychology based not on philosophical speculation but on empirical research, and how their approaches began to be excluded in it. Monroe also follows the trajectories and controversies between Richet and Janet, two major french researchers on psychic phenomena, and how the increasing importance of subconscious mental processes was interpreted either as favouring or disqualifying the possibility of those phenomena studied by psychical research. Additionally, he deals with how spiritism in France reacted to these transformations through the figures of Gabriel Delanne and Leon Denis, both of whom took different paths to address the problems that new psychological theories posed to the doctrine, one emphasizing the scientific vocation of spiritism while the other highlighted its consolatory and emotional role (Monroe, 2008: 199-250).

A deeper investigation about the role of psychical research in France during these years has been provided by Matthew Brady Brower, who explains how the transformation of psychical research at the end of the century has to be considered in relation to the reception of psychoanalysis (Brower, 2010: 5) even though French psychologists were reluctant to accept Freud's theories and instead opted for a French version of the unconscious.

When the 1920s and 1930s arrived, the old organizational and ideological structures of nineteenth century heterodoxy had radically changed and their popularity diminished. This applied equally to spiritism, modern spiritualism and to psychical research, all of which nevertheless retained promotional platforms, gatherings and doctrinal production that form a yet- to- be- understood bridge between late XIX century religious heterodoxies and

the New Age movements of the second half of the XX century. A bridge crossed by movements such as Traditionalism and Surrealism, two important but very different developments of the 1920s and 1930s, as Monroe explains (2008, 255).

1.3.5. Where do I locate this contribution?

Although the authors that have joined us repetitively in this reconstruction have all explained the major points of Kardec's doctrine, nonetheless, I think there is still much to do regarding precisely how it was that Kardec and the *Livre* gave to the doctrine an aura of scientificity. What were the debates, disciplines, evidences, authors and experiments he and his followers provided to insufflate the voice of the spirits with a grave and rational character?

In the historiographical accounts we have reviewed above, most of the contributions have tended to see the spiritist movement and the surrounding streams of mesmerists and Modern Spiritualists as tropes that reveal broader political, cultural or religious motifs in France, United States or Great Britain. Cuchet (2012) uses this episode to explain society and french religion in the Second Empire, Monroe (2008) to understand religious heterodoxies, Owen (2004) to think in the place of women in Victorian England, Lynch (2006) to grasp the political context that preceded the rise of Spiritism and how it was a womb from which many radical social tendencies were born, and so on. In doing so not all of these works have necessary dedicated thoughtful analysis to the role that science played in the emergence of these movement and how either it was used by other actors to discredit them or used by themselves to defend and justify their stances. A very few very recent contributions that have deliberately studied as their main concern the role of scientific discourses and techniques within these years include Brady Brower's (2010) investigation about "psychical research" in France or Sofie Lachapelle's (2015) and her work on the relationships between science and magic in the same period.

However, a detailed account of science as a rhetorical device used by spiritist to give legitimacy to their stances and beliefs, that is, a more careful attention about the interplay between the bodies of literature produced initially by Kardec, *La Revue Sprite* and *Le Livre des Esprits*. Thinking about science in this context as the deployment of literary strategies and materialities, will help us dress questions that are sometimes underdeveloped in the more broad studies of spiritualism.

Questions such as which type of people would gather around the spiritist sessions of Kardec? or what role did witnesses played in the conformation of facts in the seance? These, as well as an account of the characteristics of places in which people would be congregated and the role that mentioning or not mentioning them had in building a case for the seriousness of the spiritist enterprise, are themes that this thesis wants to deal with.

Approaching the materialities, techniques, places and rhetorical devices is a necessary complement to the analyses that previous authors have made about these years and helps to fill out some areas in the literature not yet sufficiently explored, specially, how did Kardec tried to convey an aura of scientificity to the doctrine in the books he codified and the journal he directed. A way to formulate this contribution could be that it wants to bring the analytical concerns of the Social Studies of Science and Technology (STS) to the more culture-oriented studies of spiritualism. Therefore, the next chapter will try to present how is it that STS academics have approached the type of heterodoxies that have concerned the historiographical work about spiritism and modern spiritualism, to see if any of these contributions can help to unveil new areas of inquiry or questions not yet explored in the literature.

1.4. Scientific heterodoxies in Social Studies of Science and Technology

1.4.1. The constitution of a scientific heterodoxy

If dealing academically with the soul or the spirits in certain social or human sciences areas requires a previous justification from the analyst showing how one tries not to be possessed by the subject itself, he can have at least the hope that its subject would be better welcomed in others. If the analyst has read the influential chapter David Bloor wrote presenting the principles of the Strong Program in Sociology, and its aim to follow a principle of impartiality in respect to truth and falsity, rationality and irrationality and the necessity of a symmetry between the type of explanations it gives about beliefs assumed to be true or false (Bloor, 2009: 38), then it is to expect that he would feel better suited in it to investigate entities that have come to be attached to categories such as pseudo-science or para-normal without quickly losing credibility while doing so. In effect, it is

easier while following these methodological principles not to incur in the quick judgment that associates immediately what has come to be under the prefix “para” or “pseudo” with an imputation of falsity.

Nonetheless, a revision of how much has the field of STS dealt with questions related to the constitution of the frontiers between science and pseudo-science might leave the analyst with the perception that even in STS it is a somewhat relegated subject, a kind of heterodox topic. Even if it began with lot of strength, thanks precisely to David Bloor’s appeal and some works about pseudoscience and deviant science made by Collins (1979), Pinch (1979), Ashmore, (1993) Gieryn (1983) and Hess (1987) their work began to move towards more “stable” cases studies in science. A biographical commentary made by David Hess on his personal website about why he moved from his earlier studies in the Spiritism movement in Brazil to other topics about publics, industry and sustainability is particularly telling about this transition: “After that, I decided that issues of science and religion were very marginal in the Science and Technology Studies field that I was joining after getting the job at Rensselaer, and as a result I turned to topical problems that were more mainstream (or at least a little more mainstream)”. Also, when Collins and Pinch wrote their 1979 article about the attempts to establish the existence of a certain class of phenomena referred to as paranormal phenomena, they had to let their colleagues know what their analytical aim was in order not to lose credibility: “we have quickly discovered the importance of telling our sociologist colleagues that our interest was strictly that of the participant observer building up the background for good sociological fieldwork” (Collins & Pinch: 1979 :239).

But even if a main line of research in STS about frontiers in science and pseudo or deviant science has not maintained its early prominence, still the contributions made in this direction provide very useful conceptual and analytical resources to enrich the historical and sociological enquiry about the role of Spiritism and Modern Spiritualism in XIX century. To my knowledge, none of these contributions has directly studied the case of Spiritism in France. What comes closest is precisely David Hess work about spiritism in Brazil (1987). Many of them, nonetheless, are closely allied, dealing with the complex configuration of the disciplinary boundaries between various forms of psychology at the end of the century, how psychical research was performed in different locations and the type of controversies in which they got involved.

A first relevant contribution comes from Dolby's article “reflections on deviant science” (1979) in which he makes a critique of the philosophical attempts to resolve the demarcation problem between science and pseudo-sciences and suggests the typical STS solution of reformulating the problem in terms of social criteria that produce in each case the distinction between orthodox science and deviant sciences. This frontier of course, is not stable and depends upon the social basis in which it rests. Dolby, then, characterizes various forms of deviant science depending on their social milieu. Deviant science in the scientific elite, which seems like a contradiction in terms, is possible when certain elite scientist have consolidated such a reputation in their fields that they can take the risk of taking up a novel and controversial theme without losing all credibility (1979: 16). This was the case precisely of William Crookes and his detour into psychical investigations trying to prove the reality of the soul. Deviant science at lower levels of institutionalized science, however, is difficult to escalate into sustained intellectual movements within orthodox science, and tends to find its social basis outside of it, sustained on many occasions by particular sources of funding. The case of experimental research on parapsychology by American psychologists in the early twentieth century was supported thanks to these sources (1979: 18). There is also what Dolby calls popular deviant science, mainly promoted by journalism and sustained by enthusiasts who publicize their engagements with the phenomena themselves. The table turning frenzy seems to fit in this category, although later spiritism and psychical research questioned precisely this popularization and tried to narrow the access to the phenomena. Finally, Dolby talks of a deviant science present in cults, a cultic milieu and sects sharing a common ideology that erect some kind of barrier between themselves and the rest of society. In these cases it is easier to defend a deviant belief system (1979: 27).

All of his categories serve us to identify the main actors involved in our case study, mainly spiritist, official scientist and mesmerists or modern spiritualists. How can we define them in such a way that does more than just add them to the single binary distinction between science/deviant science? Dolby's article helps to address the question with his categories. Here, nonetheless, we are just barely identifying each actor in different types of social domains, but how is precisely that the frontiers between science and deviant science were constructed? To answer this we need to appeal to other sources. An influential work by Collins and Pinch (1979) and another one by Gieryn (1983) help in this direction. Both are interested in the rhetorical construction of the boundaries of science. Gieryn identifies that usually the distinction is made by defining what science is not, an strategy that serves

the protection of scientist's professional authority. One type of boundary has been, as the late Victorian period shows, the drawing of a separation between science and religion. Some of the features of this distinction are, first, to see science as practically useful in inspiring technological progress while religion serves for aid and comfort in emotional matters. Second, to think of science as empirical in that its road to truth is experimentation with observable facts of nature, while religion is metaphysical because its truths depend on spiritual, unseen forces assumed without verification. Third, to understand science as necessarily skeptical because it respects no authority other than the facts of nature. Religion in contrast is dogmatic because it continues to respect the authority of worn-out ideas and their creators. Finally, science is objective knowledge free from emotions, private interest, bias or prejudice, while religion is subjective and emotional (1983:785).

Another common distinction that Gieryn points out is to see science as not-mechanics, with scientific inquiry as the fount of knowledge on which the technological progress of inventors and engineers depends. Also that scientists acquire knowledge through systematic experimentation with nature, whereas mechanics and engineers rely on mere observation, trial-and-error, and common sense, without being able to explain their practical successes or failures. Also, science is theoretical, while mechanics are not scientists because they do not go beyond observed facts to discover the causal principles that govern underlying unseen processes. Similarly, while scientists seek discovery of facts as ends in themselves not needing to justify their work by pointing to its technological applications, others think of inventions as means to obtain further personal profit (1983: 787-788).

Another rhetorical strategy, studied this time by Collins and Pinch (1979) involves not just a distinction about what is or is not science, but also implicit or explicit rejections of certain knowledge claims. Implicit rejection operates when rival knowledge claims are ignored by orthodoxy, whilst explicit rejection is characterized by controversy where the objects of dispute are articulated by individual scientists or opposed groups of scientists. Both rejections proceed different according the fora in which they are made. There is a "constitutive forum" which comprises scientific theorizing, experiment and corresponding publication and criticism in the learned journals, also the formal conference setting. Then there is a "contingent forum", a more diffuse field composed by discussions, gossip, fund raising, semi-popular journals, professional organizations, and everything that scientist do in connection with their work, but which is not found in the constitutive forum (1979: 240).

The authors depict tactics of legitimation and rejection in the constitutive and contingent forum made by the ones who want to criticize or refute the claims provided by heterodox or deviant scientist. Among them, in the constitutive forum there can be found as possible tactics: i) a blank refusal to believe the heterodox science claims, ii) the use of symbolic hardware of philosophy to superficially maintain the boundary between what may or may not be said in the literature, using notions such as “cumulative results”, the “Occam’s Razor” to exclude certain hypothesis because they don’t reach those standards, iii) an association of the claims with unscientific beliefs and interests, such as faith, a tactic that matches Gieryn’s thought about the rhetorical distinction between science and religion. iv) Accusations of triviality that instead of calling for a rejection of deviant scientist because they hide occult agendas they do it because they think of the phenomena they describe as simply uninteresting or too superficial. v) an attack to its practitioners in terms of the methodological precepts they follow, such as the use of classical frequency probability to prove certain hypothesis. Interestingly, this critique most of the time also can be interpreted as a challenge to orthodox science that uses the same methodological precepts. vi) Unfavorable comparisons with canonical versions of scientific method, for instance, they judge that deviant scientist have failed to satisfy criteria of “proper” science such as the theoretical explanation of the phenomena or the production of a “repeatable experiment” and finally vii) an accusation of fraud that is not only raised against a particular individual but to a whole discipline, for example, because they cannot produce any experiment that can block the interaction between subject and object before the experiment takes place, even if the possibility of a total absence of communication between the subject and the object of an experiment in itself seems to be hardy achievable (1979: 244-253).

There is another set of tactics the authors have found in the contingent forum, also used to discredit claims and hypothesis made by deviant scientist. A first one i) is the use of ad hominem arguments that somehow could discredit the impartiality in the design of their experimentations and observations. ii) A magnification of anecdotal evidence, so papers and evidence which were never intended for publication and were just provisional statements are used to criticize their authors. iii) a systematic denial of spaces within orthodox semi-popular publications to publish experiments and evidence by deviant scientist and even when conceding a place usually located in such a way that it is intertwined with other texts and commentaries that put into brackets the normal condition

of the contribution (1979: 255-259). To complement these tactics, we would like to add other three suggested by Gieryn that are usually used in the contingent forum although they could be conveyed also in more formal scenarios. vi) an accusation of excessive reliance upon popular opinion to validate their theories or findings rather than attending to scientific examination and v) a perception that the evidence they provide is so vague as to impede adequate empirical testing or discussion with them (1983: 789).

The authors, nonetheless, have remained within the realm of what they call explicit rejection strategies, but not implicit ones. Obviously, to describe the later is far more difficult, but another article, more recent, by Collins and Fringe (2014) might indicate a possible way to grasp this faint criteria in terms of the components of specialist meta-expertise used in judging papers: tacit aspects of style, judgments about having heard or not about the author or the journal, attention directed one way rather than another by socialization or judgments about the journal and paper as incestuous in terms of author lists and citation patterns or just simply about the “flavour” of a paper that provides a sense of whether the paper is to be read (Collins & Fringe, 2014: 730) are criteria we should pay attention to in our revision of how the scientist discredited deviant science even if we have to read with a certain interpretative flexibility these components used in judging papers, because as it is known, papers were not at the time the main source of scientific debate among scientist in France, at least not as we know them today, functioning in a peer-reviewed system. The tactics suggested, both the explicit and the implicit, can guide our own reconstruction of the type of rhetorical strategies used by the official science of the day to discredit the claims made by Spiritist and Modern Spiritualists. Describing the way they were deployed can provide a deeper account of the scientific controversies of these years, sometimes described by previous analysts in terms of what the scientific community said about the apparently extraordinary phenomena and not so much about how they said it. This would prove helpful also to identify new or different tactics from those proposed by Gieryn, Collins or Pinch.

The type of rhetorical strategies we have reviewed apply to how the scientific community generally qualifies the contributions by deviant scientist, but does not tell us anything about specific attempts to debunk an idea or experiment. The debunking of Blondlot’s N rays, a case analyzed by Ashmore (1993) provides an useful way to detail how the activities of the debunker in cases of discovered fraud and gross error are textually constituted and, in doing so, to describe how the evident rhetorical power of the paradigmatic debunking narrative is achieved (1993: 70). The case is suggestive because

it shows that the debunker was successful in the joint rhetorical aim of gaining audience assent to what Ashmore calls a “theater of the blind”, that is, a textually constructed event that we could not possibly see because it took place out of anyone's sight but also that makes us witnesses of someone's blindness in his incapacity to see how it is that is being deceived by a phenomena that really doesn't exist. Since many of the critics of Spiritist and Modern Spiritualists, attempted openly or veiled debunking strategies of another entity, the soul, which as happened with N-rays was supposedly inexistent and their believers deceived, Ashmore's text helps us to think also in the way that the social destruction of the soul or the spirits was rhetorically conveyed through debunking attempts.

