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What Are the Issues of Focusing on Irreducible Uncertainties in Professional Work? A Historical Outline of "Prudential Professionalism"

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Abstract. This article brings into view "prudential professionalism", a particular type of professionalism needed in situations of irreducible uncertainties, presents the philosophical concept of prudentiality on which this is based, and seeks to clarify both the theoretical and practical issues associated with this professionalism. A discussion with Abbott's book, *The System of Professions,* is used to argue that revisiting the theme of professionalism is needed. Then a historical outline of prudential professionalism brings some empirical material to support the theoretical arguments. This historical outline sheds new light on the current difficulties of professionals faced by demands from new public management they cannot meet and by the values of organisational professionalism. Finally, a method to rethink the social conditions of professional work is proposed.

Keywords. Professional work; New Public Management; uncertainties; practical wisdom; medicine; organisational professionalism; casework.

Professionalism has always been of great interest to the sociology of professions (Bledstein 1977; Sarfatti Larson 1977; Freidson 2001). More recently, sociologists have uncovered a new emerging form, "organisational professionalism", which greatly differs from "occupational professionalism" (Fournier 1999; Evetts 2003). This new professionalism has actually resulted in a decline in the autonomy professionals enjoyed in their work. Organisational professionalism calls upon the benefit of users in order to generate greater self-discipline by enforcing ever increasingly pervading criteria of quality: predictability of the working process and its results, deadlines, compliance with quality standards, efficiency. New Public Management (NPM) has supervised the development of this new professionalism and implemented monitoring and evaluation tools which make it possible for the management to call professionals to account for the work they do.

The many studies carried out on NPM have contributed to making the

reforms and the evolutions responsible for this decline in autonomy widely known (Ackroyd *et alii* 2007). Nevertheless, the opposition between organisational and occupational professionalism in terms of actual knowledge and practice has but been studied very little. How does organisational professionalism fundamentally challenge some tasks, ways of reasoning or the capacity to keep up with some of the objectives characterising occupational professionalism? The question has not been given a systematic theoretical answer, whereas the issues at stake are far more critical than those involved in professional autonomy (Champy 2018a). Moreover, activities are unevenly affected by the evolutions of management and organisations. The most impacted are often occupations that could be seen as professions in a functionalist perspective, such as medicine, magistracy or research work. Yet, the functionalist approach to professions has been so heavily criticised that there is no point in taking that up again. Hence, my second question: why should some activities more than others be impacted by the attacks launched against professional autonomy and by the demands of organisational professionalism? I believe that a theory of professionalism should ambition to address this kind of issue.

This article means to bring into view a particular type of professionalism, better adapted to working in situations of irreducible uncertainty, with the ambition to help provide an answer to these difficulties. I will argue that bringing to light this type de professionalism is crucial to fully understand the way professions and their regulation had developed from that time when they were protected, by the late Nineteenth century, up to the current difficulties faced by professionals to meet the demands made on them. It is also of critical interest to gain an understanding of the ongoing reflection launched by some of them in an attempt to overcome these difficulties. I call this professionalism "prudential professionalism", with reference to the Aristotelian concept of "prudentiality" or "practical wisdom", which precisely points to the very reasoning required to act in situations of irreducible uncertainty.

Any human activity is likely to result in practical wisdom. Yet, practical wisdom is unequally important according to activities, and this may have significant consequences. The idea that uncertainties or contingencies play a more significant role in some activities is not a new one. In 1985, together with his three colleagues, Strauss was already writing:

> There are two striking features of health work shared only with certain other kinds of work. One consists of the unexpected and difficult to control contingencies stemming not only from the illness itself, but also from a host of work and organizational sources as well as from biographical and life-style sources pertaining to patients, kin, and staff members themselves. A second and crucial feature of health work is that it is "people work". (...) Taken together, both features insure that trajectory work harbors the potential for being complex and often highly problematic. (Strauss *et alii* 1985: 9)