1.4.2. rhetorics of deviant heterodoxies

So far we have deal with literature in STS that provides tools to describe the rhetorical strategies employed by orthodox scientists to criticize deviant approaches in science, but not with the strategies that, in return, heterodox scientist use to give an aura of scientificity or simply to legitimize their believes and hypothesis. Since we are interested also in analyzing what Spiritist or Modern Spiritualists did to convey scientific rigor to their stances, it is also important to have at hand tools to do so. Wooffitt (2006) has studied the language used in consultations between mediums and psychic practitioners and their sitters and audiences, specially detailing the discursive properties of apparently unsuccessful demonstrations of psychic powers or spiritual agencies. What is of relevance here is to think about how the members of Spiritist movement and other heterodoxies employed language to collaboratively establish and sustain the authenticity of their claims to paranormal sources of knowledge.

More specifically, what these same individuals did to express their claims to scientific audiences is something that is also referred in the cited article by Collins and Pinch (1979) about tactics in the constitutive and contingent forum. Usual tactics used by deviant scientist are: i) the use of symbolic and technical hardware of science, that is, the use of techniques usually assumed as characteristic of legitimate scientific experiments: meticulous observations done within a laboratory, use of statistical, mathematical or other experimental technics, etc. On the other hand, ii) acquiring titles, universities posts, governmental founding, the publication in orthodox journals and other transformations to

“become” scientists. iii) obtaining funding from sources that can sustain their activities without necessarily conflicting with accusations of biased interests (1979: 253-254).

Another way to convey the rhetorics of the heterodox movements we will analyze is to think about the ways in which they demonstrated their hypothesis or beliefs. Since there is a rhetorical construction of the debunking surely there is also a similar one in the demonstration, the act of rendering something visible and remarkable, object of discussion and concern. Ashmore, Brown and MacMillan’s article (2004) about the highly charged controversy over the reality of what is called recovered memory by one side of the debate and false memory syndrome by the other is insightful precisely because it tries to show the way both sides in the memory wars are engaged in different forms of demonstration across different domains, including the private domain of the laboratory or therapy room, the sphere of public and media debate, and the legal proceedings of the courtroom (2005: 78-79). In that case, what makes the attempts to tame the phenomena so difficult is that they are dealing with an object or entity which is not directly observable: the mind. Same goes with the soul. None of them: the same or different? can be inferred directly, so they are done through many social configurations, not always shared by different actors, creating thereby controversies about what is a proper demonstration of an entity. As it happens with different demonstration settings in experimental psychology laboratory vs clinical or therapeutic work, the role of socialization or technical instruments was assumed differently in our case according to each actor framework. In describing the controversies about the demonstration of the soul in the second half of the nineteenth century in France, we aim to present precisely the confronted versions the actors of the day had about what it meant to provide a proper private, public or legal demonstration of these extraordinary entities.

Last but not least, the soul or the spirits, conflictual entities which are tried to be demonstrated under different social and scientific mechanisms will not be assumed here as stable objects that despite the controversies that surround them, exist coherently. Following Mol (1999) what we want to show is that the reality of these non-human agencies was in itself configured through the controversy. Following the recent Woolgar and his reflection on the so called “ontological turn”, we question the assumption of a “singular, ordered world” and rather prefer an “enhanced analytical sensibility towards multi-naturalism”, a “new curiosity about the way objects are enacted in practices” (2013: 323). The controversy about the nature of the soul, then, will be formulated paying close

attention to how techniques, artifacts, places and inscriptions configured it. These last two items deserve an independent development.

1.4.3. Places of knowledge production and visual representations in scientific practice

Perhaps the most common mantra once and again repeated by STS scholars, but now a sort kind of common place among some social sciences and also philosophy of science is that scientific knowledge cannot be understood from an unpolluted point of reference not affected by social factors. Science, then, has to be located within the spaces in which, through practices and different negotiations, it is conformed. Laudable as it is, this idea helps to partially subvert the notion of two petrous cultures opposed: humanities and “hard sciences” as it was formulated famously by Charles Percy Snow in 1959 since both of them are produced also in social contexts.

Nonetheless, it is not always evident how to procede and respond to this appeal of putting the social context at the very foreground of the production of scientific knowledge. Precisely, the contributions made by authors such as Simon Schaffer, Thomas Gieryn or Steven Shapin among many others, helps us to think this context in a very literal sense as the set of places where the production is conformed. Then, the notion of a universal and sceptic science is transformed into a social question conformed through specific spatial configurations such as the conditions of access to the laboratory, the type of equipment they posees, the forms in which results are reported or the type of witnesses that can have access and verify the facts produced in it.

Two seminal articles written by Steven Shapin in the 80s have been beginning to grasp the explanatory potential of places of knowledge production in the constitution of scientific facts. The first one, “Pump and Circumstance: Robert Boyle’s Literary Technology.” (1984) makes an analysis of Boyle’s experimental program and the way it pretended to produce indisputable “matters of fact”. This was done through the multiplication of the witnessing experience, since an experience or experimental performance that was witnessed by one man alone was not a matter of fact (1984:484). The way to produce virtual witnesses of the experiment was done thanks to a literary technology that Shapin defines as the means to make knowable the phenomena produced to those who were not direct witnesses of it. This mechanism, together with material technology and social technology

were the resources used by Boyle to validate the type of experiences he was producing in laboratory. Our case of study, and a general history of the idea of souls and spirits, benefits tremendously from this conceptual attention to the way a “virtual witnessing” experience is communicated since these entities are precisely of a very difficult and direct empirical verification. To my knowledge nobody has produced yet an equivalent to Wooffitt's discourse analysis of mediums in terms of the literary technologies used by heterodox religious/scientific movements of the XIX century nor of movements of these same movements in first half of the XX century.

If Shapin mainly explores in his mentioned article the use of literary technologies by Boyle, in another one “The House of Experiment in Seventeenth-Century England” (1988) he complements it by analyzing the social technologies and the physical settings in which knowledge was produced and evaluated in the same period of time. He does so establishing the connections between empiricists processes of knowledge making and the spatial distributions of participants, pointing to the ineradicable problem of trust that is generated when some people have direct sensory access to a phenomenon and other not, then, he considers the question of access to these sites: who could go in and how was the relocation of entry implicated in the evaluation of experimental knowledge? (1988:374). This paper too will be considered in our empirical analysis since a great deal of the controversies around the nature and existence of the soul had to do with the versions many actors had about the right or wrong empirical mobilization of extraordinary empirical facts through different settings. Was it necessary for mediums to have a quiet, obscure and non-skeptical audience to produce their communications? how did scientist trying to address the question the phenomena managed to participate in the séances? which were the locations in which the phenomena were reported? did they followed a common pattern? These and other related question will have a place in our case of study.

Another way places of knowledge production can be analyzed is thinking about how they are summoned to figure in scientific accounts to construct the authenticity of their claims. Thomas Gieryn's "Three Truth-Spots" (2002), precisely shows three examples in which places play different roles, whether it is to be celebrated, displayed or denied (2002:130).

A perspective that views science as located in certain places, technical instrumentations and social practices, necessarily depicts science as immanently practical, locally organized, and infused with interpersonal trust and tacit knowledge. This emphasis upon the material and the social has paved the way to think about the instrumentalities that

mediate and stabilize people’s interactions with nature in a way that doesn’t assume knowledge as stabilized by reference to an independent objective reality, but articulated through the technologies of experiment and intervention. As Lenoir explains in his introduction to a very useful compendium about inscriptions in science, “from this perspective, it is through our machines that practices and simultaneously a nature capable of being theorized are stabilized” (Lenoir, 1988: 6). Inscriptions and other ways of visualizing knowledge appear here necessarily not just as mechanisms to give a symbolic content to theoretical concerns and experimentations but, most importantly, as productions of facts in themselves.

The famous study made by Woolgar and Latour (1979) and subsequent laboratory studies have precisely observed how facts are inseparable from their inscriptions in such a way that the acceptance of a scientific fact is tied to the strength of its links to layers of texts and the ostensibly factual nature of a statement can be undermined by drawing attention to the process of its inscription (Latour & Woolgar, 1979: 76). By emphasizing the materiality of literary and scientific inscriptions, other type of media for producing signs have also been incorporated in STS analysis and beyond, such as standardized paint pigments, photographic equipment and phonographs as a precondition for and constraint upon other forms of literal and literary sense-making. (Lenoir, 1988: 4).

Studies in scientific visual representations have been fruitful since the days of the pioneer study of Woolgar and Latour. Since then, certain theoretical adjustments in the literature have been identified. A key move has been, for instance, a reframing of representation analysis from an expectation that visual traces and numerical measurements were references to independent objects and properties, to a series of open-ended inquiries into the many different kinds of relations, reference among them, that are accomplished (or dismantled) in the work people do with representational forms (Coopmans, Vertesi, Lynch & Woolgar, 2014: 3). Then, the analysis deals not only with the construction and presentation of a certain representations or inscriptions but also with the social dynamics unfolded by them and the entanglement of them with the dynamics of reception and circulation. This is why STS scholarship has tended to move away from the use of the term “representation.” Some authors prefer “mediation” (Pasveer 2006), while others adopt notions associated with the turn to ontology, such as “enactment” (Woolgar and Lezaun 2013).

To consider the social dynamics of circulation and reception of knowledge, helps us to see new areas in which the potential audiences may be comprised of scientists in different fields, but also clinicians, or various publics engaged through popular culture or the politico-legal sphere. (Coopmans, Vertesi, Lynch & Woolgar, 2014: 6). Recent work by Latour (2005) has called in this direction for a study or representations in tandem with artistic and religious practices, as well as with political meanings of the term. In contrast to his pioneer work in the laboratory and the suggestion that scientific inscription devices and the laboratory create obligatory passage points, the indication here is that every literary form of fact-making is linked to local complexes of technical and social practice and that stabilizing any representation is always at the same time a problem of political order and moral discipline. (2014: 18).

Visual representations literature in science is of great interest for a topic dealing with a scientific object as diffuse and ungraspable as the soul or the spirits because this is what an heterodox movements such as the spiritism tried to make: conveying a visual, tactile or audible inscription of these agents of such a contingent nature. In the empirical analysis, a specific detail will be paid to the strategies, whether literary or social, that these heterodox movements employed to give a materiality to the soul.

2. The invention of a science of spirits

Founding a new science has never been easy. This case was not an exception. The science of spirits promoted by spiritism intended to rationally justify an idea traditionally embedded in the domain of religious belief: the idea that the living could enter into direct contact with the souls of the dead. This was defended based on a view of soul as preexisting the body and independent from it. A soul that through reincarnation or the “plurality of existences” on earth and in other worlds, was able to progressively attain perfection.

This idea was not totally new; in 19th century France a domain of religious speculation about the possibility of reincarnation had already been undertaken (Sharp, 2006: 1-51) also, British spiritualistic movements commonly believed in the independence of the soul, although rarely they reached to assert the belief in reincarnation, which was rather a particularity of french spiritism. What was new about spiritism was that it intended to confer to these beliefs the character of a new science. It was not an unreasonable claim. At the time it was common to expect that the scientific method should be adopted for all domains of intellectual research and to think that all areas of knowledge could be reduced to scientific laws (Mesquita Hidalgo, 2004: 25).

The soul didn't have to be an exception. The fact of dealing with a subject of enquiry so essentially elusive and ungraspable as the soul, was never an epistemic restriction. In any case, as has been argued by Latour, a characteristic of all science is that of “gaining access, through experiments and calculations, to entities that at first do not have the same characteristics as humans do” (1999: 259). The aim of a spirit's science was, then, making visible and socializing such entities as well as proposing an argumentation and demonstration of them.

With the project of a science of spirits, spiritism appears to the contemporary analyst not just as another case of religious heterodoxy in modernity, but also as a scientific heterodoxy that was trying, as many other movements, to reconfigure the frontiers between religion and science in an innovative way, looking for the foundation of a new type of “scientific religion”. The place spiritism occupied in the horizon of public debates in the second half of 19th century in France and Europe, contributed to redefine the fields of scientific enunciation on the possibilities, scope and limits of the human Psyche, before

the partial consolidation of interpretative paradigms such as freudian or clinical psychology.

Evidently, a project like the one promoted by spiritism questions a traditional historical view that has assumed that the 19th century was an epoch in which spiritual and religious values were gradually replaced by the development of rational and scientific thought. On the contrary, it shows that spirituality still had an important role in society, not as a mystical reaction to scientific rationality, but as a constituent part in this modernization process (Pimentel, 2014: 2), indeed, as a paradoxical vector of reenchantment of science and technics.

The supposed findings of spiritism science gave their adherents a series of beliefs that clearly implied the rejection of a number of basic christian tenets, among them the divinity of christ, the trinitarian concept of God, the divine nature of miracles, the existence of angels and demons, and the physical reality of heaven and hell (Cuchet, 2012: 17). Even so, the movement presented itself as essentially located within the ethical horizon of Christianity, in particular, in the recognition of charity and love as the pivotal ethical principles.

But at the same time, wanting to preserve its Christian identity, it was an answer to many critiques and nonconformities that people began to feel at the time about certain particular aspects of catholic theology. Very coherently, it provided alternatives to what has been called a “crisis of factuality” in religious life (Monroe, 2008: 3). As scientific knowledge grew more refined, some religious tenets became harder to defend, and so it was thought that faith could no longer be the only way to access the knowledge of metaphysical questions such as the immortality of the soul, which made necessary certain approaches capable of turning faith into fact through empirical evidence.

Precisely because of this, Allan Kardec, the first leader of the heterodox movement, and the main intellectual figure that will be addressed in this chapter, used to collect most of his adherents among people that could be considered as “floating” from the religious point of view: the “truth-seekers”; the “ambiguous”, believers without church, etc. As it has been summarised by Cuchet, it was essentially a group of people resulting from the coalescence of groups newly converted to the tables tournantes together with the

preexisting magnetic-spiritualistic nexus; which formed a group socially and culturally heterogeneous, including aristocrats, petit-bourgeoises and workers (Cuchet, 2012: 109).

It strongly appealed to this group of supporters that Kardec had presented spiritism as a movement defending certain progressive political causes of the time, such as the recognition of women's rights, the acceptance of divorce, the enlargement of education and the abolition of the death penalty (Sharp, 2006: 63). However, without a doubt, what made spiritism a cultural movement of great significance in the french Second Empire (1852-1870) was that their beliefs were presented in the wider framework of a practice and form of sociability which was, much more than simply an explanatory method, a concrete and tangible source of consolation for many people in convoluted times (Cuchet, 2012: 284).

In this chapter we will focus our attention on a very short period of time (1857-1860), which corresponds to the beginnings of spiritism as a science, rather than the successive metamorphoses the movement underwent in later decades. This will allow us to dig deeper into the different rhetorical strategies of the founder, Hippolyte León Dénizard Rivail, alias Allan Kardec, to provide the movement with legitimacy and, most particularly, to confer on it a scientific character or to grant it an "aura of factuality".

The main instances where Kardec deployed the rhetorics to give rise to a science of spirits were initially two: 1) *The Book of Spirits (Le Livre des Esprits)* and 2) *The Spiritist Journal- Journal of Psychological Studies (Revue Spirite - Journal d'Études Psychologiques)*. These two are going to be our main source of analysis in this chapter.