Prudential professionalism is thus very close to occupational professionalism as designed along the example of medicine[1]. But the analysis of Strauss and its possible theoretical consequences have been overlooked by the sociologists of professions, who stuck to Hughes' recommendation to study all activities in the same way (Hughes 1958). The idea of practical wisdom provides sociology with new insights and can truly expand the study of those activities faced with specific difficulties arising from complexity and contingencies. The three objectives of the article are as such: report on a kind of professionalism based on this ancient observation, help clarify its close connections with practical wisdom as characterised by Aristotle's commentators (Aubenque 1963; Broadie 1991), and illustrate how professionalism and practical wisdom brought together can enrich the conventional issues of the sociology of professions.

I propose to take a three-stage approach. First, I will introduce the concept of practical wisdom and the ideas of prudential activities and prudential professionalism. Secondly, I will endeavour to demonstrate that the idea of prudential professionalism is as instrumental as the notions of science or efficiency in envisaging the history of pro-

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[1] In a broad sense, these two kinds of professionalism may be seen as similar. But arguing so would give prudential professionalism a position in the sociological analysis which is not granted by current studies. Most of all, whether both systematically blend or not is but a scholastic issue, taking us back to the longstanding debate over the adequate definition of professions that has long kept sociologists busy without any conclusive results. For a more in-depth presentation of a possible way out of this old debate as provided by the use of the concept of practical wisdom, see Champy (2018b).

tections granted to some activities. To this end and starting from Andrew Abbott's theory, I will first demonstrate that using the scientific or objective dimension of work to account for protections is not analytically convincing. I will then move on to show that the idea of uncertainty was still shaping the way professionalism was reflected on by the late Nineteenth, early Twentieth century, precisely when a number of professions were undergoing protection, clearly influencing discourses and leading to concrete measures, even though the concept was not developed as such. I will use the case of medicine in the United States as particularly relevant to highlight the history of actual protections, with references to social work to show how much the idea of practical wisdom permeated discourses at that time. The third section will demonstrate how a much simpler discourse finally prevailed and contributed to undermining these professions by confronting them to a conception of professionalism which fails to reflect the difficulties met in professional activities. My conclusion will outline the main features of a programme meaning to reconsider the organisation of professional work (or its regulation in the broad sense), based on an analysis of the social conditions conducive to practical wisdom.

PRACTICAL WISDOM AND PRUDENTIAL PROFESSIONALISM

Practical wisdom is the translation of the Greek concept *phronesis*, which is used by Aristotle to refer to a way of reasoning that allows for action in situations of irreducible uncertainty. Another possible translation is prudentiality. When action is required in highly singular and complex situations, common solutions that can be automatically inferred from routines, rules or scientific knowledge, might lead to mistakes and damages. Indeed, the singularity of the situation may imply that those solutions are not necessarily appropriate. Besides, the complexity of the situation does not allow for a high degree of certainty. Hence, this type of situation requires an approach, a way of reasoning that enables professionals to act while limiting the mistakes and damages that may arise from the uncertainty they are confronted to and which they have to accept as partly irreducible. Practical wisdom is precisely this particular way of reasoning. It is a type of modest rationality as it does not claim to provide certainty, which would be impossible, nor objectivity, since situations of uncertainty sometimes lead to making speculations. But this type of rationality is both more realistic and more challenging than the approach which consists in denying the uncertainties faced by actors. It should be added that it does not contradict established knowledge, protocols, objectivization techniques, not even science. On the contrary, it implies relying on the knowledge available, among which scientific knowledge. But it cannot be restricted to science itself since it actually becomes necessary in the very situations which science fails to solve. This is what makes practical wisdom a very particular way of reasoning, meeting a set of requirements whose phenomenology has been proposed by philosophers (Aubenque 1963; Broadie 1991). We shall examine these requirements later.

Medicine is the ultimate prudential activity. The human body and psyche are always singular and particularly complex, which means that both medical diagnoses and the adaptation of treatments to each individual patient prove to be more sensitive than most tasks in other activities[2]. That is the reason why practical wisdom is required. Furthermore, adapting treatments gets even more difficult when the patients' social and economic situations are to be taken into account, since one has to take into consideration her/his lifestyle and its possible impact on the care path: uncertain compliance with treatment, ability to sustain it that may be affected by housing conditions and poor nutrition, erratic family support, etc. When considering those difficulties, one understands that medical work cannot be simply restricted to implementing what biomedical knowledge prescribes. In other words, there is more to medical practice than a mere technique; it is also a matter of proper judgment[3].

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[2] That is what Strauss and his colleagues had realised but without making the connection with practical wisdom.

[3] Judgment may concern the advisability of a treatment. Aggressive and hopeless life-prolonging measures (a borderline, yet quite common, case) demonstrate how far the automatic reflexes of curative performance can go. The next footnote will explain how therapeutic obstinacy is iconic of a lack of practical wisdom.

The relevance of the concept of practical wisdom for sociological work lies in the fact that philosophical work provides us with an understanding of the main characteristics of this way of reasoning (Aubenque 1963; Broadie 1991). Practical wisdom requires for instance that all the dimensions of a situation should be examined. Also, a possibility to rule out ready-made prescriptions and favour tailored solutions should be introduced. Acting prudentially is what is required in order to avoid those mistakes that would reduce the case to only one of its dimensions, and to prevent any hasty decision. And yet, one should also move on despite uncertainties and come to terms with the risk of being mistaken. Consequently, acting prudentially sometimes means making bets on what seems to be the most acceptable risk. In some situations, if you want to act prudentially, you will definitely have to be daring.

Another feature of practical wisdom is of great value to the sociologist as it enables her/him to distinguish from other activities those for which practical wisdom plays a major role (Champy 2018b). The objectives of the activity should also be prioritised: in prudential activities, the complexity of the cases often makes it impossible to fully meet every single objective the professional should ideally pursue. Thus, he must make choices according to the emphasis he places on the various objectives of his activity. In medicine, tension may arise between the patient's life expectancy, his/her comfort and dignity, reducing risks of accident, etc[4]. Research, teaching, social work and architecture, for instance, also provide examples of debates focusing on the prioritisation of the objectives of the activity, whereas prioritisation is not debated in other activities, such as more exclusively technical crafts activities. My previous work has shown that these activities experiencing debates on their objectives are the ideal type of prudential professions as they provide the basis for fruitful research work on the concept of practical wisdom (ibid.).

What are the qualities of the prudential professional? The command of scientific knowledge may be required for many activities, but it is never sufficient. Experience is also crucial in the making of a prudential professional. The members of prudential professions are better able to solve some problems and carry out some tasks, both because they enjoy highly qualified expertise, and because their training and their practice provide them with experience that strengthens their judgement. Confronted to the complex cases they have to handle, their contribution cannot be interchangeable with other actors'. Thus, the prudential approach of those particular professionals must be encouraged, so as to limit mistakes. However, the uncertainties they have to contend with confront them with a number of sources of vulnerability. There is first a risk that concrete working conditions may stand in the way of prudential practice. More significantly here, due to the nature of their activity, even the most competent professionals may be mistaken in their unavoidable speculation. If so, any accident or controversy can damage the confidence of public opinion. In addition, intraprofessional exchanges debating between several conceptions of effectiveness resulting from different ways of prioritising the objectives of the activity may also be detrimental to the image of the profession as efficient. We argue that exposing this vulnerability is crucial to gain a better understanding of the evolutions of professionalism and to reflect on its regulation. This conception of professionalism has so far been overshadowed by the emphasis laid on the scientific or objective dimension of protected professional activities by a number of theories.

OCCUPATIONAL PROFESSIONALISM: SCIENCE (AND OBJECTIVITY), PRACTICAL WISDOM OR BOTH?