Being an heterodox movement that did not participate in the scientific bodies of the time and, actually, was attacked by them, with spiritism we are confronting a case of an historical scientific controversy and a typical clash between an "official science" and a "fringe science" (Collins and Pinch, 2014). But before giving voice to the official science of the time, we want to focus our research on those who were attacked. Thus, we don't want to describe the activities of the debunker, but the rhetorics of the debunked (To see the opposite case: Ashmore, 1993). That is, we want to give voice to the defeated and the marginal. In doing so, addressing the promise of a type of symmetrical explanation in science controversies (Bloor, 2009: 38), where the topics labeled under the epithet of pseudo-science are reopened in the words and interests of their own defenders. Again,

following Ashmore: “falling into the sociology of error is by no means a necessary consequence of studying epistemologically disreputable knowledge” (1993: 70).

In sum, we want to tackle as a serious claim the idea and the project of a science of spirits. We will not assume that because it was labelled a “pseudo-science” it does not deserve our critical approach, but neither will we take for granted that “Kardec and his group were among the first scholars to propose a scientific investigation of psychic phenomena” (Almeida, 2008: 136). In place of these two positions, we want to reconstruct the rhetorical strategies Kardec used to justify that he was actually doing a science of such ambiguous and ungraspable entities as the spirits.

2.1. The foundational literary instances of Spiritism

1. *The Book of Spirits*

The Book of Spirits or *Le Livre des Esprits* was written and published by Hippolyte Léon Dénizard Rivail under the pseudonym of Allan Kardec in 1857. The book was, as explained by Monroe, a Second Empire bestseller. It went through twenty-two editions at a minimum of 2,200 copies each year, which means at least 48,000 were in circulation at the beginning of the Third Republic in 1870 (Monroe, 2008: 96).

As has been pointed out, though Kardec’s book was similar to other texts of the time on the phenomena of spirits, it constituted a dramatic innovation in its genre. Usually, when spirits spoke in works like these, they tended to do so in an oracular style. In this book, on the contrary, Kardec presents a doctrine pedagogically expressed through the answers given by elevated spirits, in a simple but blunt manner, to those ethical and cosmological questions presented to them. Thus, it posited the main points of the worldview expressed by the spiritist doctrine in a way that could be understood by anyone reading it, regardless of their social memberships.

Perhaps it was precisely for this style that it found such a widespread readership among readers not educated enough to maintain an interest in a more systematic and recondite philosophical work, but could easily understand the short and freestanding moral essays, without the need of a particular academic background (Monroe, 2008: 104).

With the aim of justifying this character of clarity in his work, Kardec presented in the book itself an account of the way it was assembled. As has been pointed out by Pimentel, following the suggestions of other historians of science, this rational reconstruction of his own method is key to understand the character he wanted to confer on the work (Pimentel, 2014: 61). In the case of *The Book of Spirits*, Kardec expressly describes in a note to a preamble:

“The principles contained in this book are the result of the answers given by spirits to direct questions posed to them, as well as the product of some spontaneous instructions formulated by these same spirits. The total content, in the published version, was later coordinated to present a set of regulated and methodic questions” (Kardec, 1857:31).

On how these questions were obtained, Kardec argues that the mechanism of spirits’ manifestation was writing: not a noise, an image or other dark and blurry notational forms. The spirits’ testimonies were communicated through a verifiable stroke on a piece of paper, a proceeding that was obtained thanks to the medium’s intermediation, who served as a vehicle to express these otherworldly ideas. The communication was carried out, as it is presented, in the presence of a large audience (*nombreaux auditoire*) who attended the sessions in which they had “the most vivid interest”. The empirical evidence of the original spirits’ testimonies was, then, a public experience and later became the object of a private revision “when all additions and corrections were implemented according to their assessment” (Kardec, 1858: 36).

The place of the *séances* where the communications were held is presented by Kardec as a public place containing on-site witnesses who were observing the “mediumnic writing” happening in real time. This served him, as explained by Shapin in other scientific contexts, to publicly warrant that the knowledge produced in such places was reliable and authentic (Shapin, 1988: 374). However, there was a further space, less spectacular and private, where Kardec would correct and organize the material dictated in sessions. Thus, the main book of the doctrine is assembled in a double public/private spatiality that corresponds to the dual revealed/systematic character of the work.

The whole setting of the *séance* would be impossible without the intervention of the medium, that is, one of those gifted with the power to canalize the messages from spirits and communicate them. Regarding who they were, Kardec also intended to be open and

described in a memoir written around 1860 that to make the Book of Spirits, he had initially received the help of a man named Baudin and his family circle. Weekly, he was dedicated to the execution of experimental sessions of “mediumnic writing” through his little daughters and it would be in the middle of these séances that Kardec would start formulating regularly the first questions to the spirits about the “nature of the invisible world”.

According to Kardec, eventually, the information received by the spirits “formed a whole and took on the proportions of a doctrine” (Kardec, 1978: 244). However, with the aim of accelerating the process of information gathering (the family did not have much time to dedicate to the project) he began frequenting in 1856 Mademoiselle Céline Japhet and her magnétiseur, M. Routan. Japhet, being a professional medium, had more time to dedicate to answering Kardec’s questions than the Milles Baudin and her communications had a consistency of voice and logic that suited the systematizing spirit of Kardec (Monroe, 2008: 102).

This account of the book’s genesis matters because it gives an account of a series of conditions that, according to Kardec, favored the project of objectifying the communication with spirits. “Mediumnic writing” was accomplished not just by the intervention of a single medium and in saying so he was avoiding a possible critique of being captive to answers arising out of the imagination and subjective opinions of just one person. On the contrary, communications were obtained “by the intermediation of several psychographic mediums” who, additionally, were young women, less subject to suspicions of deception or knowing beforehand the type of “deep” questions formulated to the spirits. In this way, he attempted to justify the independence of the spirit’s identity from the mediums’, showing how the latter could not possibly understand the answers consigned to the written testimonies.

In saying so, the foundational document of spiritism was presented as one drafted by multiple hands, a doubly public labor because of the diversity of the on-site witnesses in the séances as well as the plurality of the mediums involved. In this whole process Kardec’s intervention is limited to that of preparing the questions and coordinating the work in its entirety. He has no direct intervention in the answers given by the spirits: “the answers are those literally given by them”.

Thus, Kardec presents himself as a passive actor in the formulation of the book. His role resembles that of an editor of a transcendental and revealed work in which he participates by compiling messages coming from different sources in just one single book (Pimentel, 2014: 65). He presents himself less as the prophet of a new revelation than its codifier or its methodic connoisseur. (Cuchet, 2012: 143). As explained by Pimentel, however, in later versions of the Book of Spirits, Kardec makes adjustments that are revealing of a moderation in this version of his role as a passive actor. If in first editions he uses expressions such as: “the true spirit’s doctrine, exempted from mistakes or preconceptions”, something replaced by “a rational philosophy, free from the preconceptions of a dogmatic system”. This change suggests that he was attempting to ensure a perception of the book less as the expression of a “knowledge exempted from mistakes” and more like a “rational philosophy”, that is, one looking for the cause of its facts (Pimentel, 2014: 68-71).

In this transformation of his role as an author one guesses an eagerness to endow to the spiritist doctrine a greater emphasis as a scientific enterprise susceptible to experiences and observations closer to the conventional sciences and not just as a revealed system. In this same vein, Kardec relates his conversion to spiritism as one of a progressive and reasonable transformation (taking two years), moving himself away from enthusiastic, precipitate and emotional conversions, so frequent in the spiritualistic movements of the epoch (Cuchet, 2012: 141) and in doing so reducing his role as a prophet of a new religion and emphasizing his identity as a leader of an emerging science.

2. The Spiritist Journal

For its part, The Spiritist Journal did not have the aim of systematization of spiritist principles that the Book of Spirits had. Instead, it was a showcase of the regular activities, dialogues and reflexions held in the circle of Kardec’s séances. It was, so to speak, the laboratory notebook where the spiritist principles were elaborated.

Edited by Allan Kardec from January 1858 to April 1869, the journal shows the evolution of Kardec’s thought during the construction of the spiritist science. He was the editor of the magazine for 11 years and in its pages he was the author of more than 250 articles. In this journal he will comment with more detail on the events of his science, giving voice to new actors and informing his adepts about what was happening with his group of studies. Aside from being a popularization journal and a place to develop a more detailed

commentary to passages in the Book of Spirits, the journal had sections dedicated to show the communications given by spirits with public scope, but also those with intimate evocations, as long as they had a “useful purpose”.

While the project of the *Livre des Esprits* was relatively closed, issued with the medium's interventions in sessions composed of few people and entirely codified by Kardec's hand, the Spiritist Journal had a more public character: in its pages news and testimonies taken from diaries and journals from around the world were invited. Following Shapin (1984: 481-482), Kardec used the Spiritist Journal to produce virtual witnesses of the séances, the experimental locations of spiritism.

However, it was not through a detailed circumstantial description of the séances that Kardec would give an impression of the experimental sessions, but rather through collecting synthetically the spirits' testimonies and making certain commentaries on them as well as describing the impressions of some witnesses in order to give them a context of meaning.

From the very beginning of the Journal, Kardec was very careful in posing restrictions to the type of material that could fit into its pages (See Table 1.)

In the type of topics chosen by Kardec for his journal, it is evident that he had an explicit vocation to gather empirical material from the most diverse sources and in doing so compensating for the evidential deficit of his science by obtaining a base of facts upon which to build interpretations about how the reported evidence confirmed or supported the essential tenets of the spiritist doctrine.

Key to this positioning of the spiritist science which appears so clearly in the Book of Spirits as well as in the Spiritist Journal, is the process of separating the identity of spiritism from other rational or religious discourses commonly associated with the belief in spirits. Key for this separation will be the onomastic sharpness of creating the neologism of “spiritism” as the doctrine that affirmed the *rationality* of the belief in the immortality of the soul and of reincarnation. Thus, spiritism as a word and as a doctrine, was born in 1857 with the publication of the Book of Spirits.

The concept was advantageous for Kardec's project because it allowed him to split his cause from the notion of the spiritual, closely linked to an orthodox religious terminology, as well as taking a distance from the notion of spiritualism, which designated the family of philosophies that recognized the existence of God and the immortality of the soul, but did not accept that which was perhaps the most controversial tenet of spiritism: the belief that the soul was immortal, but also that it transmigrated through many incarnations and that this could be rationally confirmed (Cuchet, 2012).

However, the creation of the concept of spiritism is not the only strategy used to separate the movement from the discourses surrounding it. In the next section, we will analyze three universes of discourse from which Kardec strategically wanted to be separated in order to increase the scientific identity of his movement.

Table 1. Topics accepted by Revue Spirite

1. Material or intelligent manifestations obtained in meetings where the person was present;
2. Facts about lucid somnambulism or ecstasies;
3. Facts of clairvoyance, predictions, premonitions;
4. Facts relative to the occult power attributed, with or without reason, to certain persons;
5. Legend and popular beliefs;
6. Facts of visions and apparitions;
7. Particular psychological phenomena which sometimes occur at the moment of death;
8. Moral and psychological problems to be solved;
9. Moral facts, notable acts of devotion and abnegation whose propagation may serve as useful examples;
10. References to old or new publications, French or foreign, in which one can find facts relative to the manifestations of occult intelligences, with the designation and, if possible, citation of texts. The same regarding the published opinions about the existence of the spirits and their relationships with men, from former or contemporary authors, whose names and wisdom give them authority (Kardec, 1858: 9).

2.2. Positioning spiritism among other discourses on spirit phenomena

Kardec will try to position his doctrine in an uncomfortable place in the social context of the Second Empire in France (1852-1870). On the one hand, psychic phenomena had been widely experienced by diverse sectors of the population without any decided intellectual or scientific interest. On the other hand, he did not have among his followers anybody with great intellectual prestige or who belonged to any of the elite scientific bodies of the time like the Academie des Sciences. His spiritist science was, in Dolby's terms, a type of deviant science existing at the lower levels of institutionalized science, with great difficulty in growing into a sustained intellectual movement within orthodox science while having a large portion of its social base outside of it (Dolby, 1979: 18).

Kardec himself, as Cuchet suggests, belonged to a whole family of thinkers that could be included within the category of what the philosopher Jacques Rancière has defined as *philosophes du soir*, that is, figures that despite the relative humbleness of their social origins or their academic credentials, were interested in culture in the noble sense of the term: religion, philosophy, medicine or social sciences (Quoted in Cuchet, 2012: 114). Thus, it was for him of great interest to endow the spiritist doctrine with respectability. The way that Kardec proceeds to do this is through a narrative in which he positions his movement in the wider horizon of a prior frivolous approach to psychic phenomena that he intends to change thanks to his rigorous and “scientific” focus. His words in the preface of the first edition of the Spiritist Journal are instructive of this attitude: “starting as a simple object of curiosity they soon drew the attention of serious investigators (hommes sérieux) who, from the beginning, perceived the inevitable influence they would have on the moral condition of society” (Kardec, 1858: 1).

Thus, the rhetorical positioning of the spiritist science will need to take its distance from the spurious past of many spiritualistic phenomena. A separation strategy that remakes the frontier between science and pseudoscience within the boundaries of movements already considered as pseudoscientific. This strategy will consist of the separation from three different fields: a) the table-tournantes phenomena, b) the manifestations of the prolific medium Daniel Douglas Home and c) mesmerism.

a) The table-tournantes

The phenomenon of “table turning” (tables tournantes) was the primary mechanism to turn what initially was a curious but irregular practice in American culture in the 19th century into a whole mass movement around 1853, extended all over Europe, especially in France. “Table turning” was a popular practice consisting in the gathering of people around a table who, by putting their hands coordinately on its surface, could produce irregular movements and sporadic agitations. These movements were interpreted as being initiated by a force independent from the people assembled. This practice was held in many places of the continent, rapidly ‘explained away’ by materialist accounts, but also assimilated by mesmerist or spiritualist interpreters who believed that these experiences were a proof of the powerful capacity of the vital fluid, a key concept in the mesmerist vocabulary.

This popular practice, conventionally located in dark and relatively private locations (inside family houses and salons) was perceived as a new space of socialization among sexes in which there was a temporal suspension of the laws of physics and the limits of the human mind were put into brackets. The scenario, available in theory to anyone interested in the spectacular movements of objects and the possible communication with beyond the grave beings, promised a democratic access to the beyond. As has been mentioned by Cuchet, the frenzy of the “esprits frappeurs”, also called “fuidomania”, was one of the first American imports into European culture and was so successful precisely because it was a simple practice, with apparent objectivity and with a public and amusing character (Cuchet, 2012: 57).

Kardec was not alien to these experiences. As a person very interested in mesmerism just before becoming the leader of the spiritist movement, he had studied it and participated in numerous mesmerist sessions. But at the moment of presenting the scientific credentials of spiritism, he does not hesitate to take some distance from these practices:

“It was only a few years ago that the first phenomena manifested themselves and we are already far away from the “turning and speaking” tables which represented their infancy “instead... spiritism ”is a Science which uncovers a whole world of mysteries; which patents the eternal truths only precognized by our spirits” (Kardec, 1858: 2).

The tables tournantes experiences were not, by themselves, what Kardec rejected, because he interpreted them as a desired preparation by the spirits to raise public awareness about communications with the beyond and, thus, opening the way for the

more rigorous and systematic approach of spiritism. He approaches the table turning phenomena from the point of view of the cold and methodic observer, responding to the critiques that considered them as mere acts of trickery and fun, arguing that the rappings and noises heard from the tables were so different and subtle on each occasion that there was no known mechanism sufficiently ingenious to produce all the effects observed. This complexity, extended all over the continent, would require, if it was a deceptive practice, a huge enterprise dedicated to fooling people on continental magnitudes; which would be, in fact, a phenomenon even more extraordinary than the table turning practice itself.

The tables in the systematic vision of Kardec, were just one way used by spirits to communicate with this world, but wood was not the only substance that could serve as a vehicle for the manifestation of the rapping spirits. Other objects, indeed the whole physical world, could serve as a tool to allow spirits to produce empirical effects. “We have seen them happen on a wall, and thus in stone. So we have talking stones. If these stones represent a sacred figure, we have the statue of Memnon or that of Jupiter Ammon as oracles similar to the trees of Dodona” (Kardec, 1858: 53).



Fig 1. Honore Huet's caricature of the table moving practice

b) Daniel Dunglas Home

Kardec's position on the spirits' manifestations through table turning is similar to that he constructed regarding the figure of Daniel Dunglas Home, the most famous medium of the time, who in his visit to Paris in the years of 1856 and 1857, thanks to the patronage of wealthy aristocrats, managed to frequent numerous aristocratic salons, even managing to hold several *séances* for the Emperor and the Empress at the Tuileries palace.

Home was famous for producing dramatic manifestations. Edmond Textier wrote early in 1857 for the *Sieclé* an enumeration of some of his manifestations:

tables tilt without being touched, and the objects on them remain immobile, contradicting all the laws of physics. The walls tremble, the furniture stamps its feet, candelabra float, unknown voices cry from nowhere—all the phantasmagoria of the invisible populate the real world (Quoted in Monroe, 2008: 86).

Like the *table tournantes* before him, the accounts of Home's abilities and the phenomena he could convey in front of the aristocracy, provided enormously appealing material for feuilletons and journals, but it also became a target for the attack of trained mesmerists, who thought that Home was subject to the suspicion, because he was performing his sessions only in aristocratic and wealthy salons, of not being serious enough. One of these critics was Dureau, a known mesmerist of the time, who said that Home's knowledge only served to amuse a certain group of people and could not be analyzed by trained mesmerists. This is why his powers or capacities should be questioned (Quoted in Monroe, 2008: 90).

Kardec, for his part, availed himself of the occasion in his pages to make a statement about this well known figure. He recognized the contingent and conflictual certification of Home's capacities, but he did so while opposing certain positions that he considered of "passionate and systematic hostility" towards Home. On the contrary, he recommended a patient and attentive approach to the study of his powers. Without compromising himself with full support for Home, Kardec considered his role in France to be beneficial, because he had provided, without wanting to produce that effect, a big push in favour of spiritual manifestations: "It was Home who had that mission. The position, credit and reputation of

those who welcomed him and were convinced by the evidence of the facts, shook the convictions of many people” (Kardec, 1858: 61).

Therefore, both Home and the phenomena of table turning had been providential instruments designed to open the eyes of the blind, to awaken the openness and sensibility necessary for the rising of the spirits science that he was promoting. A science that would have to approach these facts with another attitude, based on the “strict reality of the facts observed by ourselves or by qualified testimonies”. If Home had not convinced everybody, if he had still left a space for the arrival of new mediums, eventually, these marvels attributed to the products of a single genius, would have a rational explanation and would fit into the general corpus of this science, experimentally constructed by the exercise of mediums “emerging from all sides, in our environment, in families, among the poor as well as the rich” (Kardec, 1858: 60).

There was, however, one thing in which Home had an advantage over spiritism which Kardec will rapidly acknowledge: resources. Analyzing Home’s situation, he said that he still had hope to find a patron for his cause: “posterity will inscribe his name among the benefactors of humanity” (Kardec, 1858: 91). From its inception the lack of external resources will permanently threaten the experimental aims of spiritism, conventionally requiring large financial capacities to support them.

c) Mesmerism

A third field of rhetorical separation made by Kardec had to do with establishing both a distance and a proximity between spiritism and the mesmerist movement.

Prior to the appearance of spiritism, there was considerable speculation in certain social milieus in France about the field of *magnétisme animal* (animal magnetism). Mesmerists, as these practitioners called themselves, were followers of the teachings and techniques for treating diseases created by Franz Anton Mesmer, a German doctor, who proposed in 1778 in Paris that there was a “universal fluid”, an invisible force, analogous to electricity that could be used by trained *magnétiseurs* as a magnetic fluid to heal people. The sages of the *Académie des Sciences* were reluctant to study these forces, but students of magnetism, sharing the position of scientific heterodoxy with Kardec, thought they had a

privileged access to these phenomena and that this could reveal to them new findings in the study of the human mind and the effects it could provoke (Monroe, 2008: 64).

The arrival of the *table tournantes* frenzy in France, in the year 1853, had parted the ways of magnetism researchers. On the one hand, spiritual manifestations seemed to corroborate theories about the mind's power to act outside the body, one of the most fundamental tenets of mesmerists. On the other, the tendency to ascribe these phenomena to the intervention of the otherworldly was perceived by some (who we will call the therapeutic mesmerists) as an unscientific departure from mesmerism's primary mission, which was to serve as a uniquely effective (and inexpensive) form of medical therapy, and threatened their discipline with the disdain of the scientific community (Monroe, 2008: 64). The fundamental epistemological conundrum shared by both positions was, as explained by Monroe, the lack of reliable means of proving that spirits were autonomous beings and not simply products of the imagination.

Kardec, who had himself previously belonged to mesmerist societies, was on the side the spiritualist mesmerists, and was very careful to use some of the key concepts of mesmerism in his doctrine. In an article he wrote dealing with the subject, entitled: "*Le Magnétisme et le Spiritisme*" (Magnetism and spiritism), he asserts that there are many correspondences between the two movements because both are in agreement in basing their systems on the existence and manifestation of the soul. Therefore, far from fighting each other, they can and should provide mutual support, "as they complement and mutually explain one another" (Kardec, 1858: 91). In this moment of his argument, as in many of his texts, he inclines the balance towards the idea that there is a nexus and complementarity of spiritism with many of its supposed opponents, a tactic he would also use when arguing with the Catholic Church, when the time came to portray spiritism as a doctrine that did not deny or openly oppose the authority of Catholicism. But he will also incline the balance on the side of the differences, showing that:

their respective supporters disagree on some points. Certain magnetists do not yet admit the existence or at least the manifestation of the spirits, They think they can explain everything through the action of the magnetic fluid, an opinion that we just observe, reserving a discussion of it for later. We also concur with that in principle but, as in many other cases, we have to surrender to the evidence of facts (Kardec, 1858: 91).

Therefore, even when he recognizes the principles of the universal and magnetic fluid derived from the mesmerist grammar, Kardec goes one step further than the therapeutic

mesmerists and believes that these principles are mediated by the presence of spirits that use them to contact the living world and produce effects in it. Without a deep discussion of their doctrinal differences, he acknowledges the dispute, but not as a situation that should be avoided. On the contrary, he believed that at the beginning of any new science there is always a disagreement about how things are from differing points of view. He cites the positive sciences which have always had and still have opposing schools and theories and is confident that the day is not so far off when there will be no distinction between magnetism and spiritism because the first group will embrace the teachings of the second.

Despite this difference, magnetism, as has been argued by Sharp (2006: 127) provided the direct source from which spiritists developed many of their ideas about fluid as an explanatory category. Describing Mesmer's magnetic fluid (sometimes called force) as the medium of a mutual influence between the heavenly bodies, the earth, and living bodies, spiritism embraces this scientific grammatical field as a base on which to integrate their own convictions, using the prestige already associated with notions like fluid, even though these were being contested in more mechanistic versions of science. In sum, through these strategies, Kardec wanted the topic of spirits to leave the grammar and genre of strange facts, so typical of science in early modernity (Daston, 1998: 22) to make of it a participant in more empirical and accepted forms of factuality.

Aside from separating spiritism from other associated movements in its social context. Separation strategies that were never a matter of radical antagonism, but rather subtle attempts at partial differentiation and ambiguous appropriation in order to present them as a preparation for the arrival of spiritism, Kardec will promote, indirectly, the creation of a type of person who could witness the phenomena of a spirits science: in the absence of university, centers of study, or training facilities for newcomers. Lacking a *techné* for his ideas, he needed to create an attitude, a certain disposition that could serve as the guarantee that the type of objects conventionally perceived as trickery or amusement, could be considered with the seriousness and respectability of a genuine science.

2.3. “Serious men”

The rising science of spirits had against it, in addition to the fact of dealing with phenomena that could not be seen, the perception that their spokespersons were not

legitimate enough to provide a serious and systematic account of the afterlife, neither as scientists nor theologians. In a sense, they were more invisible than the spirits themselves. How, then, to speak in the name of the inhabitants of the beyond, when you share with them their invisibility?

To position a coherent discourse required much more than just creating visualization or performance mechanisms in the sessions. (See: “To see the spirits”) It required the cultivation and defense of an attitude towards the phenomenon, an attitude that would make the spiritist respectable and worthy of been seen or heard. As has been explained by Shapin (1984: 488), the communication of science demands the creation of an ethical attitude in front of what is seen.

This way to discipline the look is one of the keys to Kardec’s project, who found himself, so to say, with a deficit of images that could be used as projections for the creation of new virtual witnesses of the contact between spirits and humans (photography was not yet the tool to compensate for this deficit; that was going to be a challenge for later leaders of the movement). For example, if one studies the first volumes of the *Spirits Journal*, it is clear that images do not occupy an important place in the literary technologies of spiritism. Thus, the production of virtual witnesses had not so much to do with making readers feel they were participating in the session or séance while reading its pages, but to convince them that the dialogues that appeared there were authentic and, even more, to assure that Kardec, the editor, had the appropriate moral traits, including modesty and a critical spirit to approach the spirits in a trustworthy way.

Thus, Kardec positions himself through his works to be the spokesperson that claims to be authorized by the phenomenon to be its (self-)appointed interpreter and delegate (To understand other self-appointed positioning, see: Ashmore, Brown, MacMillan, 2004: 3). The role of spokesperson is similar to that of the mediums who function as the communication channels for the spirits; except that in Kardec’s case, it is the spirits who speak on Kardec’s behalf to certify his capacities as observer and rigorous systematizer of the doctrine.

Kardec-as-spokesperson expresses himself in a very synthetic manner, developing his arguments in a careful net of causes and consequences, always reminding his readers that he does not accept any hypothesis without facts, because he is convinced that this is the only way capable of satisfying people “who think and who do not stay on the surface

of things”. His attitude is similar to that described in Shapin (1984: 495) on the experiments performed by Robert Boyle and how he abandons a florid style to report them in favour of an economy of language that tends towards “sobriety and modesty”. Kardec was also convinced that this way of approaching the spirits phenomenon, soberly and economically, was what could contribute the most to leaving the path of frivolous curiosity, and entering the serious road of demonstration. This is the way he presents his way of proceeding in one of the pages of the Spiritist Journal:

To begin with I will say that I accept nothing without control and examination. I only adopt an idea when it seems logical, rational and in agreement with the facts and observations, and as long as nothing may seriously contradict it. My judgment, however, cannot be an infallible criterion. The approval I received from people that are more enlightened than I am gave me the first guarantee (Kardec, 1859: 181).

This attitude of control and examination with which Kardec presents himself is extended to the physical space of the séances, which also had to be an adequate place to attract serious spirits, because only if the session was assumed as a serious and useful exercise, it could be almost assured that superior rather than charlatan spirits, would come there. In this line, superior spirits were appealed by congregations or communities which had common interests and attitudes with them.

Hence, even if in the initial texts of spiritism one rarely finds an account of the conditions that the sessions should satisfy, whether the spatial distribution of the participants or the places where the séances were held, one do finds a description of the moral conditions of the participants, belonging to very different social origins but who shared a rejection of any hint of humor, lightness, play, or irony in the séances, all of which were obstacles to the accumulation of spiritual knowledge. Equally, some esthetics of the session’s spaces were articulated in which they were presented as public scenarios, visible and illuminated, where participants could see and rationally judge the phenomena while they were happening. Also in this, the spiritists express a similar disposition to that of the experimental British natural philosophers at the beginnings of modernity in their critiques of philosophers or solitary alchemists in “dark and smoky” laboratories, because these spaces were not adequate settings to produce objective knowledge (Shapin, 1988: 378).

Another way of visibilizing spiritism to new witnesses, aside from making clear Kardec’s ethical convictions and purifying the space of the sessions, would be to progressively

bring the testimonies of persons converted or interested in the doctrine who had positions of certain relevance in other social domains. In the *Spirits Journal*, for example, Kardec uses much space to describe how among the readers of the *Book of Spirits* there were illustrated “men of science” In one of the numbers he reproduces a letter sent to him by Marcelin Jobard, director of the *Musée royal de l’Industrie de Bruxelles*, and exhibits it as a victory of the doctrine: as an exhibition of the adherence to his cause of a man of value, un *homme de la valeur*. Jobart writes:

“I receive and eagerly read your Spiritist Magazine and recommend it to my friends...I greatly regret the fact that my physical interests do not allow me to spare the time for metaphysical studies, although I have taken them far enough to feel how close you are to the absolute truth...I do not doubt the accuracy of the explanations given to you and I reject everything I have published about it with Mr. Babinet, when I thought that there was only physical phenomena or otherwise foolishness, unworthy of the scholars’ attention. Do not feel discouraged as I do not feel discouraged, before the indifference of your contemporaries (1858: 198)

Kardec feels enthusiastic about Jobart’s letter not only because he recognizes that the spiritist doctrine has something serious to say in the domain of metaphysical studies, but also because it expresses the regret of someone who had previously assumed that the study of psychic phenomena was unworthy of academic attention.

Another testimony, from Morhery, a doctor of medicine who had been preparing a “study on microorganisms” for more than twenty years, says that he found in the spiritist doctrine the type of intuitions he previously had about the existence of the spirit and its relation with organic life, something which served him to point out the limitations of the influential anatomical system of Bichat, the famous French pathologist.

But these *hommes serieux* that Kardec was bringing for his doctrine were not just men of science. Another testimony he proudly chose to appear in his *Journal* comes from a retired military man to whom the reading of the *Book of Spirits* provoked a radical transformation of his beliefs: “to describe the effect that it has produced in me would be impossible: I am like a man who has left the darkness; it seems to me that a closed door suddenly has been opened; my ideas have been enlarged in just a few hours” (1858: 33).

Another clear strategy of the *Spiritist Journal* was to present extracts from the most prestigious magazines of the time, like the *Civiltà Cattolica*, one of the main ecclesiastic

journals in Rome, to show that in their pages there was no rejection of the extraordinary and mysterious phenomena that could not be explained by any mechanistic hypothesis. In sum, Kardec defends the capacity of spiritism to attract “serious men” to an interest in its doctrine. If the good intentions, systematic and rigorous, of Kardec’s method were not enough to confer legitimacy to spiritism, the prestige already attached to certain scientists converted or interested, would do this work. This is how he refers to this topic in one of his pages:

“Are they recruited among the illiterate, from the inferior classes of society? No. Those people have little or no interest in Spiritism... up until now its proselytes come from the finest classes of society: among the enlightened persons, among men of thought and wisdom. Furthermore, and this is a remarkable fact, the doctors who for a long time struggled against magnetism, easily adhere to this Doctrine. We count them in large numbers, both in France and abroad, many superior men, of all kinds: scientific and literary celebrities, high dignitaries, public servants, generals, businessmen, ecclesiastics, magistrates, etc...” (Kardec, 1858: 241).

While he promotes very emphatic ethical attitudes with which to approach the study of spirits, he also clearly rejects other kinds of attitudes that would make a systematic approach very difficult.