The sociological theories of protections granted to some professions have insisted on the decisive, even exclusive, importance of either science (Parsons) or of so-called objectivity (Abbott). Both science and claimed objectivity do play a crucial role in the history of the emergence of professions and its accompanying discourses. But, by insisting only on these two dimensions, one tends to bypass a significant dimension of professionalism, which is the vulnerability of activities. Relying on Abbott's theory, I will first illustrate and demonstrate that referring to the efficiency of professional work cannot actually account for protections. I will secondly focus on the history of

[4] The doctrine of palliative care claims that the doctors who want to set the comfort and dignity of at-end-of-life patients as a priority demonstrate more judgement and prudentiality than their colleagues determined to continue curative measures that no longer work.

professions during the late Nineteenth, early Twentieth century and evidence how strongly they were aware of their vulnerability: when medicine gained its first protections in the United States, medical science was in its infancy, and the awareness of its limits far exceeded the belief in its efficiency. Then, broadening the scope to other activities, mainly to social work, will enable us to observe the prime role played by casework in teaching and discourses about professionalism. And casework is brought forward by a conception of work which lays the emphasis on the relation to the concrete aspects, with characteristics that are very close to practical wisdom.

Competing for jurisdictions in the System of Professions

Abbott begins his book with a criticism of the functionalist analysis of professionalisation and its attempt to describe a typical unidirectional process characterised by immutable stages (Abbott 1988). Similarly to interactionists, he draws attention to the contingency that may characterise the outcomes of professional competition. Jurisdictions are not defined by an essential nature of work, but depends on the way a system of interdependent professions emerges over time. And yet, one should not consider Abbott only as an interactionist. On the contrary, he breaks away with the relativism of the interactionist perspective, particularly Becker's (1962), when sharing the functionalist assumption that the boundaries of jurisdictions are ultimately set by effectiveness. Therefore, the issue to be addressed is whether the interconnection between ideas that belong to two wholly different theoretical propositions which appear contradictory may prove robust. We shall see how Abbott manages to go beyond this apparent contradiction.

The cornerstone of Abbott's innovative approach lies in the reintroduction of actual work activities at the core of his analysis when dealing with the uneven capacity of professions to achieve dominance over jurisdictions and to protect them against attacks launched by competitors. Interprofessional competition is made possible by the very fact that different professions may provide different "treatments" to the same problem. Abbott describes these variable treatments as "subjective", as opposed to problems seen as naturally or technologically more "objective". This means that treatments are social constructions, hence partly contingent, but that the range of socially acceptable treatments is limited by the characteristics of the problem to be dealt with, at least in the short term. For example, according to Abbott, the diagnoses and treatments for alcoholism are subjective, but the "objective qualities" of the problem imply that not all solutions are possible. To claim a jurisdiction, professionals strive to demonstrate that their definition of the problem is more objective than those provided by competitors.

By reintroducing actual work in his analysis, Abbott is led to go further than simply examining the part played by the professions' interaction with the legal system when professional status is being negotiated. More precisely, three arenas prevail in shaping the future of professions: the workplace, where interactions between the members of various professions generate, duplicate or make divisions of labour evolve, hence contributing to defining each profession's actual tasks; the arena of public opinion which, through trust and the actual demand, validates the connection between a group and a task; last of all, the relation to the legal system, as formalising the boundary of a jurisdiction makes it more difficult to be pre-empted.

The key to Abbott's successful reconciliation of apparently contradictory ideas rests on his emphasis on the role played by time. In the short run, competition impacts the division of labour and generates possible contingent effects: jurisdictions may be unreflective of the unequal effectiveness of solutions provided by various competing professions; a profession may take advantage, for a while, of an acquired position even though its solutions are not the best. Besides, the "social environment" (that is the techniques, the organisations and the culture of public opinion and the State) impacts competition and allows for disparities between the most relevant solutions and those acknowledged as such. It may prevent the recognition of some appropriate solutions, when, for example, public opinion and the legal system shaped by their cultural environment are not prone to accepting them. These disparities allow for competition in which dissimulation, rhetoric and alliances play their part. Abbott defines professional power as the capacity to maintain control over a jurisdiction whereas the system should have forced it out (ibid.).