In this case, the disqualifying criteria is not a matter of having a certain social position, but instead has to do with exhibiting attitudes like irony, amusement or just simple curiosity, all perceived as obstacles to building a doctrine or appealing to superior spirits. These attitudes we have mentioned match one which is even more inadequate: incredulity. In a description of the type of participants in a table turning session, Kardec talks about those who were “pure sang” skeptics, semi-believers or fervent adepts. He considers this mix of people as unfortunate, because none of them has an appropriate attitude for study. On the incredulous, Kardec believes there is no sense in discussing with them, because they will refuse to accept or receive any evidence with an open mind:

There are skeptics that deny even the most clear-cut evidence and for whom even miracles would not be sufficiently convincing. There are even those who would be really upset if they were obliged to believe, since their self-love would suffer by confessing that they were wrong (Kardec, 1859: 153).

Thus, there is a separation between the critical attitude of the scientist and the attitude of the skeptic. This last one, Kardec believes, will never be able to do science because he will never believe any of the evidences reported by the phenomena, even if they are consistent. Kardec asks, then, for an ethical disposition of the people interested in spiritism, an attitude consisting in placing oneself in a place between doubting what is seen and having a certain faith that the things seen can also be rational and true.

Beyond the creation of a hypothetical witness of the spirits science, a person with intellectual qualities and moral attitudes towards the spiritual phenomena, Kardec will assemble a series of discourses and narratives to make spirits a research object. This object was far from evident, given that at the time, just as now, the common belief was to assume that spirits were an unsuitable phenomenon for scientific study. Thus, the legitimizing task of spiritism had to do, at least for Kardec, with gathering testimonies and explanations from scientific and religious sources to defend this possibility. This is the project we will now describe.

2.4. Naturalizing spirits

The first task of Kardec's scientific program will focus on naturalizing the spirits' manifestations, making of their ungraspable agencies a possible object of research for science. To normalize them as just another phenomenon of nature, like magnetism or electricity, was to assume that these spiritual manifestations had nothing to do with anything supernatural or occult.

This naturalization was justified for Kardec by the numerous available evidences of their existence and intervention in the world, which he thought proved, not as an exceptional fact, but as a general principle in many authors from the most diverse times whose authority he will use to legitimize his own convictions. In St. Augustine, St. Jerome, St Chrysostome or St. Gregory of Nazianzus, and in many other Fathers of the Church, but also in "the wisest philosophers of the ancient times": Plato, Zoroaster, Confucius, Apuleius, Pythagoras, Apollonius of Tyana., etc.

This belief in spirits constituted, then, a wide and extended tradition that Kardec recognized in the religious and philosophical past of the west, but also "in the practice of evocation among the peoples of Siberia, Kamchatka, Iceland, among the native Indians of

North America and the aborigines of Mexico and Peru”. As he sums it up, “the whole phalanx of nymphs, good and evil geniuses, gnomes, fairies and elves with which all nations have filled the space” (Kardec, 1858: 4). Being so extended and “universal” because those who had believed in the existence of spirits extended from one end of the planet to the other, among widely diverse peoples from all degrees of the social scale, it was a sign that it was based on something positive. The amplitude of the belief in spirits becomes an evidence in favour of the universality of spiritism. This helped to legitimize a type science that was not preoccupied in offering contra-intuitive hypothesis that would put into question scientific or religious commonplaces, but rather to vindicate these older ideas, not yet seen with a fair interest.

Kardec, in this sense, thought the Spiritist Journal provided an opportunity to connect isolated facts and fantastic descriptions of all epochs in a coherent system of consequences and explanations. From spirits knocking on objects in Lower Saxony to reports about the evocation of spirits in old Abyssinia, these testimonies were literally extracted from the original sources: magazines, travel diaries, descriptions, they were all explained in light of the spiritist knowledge thanks to the explanatory commentaries that Kardec added to each report. Thus, a whole range of extraordinary and diffused facts became evidence that the spiritist phenomena had occurred in very many epochs and places. It was this rational and coherent tissue of empirical data assembled with the laws of the spiritual world explained by the Book of Spirits, what would bring people into the era of a scientific spiritism.

Specially relevant in this strategy of collecting past testimonies as a warrant of the spiritist doctrine, was for Kardec the likeness between the druids’ ideas about reincarnation and life after death. As explained by Lynn Sharp, this association was not new nor an invention of Kardec. In the climate of political agitations in the decades of the 1820s and 1830s, the calls for a rebuilding of a country shattered by revolution, empire and war implied rebirth and regeneration as ideals of progress. These ideas were shared by many thinkers, who saw reincarnation as an explanation for and a way to solve many of the social tensions that shaped French history in the nineteenth century. Even if French society never really entirely embraced reincarnation as a religious tenet, it nonetheless was a popular doctrine linked to the discourses of thinkers who developed utopian social projects, many of them considered among the first sources of French socialism (Sharp 2006: 3).

In the thought of Jean Reynaud, one of the main defenders of the reincarnation doctrine in the 1840s, he argued that it was France itself, not the Orient or early Christian fathers such as Origen, who were the “true” source of ideas of reincarnation. In his article “Druidisme” made for the *Encyclopédie nouvelle* (1847) he would argue that the core truths of his philosophical ideas and of all religions could be found in the first Frenchmen, the Gauls, as expressed by their intelligentsia, the druids, who already knew about reincarnation (Sharp, 2006: 24).

Clearly Kardec had read with great attention these hypotheses and he will profit from the latent discussions in these years about the role played by the druids in the formation of French identity, to join Reynaud in his nationalization of the belief in reincarnation, showing, through several articles he wrote in the *Spiritist Journal*, the common elements between spiritism doctrines and some old druids’ texts on the subject. In fact, the pseudonym of Allan Kardec came from the conviction Hippolyte Rivail had of himself as the reincarnation of an old druid sage and the role he was now playing in completing the mission he had already started in previous lives. The fact that the belief in reincarnation was shared by the ancestors of the French nation, in a context of convoluted discussion and search for the sources of the national identity, was for Kardec, once more, a proof of the ancient prestige of his convictions and the providential mission France had in spreading these ideas.

But it was not just the universality of the belief in spirits that supported its mundane and everyday character. A pleiad of spontaneous phenomena, reported by people of the most diverse conditions, even those most distant from the concrete practice of spirits’ manifestations, were evidence, from Kardec’s point of view, of the soul’s independence: visions, apparitions, clairvoyance, premonitions, intimate warnings, secret voices, etc. In general, the type of experiences today referred as “psychical phenomena”; in addition, but also a number of social and natural phenomena, like birth defects or the precocious genius of some individuals, whose explanation, Kardec believed, we would uselessly search for in all other known doctrines:

“In that category we place, for example, the simultaneity of thoughts, the anomaly of certain characters, sympathies and antipathies, the intuitive knowledge, the aptitudes, the tendencies, the destinies which look like hallmarks of fate and, in a broader picture, the distinctive character of the peoples” (Kardec, 1858: 5).

So, spiritism appears here not simply as a doctrine that could give an account of the past religious beliefs of humanity or a series of relatively anomalous phenomena, but as a doctrine that was indeed able to present a whole anthropological view that explained the different characters and tensions from a spiritual point of view. In this sense, it was much more than just a science with a singular object of research. It had the aim of offering a new cosmology of the human realm. The spirits doctrine, Kardec said, “offers us the only possible and rational answer to a huge number of moral and anthropological phenomena to which we assent everyday” (Kardec, 1858: 5).

The function of the science of spiritism would be to assemble this universe so full of diverse experiences into an organized set of observations that would feed a theoretical system based on general laws. The empirical phenomena were scattered everywhere, so it was still necessary to see them with a systematic view and with a theoretical purpose. The point of arrival of a true spiritist science was when it would be constituted by a complete coordination and logical inference of facts. One in which all facts could eventually be explained by laws. Of course, that was not the state of spiritism: it had already a large number of observations, all of which could allow, at least in principle, a partial deduction of general principles. And this is why spiritism was not yet considered as a complete science.

Kardec’s project established a contradictory character in the whole spiritist movement, because once he made of spiritual phenomena an object of study, they would oscillate between the status of revealed truths and that of a source of testable empirical hypotheses. As argued by Hess, spiritists were caught between a personal loyalty to the principles of a spiritualist doctrine and the universalistic rules of scientific empiricism (1991: 47).

This naturalization strategy, however, had its limits. If, on the one hand, Kardec will defend the possibility of making spirits an object of scientific study, and deducing general laws from them, he will rapidly argue that this does not mean a science of spirits should be understood as an ordinary science. That is, it could not be framed with the same epistemic expectations of other traditional sciences like chemistry or physics, because it dealt with a series of facts that would not fit into those kind of preexisting theoretical

systems. This is how Kardec expresses this tenet in the Spiritist Journal, reluctant to lose the imprimatur of science to the set of his activities:

It is possible that the denomination of Science which we give to Spiritism will be contested. That Science would not have, without a doubt and in any case, the characteristics of an exact Science and it is precisely in this respect that those who intend to judge and experiment it are in error, as if they were dealing with a chemical analysis or a mathematical problem (Kardec, 1858: 3).

The limit to the spirits naturalization was the fact that the main object of study was not inert matter but a group of agents with free will that could not necessarily be submitted to the instrumental domestication of laboratory experimentation, so experimenting with spirits as if this was being done on an electric battery, was to approach them inadequately. Experimental replication, key in the expectations of natural sciences, was, then, hard to obtain for spiritist science because any such practice would always require the instantiation of a relationship with the beyond through the mediation of mediums. Mediums were the only mandatory machines of spiritist science. But they were living machines with irregular fluctuations in their capacities and, for that reason, not suitable for the production of phenomena in any contingent setting or circumstance.

Following what has been said by Ashmore et. al. on the question of scientific controversies in psychology (2004: 21), in spiritism, as in other therapeutic practices dealing with traumas, the phenomenon cannot live in the absence of a unique social relation. The communication with spirits was essentially an interpersonal phenomenon so their non-manifestation under the “purified” conditions of experimental practice was no evidence against their reality.

Kardec was very emphatic in not letting spiritist science be measured by the criteria of the exact sciences:

.. ordinary Science is incompetent with such a subject; it is exactly like the musician who wanted to judge Architecture from a musical point of view... nobody is a good judge away from the subject of their expertise. If we want to build a house should we look for a musician? If we were sick would we prefer to be treated by the architect? If we faced a lawsuit should we be advised by a dancer? Finally, if it is a question of theology should we seek the solution by a chemist or an astronomer? No. Everyone should stick to their own profession. Traditional sciences cover the properties of matter that we can manipulate at

will. Their produced phenomena have material forces as their agents.... Spiritism reveals to us a new order of ideas, of new forces, of new elements, of phenomena which are not absolutely based on what we know... (Kardec, 1859: 9).

Once naturalized the phenomena of spiritism within the framework of a type of science with independent agents as the main object of research, it was necessary, as a consequent rhetorical strategy, to create a new language, a conceptual net to name the things to be studied, even though they were intangible.

2.5. The creation of a language to classify spirits

“New things demand new words”, was a common saying of Kardec and this is precisely how he is going to embrace the project of a new science in which ontologically distinct agencies were in contact: classifying the different types of spirit manifestations; creating a language for things that had no associated linguistic reference.

One of the initial nomination exercises of was to name and classify the different types of spirit manifestations which could have a potential empirical character, like the visual manifestations or so called “ghostly apparitions”, or the spontaneous movement of objects, shaken by the spirit’s will.

However, not all the communications were so adept at leaving an empirical trace. Other type of interactions, more subtle, were abundant in spirits’ daily interactions with men. These were, for example, the hidden actions of spirits through inspiration or suggestion. For this last group, the most usual mechanism to reveal spirits’ thoughts was through the intermediation of the medium, who could reveal messages with both a frivolous or instructive character.

Kardec therefore proposes a taxonomy of the different modes of spirit communication (see Table 2.) These could range from mere noises in the air to the use of a particular, even dead, language. Sensory signals were the most rudimentary and common method of communication: table turning, noises of moving objects, these were phenomena denominated by Kardec with the neologism of *sématologie spirite* (spiritist sematology).

The communication mode in which Kardec was most interested was the sixth, that is, intelligent communications mediated by mediums, who were persons who had the ability to act under the influence of the occult force which guided them, obeying a power not under their control. This exchange was performed in Kardec's circle mainly through writing. The medium, then, used his hand for channeling the spirits' thoughts onto a piece of paper. To designate this form of communication, Kardec used another neologism: psychographie (psychography).

Table 2: classification of spirits' manifestations according to Kardec:

1. Hidden action: nothing is ostensive. These are, for example, inspirations or suggestions, intimate warnings, influence over events, etc.
2. Patent action or manifestation: when it is in any way demonstrable.
3. Physical or material manifestations: those evidenced by noticeable phenomena such as noises or moving objects. Frequently, these manifestations do not carry any message, having the sole objective of attracting the attention to convince us of the presence of a superhuman power.
4. Visual manifestations or apparitions: when the spirit shows itself, though without bearing any of the known properties of matter.
5. Intelligent manifestations: those which reveal a thought. Every manifestation which has a meaning, even a simple movement or noise, indicating some freedom of action, corresponding to a thought or obeying a will, is an intelligent manifestation. They exist in all degrees.
6. The communications: these are intelligent manifestations aiming at an exchange of ideas between man and the spirits. The nature of these communications varies according to the elevation or inferiority of the manifesting spirit and the nature of the discussed subject. These can be frivolous, rude, serious or instructive (Kardec, 1858:7-8).

The principal characteristic of this mode of communication was the partial loss of agency of the medium's hand movements, which produced a series of agitations that, being involuntary and febrile, were referred by Kardec as psychographie directe (direct psychography), in contrast with another variation in which the force acting on the person

transmitted itself to the object of writing, usually a pencil which became an extension of the hand, yielding the necessary movement to produce distinct and more defined characters. This mode was called indirect psychographie (indirect psychography) (Kardec, 1858: 9).

A rarer case was that of a spirit writing his thoughts directly on the paper without the direct intervention of the medium's hands. This was called spiritographie (spiritography) (Kardec, 1858: 10).

Among these possible modes of communication, spiritist science is going to privilege written communication, because it was the only one that could leave material traces and stokes, all of which could serve as possible empirical evidence. But spirits also preferred the written word, because it was the most complete mechanism to transmit both their thoughts and convictions. Superior spirits, interested in the realm of knowledge, did not communicate through sounds or noises, given that these were insufficient resources for the expression of their ideas.

Here spiritism appears as a science of a particular type of communication, a science which establishes a hierarchy of value of different linguistic expressions that correspond to a more general hierarchy of the spirit's order, which admitted three major divisions in Kardec's classificatory system: imperfect spirits, who were at the bottom of the scale and were characterized by a predominance of matter in their thoughts and a propensity towards evil; good spirits, who still had a certain predominance of matter but had a desire for the good, and perfect spirits, who had obtained the highest degrees of goodness and intelligence (See Table 3.)

This spirit hierarchy, from matter to perfection, from the noise to the word, shows that Kardec divides his classificatory system along two main axes: moral progress and scientific development. Perfect spirits are, precisely, those that have reached the maximum level in both areas; those that are examples of both intellectual perfection and moral benevolence.

It appears, then, in Kardec's defense of a new language for this science, spirits are far from being those abstract and metaphysical agents as conventionally described in certain theological discourses. The means they could use to intervene among the living were as

multiple as the possible ways of making them graspable, of making them leave an empirical footprint. To see spirits, to make them available to our senses will, then, be the next step in the process of naturalizing them and of making them an object of study.