On the contrary, in the long run, those disparities, hence power, vanish. Abbott precisely characterises the three arenas by a specific temporality. The workplace is where jurisdictions adapt most rapidly to what effec-

tiveness prescribes. Indeed, daily relationships at work make it impossible in the long term to ignore treatment failures. However hard they try, professionals cannot keep on deceiving if what they do is irrelevant. According to Abbott, it takes two or three years for effectiveness to prevail in the workplace. The necessary solutions that emerge in the division of labour are then the most appropriate to the current social environment, which is the restrictive framework for cooperation. Temporalities are different in the other two arenas. The image a profession gives of its work is more stable in front of the lay public than at the workplace since Abbott considers that ten to twenty years are necessary for the public to be aware of changes in the role performed by professions competing at the workplace. Finally, the arena of the legal system fixes things even further: twenty to fifty years are actually necessary to adapt the institutional system, particularly the law, to changes in the division of labour. But, however heavy the inertia of the legal system, the social utility of work, hence its effectiveness, is the main decisive long-term factor in distributing jurisdictions. To summarise, the demand for effectiveness constrains the construction of jurisdictions first at the workplace, next in public opinion which gradually comes to understand the new distribution of tasks, and finally in the law. By emphasising both effectiveness and contingency, Abbott's theory achieves a *tour de force*. It is a highly significant contribution to the sociology of professions, but this does not mean that it is fully satisfactory.

This theory is convincing in its description of the processes at work for conquering jurisdictions in the first two arenas, the workplace and the public opinion. One clearly understands how professionals manage to convince people that the solutions they provide for a problem are the most appropriate as opposed to their competitors'. Besides, the actors of the legal system may also be convinced of their effectiveness. But it is not clear for which reason these actors might want to secure formal protections. On the contrary, protections do not seem necessary: professionals will have secured their jurisdictions well before formal protections are set up. In addition, a great number of other occupations, particularly artisans, manage to secure a jurisdiction fully recognised in the first two arenas without seeking protection from the legal system.

Going further, the legal system would have reasonable grounds not to act since legal protections are likely to hinder effectiveness. To make things clearer, one has to consider the intricate temporalities of the processes at work in the three arenas. When the State grants a legal boundary to a jurisdiction after several decades of competition, how does one know for sure that this formalised division of labour is not already obsolete? It may no longer be in line with the latest solutions adopted, or in the process of being adopted, at the workplace, since the actual division of labour may keep evolving. By hindering possible later changes in the division of labour, legal formalisation is likely to interfere with its necessary adaptation to new relevant solutions. Thus, formal protections seem to go against effectiveness by making adaptation more difficult and slower.

These protections make sense only if clients find it very difficult to identify which professional is competent and who is not. But, the quality of work is harder to assess for some activities (Karpik 2007), which is exactly the case of prudential activities, since the quality of the work performed is more a matter of judgement than one of applying knowledge or specific and unquestionable procedures. The limitation of Abbott's theory calls for a two-fold remark: effectiveness as such cannot justify the necessity for protection. In addition, by over-emphasising the effectiveness of professional work, one has masked its fragility, which is a significant dimension, necessary to carry out a reflection on professions.