Table 3: classification of the hierarchy of spirits according to Kardec:

Imperfect spirits

1. Impure spirits: “inclined towards evil, as the main object of their concerns. Their advice is perfidious, spreading discord and mistrust and using masks to better deceive others”
2. Frivolous spirits: “ignorant, malevolent and inconsequential. They get involved in all things, responding to anything with no regard whatsoever to the truth”
3. Pseudo-wise spirits: “having extensive knowledge, these claim to know more than they actually do. Their language has a serious character which may lead to mistakes regarding their capacity and illumination but, very frequently, it is a simple reflex of prejudices carried over from their earthly life”
4. Neutral spirits: “These are not good enough to do good deeds or bad enough to do evil ones. They incline towards one or the other and do not rise above the vulgarity of humanity”

Good spirits

5. Benevolent spirits: “goodness is their prevalent quality. Enjoy protecting and serving men but their knowledge is limited”
6. Spirits of science: “the extension of their knowledge is what distinguishes them. Less concerned with moral questions than with scientific ones”
7. Wise spirits: “moral qualities of the highest order are what distinguish them. Their knowledge is not unlimited but they have such a high intellectual capability that it allows them to make a shrewd judgment of men and all things”
8. Superior spirits: “unite science, wisdom and benevolence. Their language, permanently dignified and elevated, breathes generosity and, sometimes, it is sublime”

Pure spirits

9. Pure spirits: “have passed through all degrees of the scale and are cleansed from all impurities of matter. Having achieved supreme perfection attainable by the creature, they do not have to go through trials and expiations. They are the messengers and ministers of God whose orders they execute for the maintenance of universal harmony” (Kardec, 1858: 40-42).

2.6. To see spirits

The second half of the nineteenth century is a paradoxical moment in the history of European science. An enormous number of phenomena started to gain renewed scientific attention: electricity and the wonders it promised, as well as the attempts to create technologies based on the manipulation of steam or other gases. In both cases, the object of study had the potential for many possible applications and evident practical effects. However, despite all these possible effects they could produce, these were, for the most part, empirically elusive. In this sense, in nineteenth century Europe, a cluster of invisible phenomena were incorporated in the agendas and attention of the official scientific bodies.

To orient scientific research towards the conformation of invisible objects of study was, then, a preoccupation that was far from being exclusive to the science of spirits. However, also at the time, there emerged a new brand of scientific ethics that defended a notion of ‘visual objectivity’, in which the non intervention of scientists imposing their hopes, expectations, generalizations, aesthetics, even ordinary language on the image of nature, was promoted as a guarantee of scientific certainty (Daston and Galison, 1992: 81).

The creed implied in the phrase “let nature speak for itself” was an impulse to confer to technologies of visualization such as, and especially, photography, the capacity to produce truth and consensus among scientific actors. This morality of prohibitions that was gradually being conformed in the second half of the nineteenth century put an enormous value on the capacity to visibilise scientific objects of study. Thus, there appears the paradoxical situation of an increased interest in generating experiences of direct witnessing in science, at the same time as a series of invisible objects are subjected to scientific experimentation. This paradoxical situation confronts spiritism with the question of how to produce a science among empiricist frameworks of knowledge in which the ultimate warrant for a claim was an act of witnessing? How could they make visible to the gaze of science the invisible agency of the soul?

Kardec saw himself compelled to produce inscriptions (Lenoir, 1998: 8) that could give an account of the empirical footprint of spirit action. These inscriptions will not yet be, as we have explained, photographs of spirits, which did not exist at the time. For Kardec, the empirical evidence of the words written by the spirits through the medium’s role or the

drawings they would make (See next section) would be the literary technologies he will use to convince new adepts. As explained in a famous article by Steven Shapin, the production of literary technologies was the way in which, from certain instances of experimental sciences, the experiences of an experimental performance were reproduced to people who were not present at the time (Shapin, 483-484).

This is why Kardec will use sections of the *Spirits Journal* to reconstruct the testimonies from the beyond. In the *Journal*, for instance, aside from the articles that Kardec wrote on particular doctrinal questions, a place was always reserved for the transcription of private evocations that were obtained in the group's meetings. These dialogues from the afterlife were presented with a commentary that would clarify the teachings given by the spirits and give a context to the conversations. A mother, as it is shown in the first number of the journal, goes to the sessions to summon her daughter, who died when she was fourteen years old:

Julia: Mom, I am here!

Mother: Is that you my daughter, who answers me? How can I know it is you?

Julia: Lili.

Observation: This was her family childhood nickname; neither the medium nor I knew about it, as she was only known, for many years, by the name Julia. With this sign her identity was evident. Not withholding her emotions, the mother wept.

Julia: Mother, why such affliction? I am happy, very happy. I no longer suffer and always see you.

Mother: But I cannot see you! Where are you?

Julia: I am here, just beside you, with my hand over Mrs. X (the medium) so that she can write what I am telling you. See my writing (the writing was really hers). (Kardec, 1858: 17).

Kardec, as the example shows, intervenes in the dialogue's transcription to confer veracity on the spirit's identity, pointing out that this spirit presented herself with a name that was known only by the mother, as well as showing that the medium's handwriting had the same characteristics as the deceased daughter's. This testimonial reconstruction, whose veracity depends upon the recognition by one of the witnesses at the séance of the spirit's identity, is what the literary technology used by Kardec tries to do. It does so by using a language to communicate this individual conviction to other distant readers and in doing so convincing them that the experiences had at the sessions are reliable enough to produce hypotheses. "Nous avons conclu d'après ce que nous avons vu" (we have concluded following what we have seen) (Kardec, 1858: 150) is the phrase that the

“codifier” repeatedly repeats when he jumps from presenting testimonies to making hypotheses out of them.

However, Kardec is cautious in respect of the gaze as the only mechanism to confer legitimacy on the productions of his science. The experience, he says, leads him to conclude that facts, and in particular the type of facts he claims took place in the sessions, are insufficient to produce reliable convictions:

Well, experience has taught us that facts, however strange and amplified they may be, are not elements of conviction. The stranger they are the less convincing they will be. The more extraordinary a fact is the more abnormal it seems to us, and the less willing to believe we become. We want to see, and after seeing we still doubt; we suspect illusion and connivance. This no longer happens when we find a plausible cause of the facts. We daily come upon people who used to attribute spiritist phenomena to imagination and blind credulity, yet who are avid followers today, precisely because today those phenomena no longer repulse their rationality: explain them, understand their possibility and then believe, even if they have not been seen. (Kardec, 1859: 66).

Therefore, though spiritism seeks to produce virtual witnesses of the sessions through the reconstruction of the spirits’s messages or dialogues, and in doing so, create instances of objectivity production, it is very careful not to consider that just seeing is enough, because facts and observations need to be located in a wider framework of reasons and coordinated explanations that can give sense to what is seen and make of it something rational.

For spiritism, this framework that gives reason to the visual and empirical manifestations of spirits is a theory that defines them not as vague and undefined beings, but as agents that share our sensory faculties and that can, through their form and constitution, dwell in mundane space and produce effects on it.

They can do so because, according to spiritism, all incarnated men are made of three parts: the immaterial soul, the physical body and a “semi-material” link between the two, called *périsprit*. It is this last one that gives to the disembodied spirits the ability to produce tangible phenomena, thanks to the channeling of their “vital fluid”, which is the medium’s role and ability (Monroe, 2008:108). Kardec compares the *perispirit* with a physical body that can present itself in solid, liquid or gaseous states, like water,

according to their degree of condensation. But despite comparing them with other gases or elements, he also warns that it is incorrect to attribute to them identical properties or to compute their strength by the same standards used for steam or other elements. A perispirit is at the end a new order of ideas, outside the competence of the exact sciences, so they are not necessarily the best suited to give an account of it.

Hence, from the spiritist theory of human physiology, spirits can make themselves visible thanks to the use they make of the perispirit, but, they can equally see, because they have the faculty to do so. In a communication with a spirit, Kardec and his group are informed that the magnetic fluid is not the agent of spirit's vision, this capacity resides in their nature: "I have no eyes or pupils; I have no retina or lashes; however, I see better than any of you see your neighbor. You see through your eyes but it is your spirit that really sees". (Kardec, 1859: 75). This theory, as is evident, goes against most of the predominant physiological discourses on human perception of the day, when it argues that the senses are a property of the soul and not of the body. Kardec summarises these considerations in the following explanation:

The semi-material envelope of the spirit constitutes a kind of body, of a definite and limited form, analogous to that of the physical body. But that semi-material body does not have our organs and cannot feel our impressions. Nevertheless, it can perceive everything that we perceive: light, sounds, smells, etc. These sensations are not less real, although they have nothing of the material; they are even clearer, more precise, subtler, since they get to the spirit without intermediaries, not passing through the filter of the organs that attenuate them. The faculty of perception is inherent to the spirit; it is an attribute of the whole being. The sensations come to them from all sides and not through circumscribed channels. Talking about vision, a spirit once said: "It is a faculty of the spirit and not of the body. You see through the eyes however it is not the eyes that see but the spirit." (Kardec, 1859: 87)

Thus, the fact that spirits can see and be seen is not defended as a supernaturally prodigious because, as Monroe says, "they did not involve a divine suspension of the laws of nature. Instead, these manifestations were direct consequences of human physiology, and as such were no more miraculous than breathing" (Monroe, 2008: 108). The distinction of material and immaterial to define an ontological distinction between the empirical world and the world of spirits was incoherent, because in the theory of psychic manifestations, the spirits were not precisely the absence of matter. To see spirits and be seen by them was, then, a naturalized condition of the science of spirits.

As the reconstruction of the spirits' testimonies was the preferred mechanism through which Kardec intended to create virtual witnesses of this mutual process of seeing, it is convenient to explore more deeply the place that testimonies occupied in the whole project of his science.

2.7. The role of afterlife testimonies

The most immediate consequence that Kardec hoped to obtain from the intellectual system of spiritism was, even more than the construction of a coherent and rational science, to offer consolation in face of the defiant persistence of death and illness. If there was justice and recompense in life after death, this would serve many people to bear the sorrows of missing relatives and, for a moment, it would give them the chance to regain contact, however transitory, with those who had left them.

These testimonies, however, as reconstructed by Kardec, had the purpose, not just to serve as a proof to help desperate families and individuals, but were also presented as exemplary documents in the confirmation, adjustment and gradual construction of the spiritist theory.

The communications with spirits had the role of presenting the testimonies of the beyond, accounts that could be terrible or wonderful according to the degree of the spirit's evolution. Therefore, each testimony fed the hierarchical categorization of the spirit's scale that we have already presented and it served as a warning and anticipation of the conditions that people would meet in the afterlife according to the merit of their moral actions.

The testimony of spirit's lives was presented with enormous detail of the forms and conditions and was, so to say, a diary of spiritual life in the universe, because, from the point of view of spiritist cosmology, the whole universe was a dwelling place for spirits. The question of the possibility of life on other planets, or the “plurality of worlds”, as it was called at the time, had awoken a great interest in the cultivated public of these years, especially in England and to a lesser extent in France, so it was not of the exclusive interest of the spiritist movement. As has been explained by Guillaume Cuchet, progresses in the astronomic discipline gave the conviction to contemporaries that they

were effectively in front of a new domain of knowledge and discoveries “thanks to the enlargement of the horizon of observation, particularly thanks to the transition from a study of the solar system to the study of the stellar system, or, as said at the time, the transition from the “world” to the “universe” (Cuchet, 2012: 301). In this barely known universe, it was speculated that in its wide and empty spaces, could be dwellings of possible new planets and, in consequence, this augmented the possibility of many of them being potential places for the existence of “intelligent life”, as we call it today.

The absence of empirical proofs of the existence of living beings in other worlds was not for Kardec, nor for others interested in the astronomy of the epoch, a certain refutation of the existence of organisms who could have natures suited to different environmental conditions. On the contrary, following the testimonies the spirits communicated about their post-life lives, spiritists had the notion that other worlds were inhabited by different beings, whose constitution, according to their spiritual advance, could be adapted to the plural conditions of the universe. When defending these tenets, Kardec had in mind, for example, the claims of recent science, such as the discovery that the moon had no atmosphere. He would repeat:

“if the atmosphere of the Moon is not perceived, is it reasonable to infer that it does not exist? Could it not be that it is comprised of unknown elements of such density that they do not produce appreciable refraction? We say the same about the water and liquid which may exist there” (Kardec, 1858: 65).

From the spiritist view, some worlds were reserved for morally and intellectually advanced spirits, while others were worlds of expiation and purgatory. In them, there was a manifest struggle between a hostile and violent realm against a certain though flickering spiritual intuition. The earth, needless to say, in this universal cosmic hierarchy, was a world “far from the best rank”. It was still in the process of expiation and it was a dwelling place for spirits of the most diverse conditions, some superior to assist us in our moral or intellectual progress, and other barbarians, who sowed pain and destruction. This spiritist imagination of an evolutionary process of undefined reincarnations was better adapted than certain theologies to the new astronomic universe of wide dwellings and unimaginable territories. The link between the notion of the “plurality of worlds” and the “plurality of soul’s existences” already sketched by spiritualists who preceded Kardec like Jean Reynaud (Cuchet, 2012: 310) was deepened by the testimonies of spirits gathered at the séances.

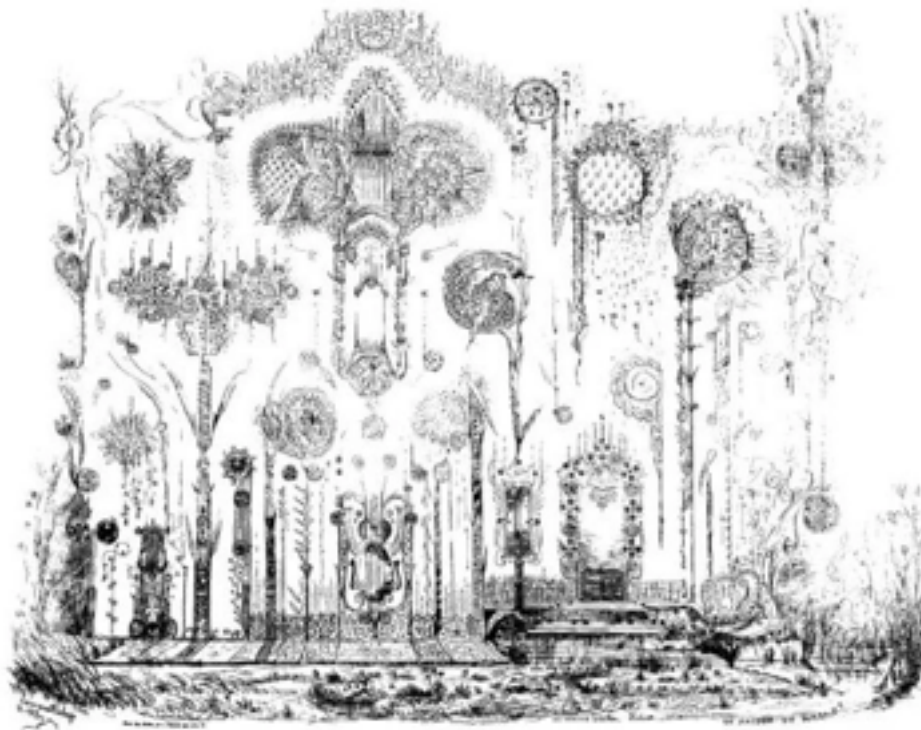
One of the most detailed reconstructions on the conditions of spirit's lives in the “plurality of words” was of the planet Jupiter, which was described, among all known planets, as the most advanced, because it was a reign of benevolence and justice and was exclusively inhabited by good spirits. Two of those who gave testimonies on the conditions of that blessed globe were Wolfgang Amadeus Mozart and Bernard Palissy, superior spirits that described their dwellings compared to those on earth. Kardec reconstructs one of the colorful descriptions:

The inhabitants of Jupiter transport themselves from one place to another by sliding on the surface of the soil, almost tirelessly, like the bird in the air or the fish in the water. As the matter that forms the body is more refined, it dissipates after death, without being subjected to putrid decomposition...feeding is in analogy with that ethereal organization; it would not be substantial enough for our coarse stomachs, and ours would be too heavy for them. It consists of fruits and plants which, in fact, they somehow harvest, for the most part, from the environment, whose nutritious emanations they inhale. The life span is proportionally much longer than that on earth. The average is equivalent to about five of our centuries. The development is also very fast and childhood lasts only a few of our months ... the spirits easily unleash and communicate with each other only through their thoughts, which do not exclude the articulated language; also second sight is a permanent faculty for them... the intuition they have of their future; the security given by a conscience exempt from remorse, are the reasons why death does not cause them any concern. They see its arrival without fear and as a simple transformation...The animals are not excluded from this progressive state, although not similar to that of man... Their body, more materialized, is attached to the ground, like ours on Earth. Their intelligence is more developed than that of our animals. The structure of their limbs adapts to all requirements of the work. They are responsible for the execution of manual jobs. For them man is a god, but a protective deity, who never abuses his power to oppress them.. (Kardec, 1858: 71-72).

Jupiter appears as a spiritist utopia where matter was no longer a hindrance to existence, where beings could live lightly, devoid of the vicissitudes of death and illness. In this social order all nature breathes more harmonic conditions, even animals, who have evolved enough to develop intelligence and conditions that make them apt for manual duties. So to speak, there is progress in all nature, including plants and minerals. This description has a resemblance to 19th century accounts of poor and non-white peoples as “noble savages”. Palissy and Mozart described in later renditions that in their planet there was no polytheism, because all beings worshipped one single God, and gave an account of their

artistic occupations, by showing that all nature supported musical composition, because “plants and birds are choruses and the thought itself composes”. Their testimonies were so generous that Mozart’s spirit even had time to use a medium, Mlle de Devans, one of Chopin’s students, to play a piece composed by him after his death, inaugurating the genre of afterlife music. Also, on another occasion, the dramatist Victorien Sardou, who worked as an illustrator at *La Patrie*, an influential journal, made a spirit-inspired drawing of Mozart’s dwelling on Jupiter (See Fig 2.)

Figure 2: Mozart’s dwelling on Jupiter as drawn by the medium Victorien Sardou



These detailed reports of the conditions of life in superior worlds contrasted with the apparent simplicity of the answers provided by superior spirits to the questions that were posed to them in Kardec’s group. The spirit of Alexander Von Humboldt, who had recently died, was approached about the opinion he had on spiritism. Here we see a clear example of this succinct and brief style:

Q- Have you known Spiritism during your life?

A- Not Spiritism. Magnetism, yes.

Q-What is your opinion about the future of Spiritism among the scientific organizations? -

A- Promising. But its path will be rough.

Q- Do you think that the scientific institutions will one day accept it?

A- Certainly. However, do you see that as indispensable? You must first endeavor to implant its principles in the hearts of the unfortunate ones that are plentiful in your world. It is the balsam that mitigates despair and gives hope. (Kardec, 1859: 22).

To the optimistic place Humboldt gave to spiritism in the future of science, Kardec will comment that in his style: “everything and even the most beautiful thoughts breathe simplicity and absence of pretension”, a commentary he will repeat on many occasions to point out that the communication of elevated spirits might appear rather ordinary at first glance, but this is because they are composed without pretension, sufficiently clear and sublime to be understood by anyone. Thus, it was possible to distinguish the testimonies of superior spirits from those of others if attention was paid to the characteristic style of their communications:

Their words always breathe kindness and benevolence and are never affected by irritation, violence, bitterness or harsh words... their words are never in contradiction. Their language is always the same with the same people so “if some of them say contradictory things taking a common name, it is not the same spirit that speaks or, at least, is not a good spirit” (Kardec, 1858: 214).

On the other hand, it was recommended to be suspicious of spirits who emphatically repeated they were at the highest levels of perfection and were boastful about themselves. “Swaggering is always a sign of mediocrity among the spirits, as it is among us” (Kardec, 1859: 28). In this way, exaggerated messages or ones assuming a ridiculous and anachronistic form were almost always the work of inferior spirits and unworthy of close attention and why even though compelling or logical, many communications some mediums produced were awkwardly divergent (Monroe, 2008: 133-134).

So, Kardec’s spiritism advocates a politics of the literary style of spirits, which is the way to tell which is superior or inferior and, based on this, to determine if the testimony is or is not reliable for the formation of a spiritist scientific hypothesis. This politics refers to the

way in which spirits express themselves, but also to the content of the communications. For instance, it is also a sign of the identity of a superior spirit if he defends and promotes certain moral claims. In this line, many of the testimonies that appear in the first works of spiritism are moral lessons against pride or laziness and in favour good acts like charity. As a set, these moral lessons present an ideal of an individual in society that makes himself useful to others. From the spiritist perspective, men are gifted with physical and intellectual capacities that are assigned to them to be used in the service of others. This is why charity is probably the fundamental virtue of the whole spectrum of human virtues, because it is by helping others that spirits progress. Human solidarity goes against a selfish life in which people only strive for their own material benefit, and vindicates a way of life in which giving oneself to others and accepting with abnegation life's challenges, such as illness or abandonment, are the most secure mechanism to an easy detachment of passions and material gridlocks and, thus, of spiritual evolution. Evolved spirits are, then, always examples of the defense of these ideas.

In this sense, it is no accident that those who defend these aforesaid virtues are in the spiritist discourse very well known figures of Christianity. Spiritism does not pretend to be a system that detaches itself from basic Christian virtues like charity or love of the fellow man. In fact, Kardec and other spiritists believed their doctrine was a renewal of Christianity in terms of redirecting people's life, but this time, based on a doctrine which was also a science. It can be argued, with Hess, that spiritism embraced Christian morality without accepting Christian theology (Hess 1991: 72).

Hence, the mechanism of spirit testimonies required some filters of style and moral content to guarantee that the spirit was trustworthy enough to use as a reliable source for hypothesis construction. These filters were, also, ways in which the virtual witnesses were educated to identify while reading testimonies the conditions of the spirit's evolution and, consequently, how much credibility to place on it. However, not even this degree of caution was enough to avoid answers being sometimes contradictory, and the danger of certain absurd ideas being presented under the imprimatur of a respectable name. This possible confusion in the testimony of spirits was a hard condition of the new science, but Kardec thought of it as proper to all sciences in their initial states:

“Which scholar was nor confused in his investigation by facts which apparently contradicted the established rules? Do not Botany, Zoology, Physiology offer us thousands of similar examples and do not their foundations defy any contradiction? It is by

comparing the facts, observing the analogies and dissimilarities that it is possible to gradually ... constitute the Science” (Kardec, 1858: 205).

In this sense, the contradiction in the testimonies demanded an additional degree of caution in spiritist practitioners, consisting in not passively receiving what spirits reported, but carefully discerning, from all reliable sources, where there was coherence and consensus among the answers, and which came from a spirit, even if supposedly learned, giving a false answer on a subject. Only in this way, Kardec thought, the divergences among testimonies would be slowly corrected. This progress meant a growth of the adherents' skills in discerning which statements were believable or not.

This is how, on some occasions, Kardec comes to question the report made by a spirit on a particular scientific topic. Such is the case of a communication with the spirit of a deceased doctor who had widely studied magnetism and who answered a question about the moment of union between the soul and the body, saying that it occurred in the moment when the child begins to breathe, as if receiving the soul from outer space.

To this opinion Kardec poses a critique, saying that this opinion is wrong and comes as a consequence of catholic dogma. As an alternative, he affirms that the union begins at conception, that is, at the moment when the spirit, not yet incarnated, attaches to the body by a fluidic tie which progressively reinforces, up until birth. The incarnation, in this view, is completed when the child breathes. The “codifier” gives himself the authority to reject this testimony because it does not correspond with the opinions given by higher spirits on the same subject.

On other occasion, he asks a question about the action of spirits on solid bodies:

Q- Does the spirit that acts upon a solid object, in order to move or rap, penetrate inside the substance of the body or act from the outside?

A – One or the other. We have already said that matter is no obstacle to the spirits as they can penetrate everything (Kardec, 1858: 11).

In this case, he shares the spirit's opinion because it corresponds to another answer given in another Journal, the *Spiritualiste de la Nouvelle-Orléans*. Thus, spiritist theories are constructed by means of a systematic comparison looking for the concordance of spirit testimonies. This method demands adequate skills , moral qualities and a degree of

intelligence, but also the capacity, not only to know how to read the answers, but also to formulate the questions:

“it requires the capacity... to methodically formulate and structure the questions, so as to obtain more explicit answers; and to capture from the answers the nuances that sometimes are characteristic traces, important revelations, escaping the superficial, inexperienced or occasional observer” (Kardec, 1859: 178).

Spiritist science, as formulated by Kardec, is one in which precaution, restriction and prudence in the way of asking, as well as in assessing trustworthy or unreliable testimonies, are the skills necessary to assemble the literary works of spirit testimonies, which is the principal source for building the whole set of its hypotheses and the mechanism that catches new virtual witnesses to recreate the private space of the séances.

This is the way in which Kardec tried internally to discipline the communication of spirits among his adepts, but in the pages of the Spiritist Journal he will also have to discipline the communication with those who, in these early years, showed themselves opposed to the cause of spiritism. In answering the critiques of its antagonists, Kardec will also give an example of how to deal with the official science and, at the same time, how to position strategies of rhetorical legitimation of his marginal position, as these strategies are explained by Collins and Pinch (1979: 239-259).

2.8. Answering critiques

Spiritism, although marginal, was hardly ignored. All the major presses of the time, as well as official bodies of science, pronounced their opinions about it. We will not try in this section to understand all the positions involved in the debates and dialogues held. What matters to us now is to analyze within the discourse of spiritists, how they dealt with the attacks and opinions proffered by the official bodies of science of the time.

In the literary style used to answer these critiques one can see a conviction defended by Kardec about the importance of using adequate linguistic practices that could enlist spiritism in an ideal of scientific conversation both argumentative and rational, avoiding associations with esoteric, mysterious and occult movements. In language, Kardec tries to

offset the magical burden that the prestige of his movement carried, in order to bring it to the “clarity” of the scientific mode of communication.

This implied also a methodical attitude in answering his opponents. Above all, it was not necessary to answer all critiques. To many commentaries, the best answer was silence. It was only necessary to answer those opponents who shared the conviction that disputes should be based upon arguments and not on personal attacks, and also those in which there was an opportunity to clarify essential points of his doctrine in order to avoid misunderstandings.

This was made based on the conviction that a science needed to slowly correct and adjust its arguments, but also on the assumption that these type of opponents could be potential converts to his cause. If they were bitterly treated, they would be lost. His position was, then, that of waiting and not provoking a controversy, not attacking his adversaries, but hearing their declarations and strategically answering them. While doing this, he was showing that his doctrine was of the interest to the great scientific bodies of the time, indirectly collecting part of their prestige, even if in practice it was only on rare occasions that any of them actually offered a response to Kardec’s writings.

Three types of critique were the most commonly held against spiritism and adjacent practices in these first years: a) fraud accusations, b) accusations of causing folly and c) accusations of having been proved false by official bodies of science. This is how Kardec tried to answer each of them:

a) fraud accusations

The association of the type of phenomena studied by spiritism with attempts at fraud and illusion were well-known. Kardec brings to his pages one of these accusations by extracting some fragments from a famous article published in 1857 in *Scientific American* titled: “Cambridge professors and the spiritualists” In this article an event in Cambridge University was reconstructed in which 500 dollars were offered to any interested person who could reproduce the mysterious phenomena that spiritualists said they had provoked through a medium’s intervention. The professors who had to evaluate the case, after several days of open call, declared in their report the following statement:

“The committee declares that Dr. Gardner, not having been able to present an agent or medium who, from the room next door, would reveal a word requested to the spirits; who could read the English word written inside a book or on a folded piece of paper; who could answer one question which only superior minds could answer; who could vibrate the piano strings without touching it or even move a small table without the help of hands; as he was unable to give to the committee a testimony of a phenomenon which, even with the most elastic interpretation and greatest good will, could be considered as equivalent to the required proofs; of a phenomenon requiring the intervention of a spirit to be produced, supposing or at least implying such an intervention; of a phenomenon up until now unknown to Science or whose cause was not touchable and immediately recognized by the committee, he has no right to claim from the Courier of Boston the payment of 500 dollars as offered.” (Reproduced in Kardec 1858: 21-24)

Kardec, commenting on the article, believed that these type of reports revealed the ignorance the committee had on the subject, precisely because they assumed the phenomena were fraudulent just because they were unable to replicate the described experiences. All these agents had in common a shared belief in an ideal of experimental replication according to which such phenomena had to obey their will and be repeated with mechanical precision. Something that was against the alleged nature of these experiences, which involved agents, spirits, who had free will and were not necessarily obedient to any particular test.

For Kardec, spirit manifestations essentially obeyed a moral interest, so it was not going to be reproduced in instances merely wanting to “satisfy our curiosity”. Actually, he believed spirits had certainly rejected research attitudes which just wanted to debunk or unmask. He argues this by equating this case to the “serious men” of his time, showing that they would not be comfortable in a scene in which they were tested through naive questions trying to catch them out in elementary issues. Thus, the indirect critique that appears in the articles is used by Kardec as a motive to emphasize an aspect that makes the spiritist science different to other types of science and to stipulate some methodological differences:

In the phenomena of the natural Sciences, human beings act upon the inert matter, handling it at will. In the spiritist phenomena we act upon intelligences that have free will and are not submissive to our wishes. Thus, there is in principle a radical difference between the common phenomena and the spiritist phenomena. That is why ordinary Science is incompetent to judge the latter (Kardec, 1859: 2).

He was not denying either that certain phenomena supposedly effectuated in spiritist sessions were, in fact, the result of skillful conjurers, but to conclude from this that mediums were nothing but swindlers, would be like arguing that “due to the fact that there are charlatans selling medication to the public; that there are also doctors who, although not doing it openly in public, abuse the trust given to them, it then follows that all doctors are charlatans and that the class will suffer in its reputation” (Kardec, 1859: 94). So, of course, spiritism was not exempt from fraud or deceptive practices, but the best mechanism to guarantee that one was not in front of a trick was to see if there was any material gain behind the practice: “fraud has always an objective, some sort of material gain and interest, thus where there is nothing to gain there is no interest in deceiving... the best of all guarantees is a total material disinterest” (Kardec, 1859: 94).

In any case, aside from the material disinterest of participants, it was also advisable to avoid falling into the subterfuges of people driven by any kind of interest, to carefully observe the circumstances and above all to take into account the character and condition of the persons, as well as the objective and possible interest they might have in deceiving. Just mere curiosity or amusement were always marks of distrust. In this, the “seriousness” assumed by the performers as well as the assistants, was the best guarantee to identify mystification.

b) accusations of causing folly

In many scenarios, the critique against spiritism and, in general, against the practice of spirit evocations, was that it could awaken madness and folly among its participants, no longer being able to distinguish the limits of what was real. For Kardec, however, the possibility of alienating its practitioners was a risk in all sciences:

“Haven’t all Sciences supplied their masses to the asylums of the alienated? Should they all be condemned for that? Are not the religious beliefs also greatly represented among them? Would it be fair to proscribe religion for that? Do we know the number of lunatics produced by the fear of the devil? All great intellectual concerns lead to exaltation and may produce harmful reactions in a feeble mind. We would be right in assessing Spiritism as having a special danger if it were the only or even the major cause of madness. (Kardec, 1859: 6)

Very concretely, answering an article written in the journal *The Universe* authored by an Abbot Chesnel, in which the problem of Spiritism is extensively discussed, one of the possible dangers that Chesnel identifies is that many followers of spiritism were considered mad. Rather than dealing with Kardec's reply, which basically repeats that lunatics can be produced by all great intellectual endeavor, it is interesting here to understand why he decides to answer Chesnel's argument at all. He acknowledges that the opponent in this case has some characteristics that satisfy and encourage an answer. "By the moderation and convenience of the language he deserves an answer, even more so since the article contains a serious mistake and may give a false idea of Spiritism as a whole, as well as impact the character and objective of the Parisian Society of Spiritist Studies" (Kardec, 1859: 129).

Here, moderation in the way of putting arguments as well as in expressing a difference, becomes the sign of a positive opponent, one who agrees with Kardec on the politics of his style of addressing controversies. It is only on rare occasions that Kardec avoids this condition and responds to a disrespectful critique. This is the case of the following article.

c) accusations of being proved false by official bodies of science

Kardec used the *Spiritist Journal* in 1859 to respond to an article written in *L'Abeille Médicale*, which he reproduces completely and complements with a reproach to its style: "our common sense tells us that nothing is proved with silliness and harm, no matter how smart someone may be" (Kardec, 1859: 132). However, he makes the exception of responding to this one because it "addresses the question from a scientific point of view". More concretely, it was an article that made use of a recent report produced by the most prestigious scientific body of the epoch in France: the Academy of Sciences. The report presented the academy's session of April 18th, 1859 about a rhythmic muscular involuntary contraction. In the session, Mr. Jobert de Lamballe, member of the academy, reports a curious fact about the involuntary rhythmic contraction of the right hand side lateral peroneus brevis muscle, which, he argues, confirms the opinion of Mr. Schiff, another member, that, with respect to the occult phenomenon of the rapping spirits, it is the skilled movement of this muscle that produces the movement of tables in phenomenon of the so called *les tables tournantes*.

Kardec, using his answer to the article as an indirect response to the affirmations made by the Academy member, positions himself as someone who can participate in the

discussion, even if it actually doesn't include him, because he or his adepts have academic experience in the type of research domains of the investigators at the Academy: “we will only say that our personal studies of Anatomy and Natural Sciences, that we have had the honor of teaching, allow us to understand your theory and in no way do we feel perturbed by that avalanche of technical vocabulary” (Kardec, 1859: 132). This experience makes of him someone who knows beforehand the hypothesis offered by the Academy. “The phenomena you describe are perfectly well known to us. In our observations about the effects attributed to the invisible beings, we were careful enough not to neglect a so patently negligible cause” and he reiterates that his approach is one which shares the same disposition and care for scientific research: “when a fact is presented to us we are not satisfied with a single observation only. We want to see it in all angles, all faces and before accepting a theory we verify if that theory embraces all relevant circumstances and if any unknown fact would be able to contradict it” (Kardec, 1859: 132).

The first objection he makes to the report is about how exceptional is the experience. He considers very singular the fact that such a faculty (the skillful use of the muscle) so far acknowledged as exceptional and considered as a pathological case, which Mr. Jobert de Lamballe classifies as a “rare and singular disease”, is actually so common. It is true, he acknowledges, that in principle everybody may acquire this faculty by practice, but, following Mr. Jobert, this use requires pain and fatigue, so it should require “a very strong desire for mystification to make one's muscle crack during a session of two or three uninterrupted hours, without any profit and with the only objective being entertaining a few people” (Kardec, 1859: 132).

Second, he contends that the properties attributed to the muscle in the Academy's report are not enough to give an account of the plurality of phenomena associated with spiritualism and spiritism:

“those gentlemen who found such a marvelous property of the peroneus longus did not imagine everything that those muscles can do. Well, here you have a nice problem to solve: The displaced tendons do not knock on the bone gutters only. Through a really singular effect they also knock on doors, on walls, on ceilings, and all that at will, exactly at points that are requested. Here there is something even stronger: Science was far from suspecting all virtues of that cracking muscle. It has the power of lifting a table without touching it; of making it knock with its feet, move around the room and stay in the air

without a support; of making the table open and close! And imagine its power! It has the ability of breaking the table when falling... And that is not all. The muscle is also a poet since that great peroneus creates charming poetry, even though the medium had never done so in his life. The muscle is multilingual since it dictates very sensible things in languages completely unknown to the medium (Kardec, 1859: 133)

The possible reason given by Kardec for this lack of explanatory capacity of Jobert's hypothesis was that, and here he directly attacks the intentions of the members, even against his own language restrictions, is that they actually did not consider any of them as points of departure for investigation, but rather, only used their knowledge of anatomy, assuming that any prodigy should be a product of an anatomical anomaly. So, he accuses:

Mr. Schiff did not take the facts as a starting point but only his own ideas, his preconceived and well-entrenched ideas. Hence the research in one exclusive direction, and consequently one exclusive theory, which perfectly explains the fact seen by him but does not explain the ones that he did not see. And why hasn't he seen them? Because in his thoughts there was only one true starting point and only one true explanation. From that, everything else should be false and would not deserve examination. Hence, in the heat of striking the mediums, he missed the shot (Kardec, 1859: 133)

After showing these inconsistencies, Kardec will say that his opinion does not imply a proof that spirits actually exist. He just wants to say that the hypothesis that these phenomena were produced by invisible beings, who called themselves spirits, seems more plausible and has more explanatory capacity.

In his critique, he doesn't want to give the impression that there is a fight of science against spiritism or vice-versa. In fact, as has been seen, Kardec prefers to comment on articles that rarely directly attack spiritism. "It is a serious mistake to think that all scientists are against us, to begin with, since Spiritism propagates precisely within the educated class". Additionally, he argues that there are many respectable opinions even outside of the official bodies of science:

Wise individuals are not exclusively in the official Science and official organizations. Can the issue be prejudged by the fact that Spiritism does not enjoy the status of citizenship within the official science? The circumspection of that official science with respect to new ideas is well known. If science had never been wrong then its opinion could weigh in. Unfortunately, experience shows the opposite. Hasn't science repealed as pure illusion a

number of discoveries that have later distinguished the memories of their authors? (Kardec, 1859: 150).

In all these examples of a conscious attempt to deal with controversies, it is clear that Kardec or his group never tried to use the technical hardware of the official sciences, they could not compete with them in terms of machines or particular artifacts. In any case, the only singular machine of spiritism was the medium. Instead, they made use of other legitimation strategies (Collins and Pinch, 1979: 242) like gradually metamorphosing the language to pose themselves as closer to scientific knowledge or to use the prestige of the official bodies in their favour, while never directly and vigorously trying to attack any of them.

5. Conclusion

What does such a distant and forgotten episode in the history of the official sciences say about the scientific enterprise? Why should revisiting the rhetoric of a group that never found a secure place in the domains of psychology or medicine matter today, even in the context of an STS reflection?

I think that the very radical nature of the spiritist enterprise, that is, attempting to include the spirits as a new object among other natural forces and processes in the huge index of science, serves us, as people who have implicitly or explicitly assumed a frontier that stipulates what science can explain and what lives outside its jurisdiction, as a mirror in which to observe how strong it has become a notion of the scientific as something that excludes certain subjects or agencies (say, for instance, fluids, ether, spirits, non-material agents, etc).

Not because claiming to study them is impossible. There are faculties, research grants and a plethora of investigations in the field of parapsychology and, usually, the demonstration of these type of events or experiences are expected to be much more rigorous than that of any event consistent with present knowledge (Pinch, 1979: 332) precisely because they carry an aura of fraud or delusion. But attempting to do so will always be done within the limits of a “pseudo” or “para” epithet. Just to attempt to deal with these objects carries the danger of falling into a less objective, nonserious or just unscientific work.

This is now the consequence of dealing with such ungraspable agencies. But it was not always the case. The second half of the nineteenth century in European science saw the emergence and development of many scientific movements: mesmerism, (Winter, 1998), modern spiritualism (Oppenheimer, 1985), hypnotism (Chertok and Stengers, 1992) and spiritism (Monroe, 2008; Cuchet, 2012; Sharp, 2006), among others. While they were not completely independent (spiritism, for instance, used the mesmeric grammar of the universal fluid to explain its own physiology) each one had its own publications, intellectual leaders, settings and formed societies to develop their research agendas. In all cases, they dealt with contested objects of study as their main source of interest. Even though they were contested since their conception, there was a space of social ambiguity and slippery of discourses to question the authority of the official science. It was still possible to challenge the validity of individual scientific programs and groups of scientists

and even cast doubt on the assumption that the scientific enterprise had a uniquely privileged and trustworthy access to nature (Winter, 1998: 271).

The capacity of these movements was to create new assemblies for experimentation and a public display of science. For instance, the importance of the séance in the case of spiritism, which turned a dining room into a laboratory for the underworld, precisely challenged the frontiers of the scientific realm in a way that confronts the contemporary analyst with how malleable and ambiguous can be the place of science in the social body.

The fact that all of these movements are nowadays considered as “pseudo-scientific” or just simply “unscientific” and that they were met with so much contemporary hostility, both scientific and political, suggests that the type of agendas they were defending were dangerous for the coherence of scientific knowledge and, in consequence, the attack on them was always related to the difficulty of considering their objects of study (spirits, ether, fluids) and the practices related with them, as suitable for a proper scientific treatment. The mesmeric therapies that tended to address the whole body rather than individual internal organs as the site of therapy, for example, were a challenge to the developing medical and surgical cultures of the nineteenth century (Winter, 1998: 162). In a similar way, spirits and the mediums who canalized them, were an obstacle for a purified scientific treatment because they involved the appearance of less than perfectly controlled bodies (those of the mediums in trance while they were being possessed by the spirits) but also because the spirits were essentially ungraspable.

As we have seen, this condition of intangibility, of invisibility, was not a unique problem of the spirits’ science. This was a time where many phenomena of novel scientific attention, among them electricity or the manipulation of steam and other gases, also shared the condition of being hard to reduce to empirical sensorial data. This precisely at a moment where a new brand of scientific objectivity defended a visual objectivity as the guarantee of certainty (Daston and Galison, 1992: 81). So, the question of conferring legitimacy to a scientific enterprise had to do with making graspable objects of study, to being able to see or touch or to have a way to register their traces and marks. Then, it became a scientific question how to make the objects of study graspable and treatable?

In order to do so, in a sense, these objects had to be dead. Dead for the laboratory, dead as something that cannot change its nature, the way it communicates with others, the way it speaks with other agencies. This has been the case with science then and now: many objects of study of the scientific enterprise must be dead or be killed to be properly studied: the dissected animal that has to be transformed into a static piece in order to be displayed in the space of the museum or the laboratory. This deadness is a production, a production enacted (Woolgar and Lezaun, 2013) by a network of social dynamics that mediate the object to make it suitable for scientific intervention.

Paradoxically, it seems that the problem with spiritism, the challenge it found in order to become an accepted object of science, was that spirits were not dead enough to become candidates of a rigorous and systematic approach. They didn't share enough deadness, they were not dead enough. Spirits are post-dead, undead agents. Their nature has also to be constituted, build through inscriptions (automatic writings, drawings, traces, etc) but this constitution hardly fitted the assembling patterns of an experimental approach to mind and consciousness.

Perhaps because of this difficulty that spiritists found to provide a proper death to their main object of study; because they failed to emulate the ontology of more stable, and less lively, entities such as atoms or hereditary traits, it might be more appropriate to deal with them from a social sciences approach: a sociological or anthropological framework that shares the common feature of dealing with living, and languaged objects of study. Spirits are unstable entities because they live, because they can intervene in people's lives and perceptions, because they have opinions and they denounce and take a stance. Spirit interactions leave traces in the social realm and these traces can undermine the stability of institutions and social roles.

This is why, as dead-and-alive agents, spirits were always uncomfortable for scientific elites. The episode of the commission appointed by Louis XVI on March 12, 1784, to "examine and report on animal magnetism" gives us a very good example of why it could be so. The investigation of the phenomena of animal magnetism, or mesmerism, as it would later be called, emerged not in the initiative of the scientific bodies of the time, but as a political concern. The practice Mesmer attempted seemed threatening to the political and social order. The threat was specific and very well acknowledged: "the sexual feelings provoked by the magnetism who might abuse this attachment, this habit..." (Quoted in

Chertok and Stengers, 1992: 3). In consequence, the role of the scientific elite united to evaluate the phenomena was to make a public report in order to prepare a legal decision by the king. “The men of science yielded to those who were responsible for moral and social order” (Chertok and Stengers, 1992: 4).

Spirits, too, were defiant of the social order. They had opinions about death penalty laws, about women rights, on the responsibilities each one should assume according to its role in society and were critics of acknowledged religious figures and ideas. The séances were new assemblies of truth production that created public experiences within the walls of Parisian middle class homes, hidden from political control. It was, then, a science that created new and unstable social relations among the living and the dead. Too many and with much profusion to help stabilize a political order already in tension.

But it was also an unstable practice for the experimental view of science, the séance was an obstacle for those who wanted to “isolate the phenomenon, to sort out causes, to seek proof, to observe actively, to manipulate the different parameters of the situation” (Chertok and Stengers, 1992: 6). In short, it was a setting where “too many things” were happening, it was too public and the bodies implied in it were not stable enough to produce isolated and purified facts. As a settlement, as a practice, spiritism as well as the other heterodox movements of the second half of the nineteenth century, still challenge the presuppositions of an experimental approach of science.

Paradoxically, Kardec always thought of himself not as a critic of science or the experimental ideal. On the contrary, he saw and portrayed himself as someone who was using the instrumentation, moral attitude and rigorous and systematic approach of the sciences of his time applied to a new domain of research. He deployed a complex repertoire of literary technologies, linguistic innovations, settings and rhetorical presentations of his own persona and method to do this, as was portrayed in the previous chapters on Kardec’s early and foundational works on spiritism.

But the seance and the spirits could not be reduced to the exigencies of fact production settings without paying too high a price for the reality of the phenomena. Kardec was aware of this. He knew that despite all of his efforts to make of spiritism a science, it was doomed to be a particular type of science. One in which nature could not be handled at will, because it acted upon intelligences which had free will and “do not submit

themselves to our wishes”(Kardec, 1859: 2). The ideal of the balance of reason and the diversity of natural phenomena was not attainable as Kant would have thought. Reason could not always approach nature as an “appointed judge who compels the witness to answer questions which he has himself formulated” (Kant, 1958: 20).

The séance, the place where the spirits would be summoned or the hypnosis would take place; this impure place, uncontrollable par excellence; ungraspable and empirically unstable, was not enough of a laboratory. What is it that appears in that place, and to whom? Who is it that is voiced there? The spirits talk but so does the medium and the one who poses the questions. This place where “too many things happened” is not central in the history of science because it failed to be properly purified. The problem for the STS researcher is not the question of how it can be purified and controlled in the proper domains of research and law. That is a task for judges.

What can be done in this type of work where the frontiers between “fringe” and official sciences are put in brackets, is to give voice to the “debunked”, to the marginalised. Not because we want to take the part of the weak or the losers, but because once we go to these “deviations”, we find in them an open wound that science has failed to cover over: the problem of hypnosis or of the attempt to undertake a science of spirits lies in the fact that it problematizes the possibility of constructing a theory on the ‘simple’ basis of experiment or experience (Chertok and Stengers, 1995: xvi). It makes explicit the social and the epistemic problem of the deadness science requires of its subjects in order to make a proper use of them, in order to experiment with them. In Kardec’s science, the problem was that its subject even when dead, was always too alive to be dead..

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