It is worth noting that the mere idea of protection encapsulates that of vulnerability. If the legal system feels the need to protect, it does mean that something is under threat. In addition, the idea that work activities are vulnerable is present in Abbott's study. First of all, effectiveness is not always sufficient to keep the control of a jurisdiction, which means that jurisdictions are weaker than they first appear to be. In addition, professionals have to protect themselves from other interferences by making their actual tasks arcane. Inference (that is the reasoning process taking place between diagnosis and determination of an appropriate treatment) and abstract knowledge play a major part in Abbott's theory. But their importance varies according to professions, and also within a single profession according to periods and cases to be addressed. The length of inference and the level of abstraction are crucial to making professional jurisdictions more resilient to external attacks. Without any inference, tasks become mechanical and easy to duplicate. On the contrary, an excessively lengthy inference process may weaken the juris-

diction by exposing a connection between diagnosis and treatment which is far too uncertain to convince public opinion of the professionals' competence. My argument is that the need for protection of some activities comes from the unusual uncertainty of the connection between problems and treatments in these activities. To support my argument, I will now show how this fragility was at the core of the way professions thought of themselves towards the end of the Nineteenth century.

Uncertainties in the American medicine of the Nineteenth century

Medicine as such is a particularly relevant instance, both because it is an iconic profession and because its achievements are seen as epitomising the benefits derived from scientific knowledge and progress. Paul Starr's (1982) work on the history of American medicine shows how the profession, poorly considered in the early Nineteenth century, gained authority and recognition by relying on modest thinking and a careful approach very much akin to that of practical wisdom. Obviously, the concept of practical wisdom is not referred to as such whether during the Nineteenth-century discussions or in Starr's book devoted to describing them a century later. But both the ideas developed, and the measures taken closely connect medical professionalism to practical wisdom.

The first regulations gained by physicians for their activity at the very end of the Nineteenth century followed on from an aggiornamento brought about by a greater concern for the reality accompanied by an overall distrust of the early-century metaphysical abstraction (ibid.). Hence, as early as the first decades of the century, stress was laid on clinical observation, rather than on scientific knowledge. Besides, these efforts to obtain recognition went hand-in-hand with some therapeutical scepticism that lived on up to the end of the century. Medicine was unassuming, and physicians paid particular attention to the social conditions of illness, which exemplifies a more holistic than technical approach, closer to prevention than to therapy and which clearly makes it prudential.

Starr also presents the actual measures and changes implemented that preceded the recognition awarded to academic medical training and led to the disappearance of all the training courses that did not comply with established standards by the turn of the Nineteenth and Twentieth century. Two places did play a major role in encouraging innovations by the end of the Nineteenth century: Harvard University and John Hopkins University, through the strong influence of respectively William Welsh and William Osler. A closer connection with science was gradually introduced and radically changed the training: universities equipped laboratories and scientific research became part of the future physicians' training programme. But that very move also expressed a determination to move away from didactic lectures in favour of greater concern for actual work. Back then, the prevailing conception of medical work used to be largely empirical and based on experience. In 1893, a training reform at the John Hopkins University granted "scientific research" and "clinical instruction" equal importance. Out of the four training years, two were devoted to practising on the spot. Starr particularly insists on that aspect: «though Hopkins accentuated science, it did not stand for a narrowly technical vision of medicine; this was the secret of its special éclat» (ibid.: 116). Another feature of the late Nineteenth-century programme clearly illustrates the degree of awareness of the non-technical dimension of the activity: Welsh and Osler both placed particular importance on general culture as necessary to help guide judgment.

By insisting on experience and general culture, Welsh and Osler demonstrated that they wanted physicians to be trained as prudential professionals, even though, here again, the concept was not mentioned. That representation of the physician prevailed at least until the early 1900s. In other words, the implementation of the institutions of professionalism in the second half of the Nineteenth century (creation of the American Medical Association, growing connections between universities and hospitals, minimum standards for officially recognised courses) took place before the emergence of medicine as exclusively scientific, such as developed in the Twentieth century. What's more, back then, both the public and the States understood the necessity to entrust specialists with healthcare, even though their competences were still looked upon as rather vague: «there was hardly an advance in medical science whose introduction into medical practice was not initially marred by uncertainty and disillusionment because of errors in application or failures of quality control». (ibid.: 138)

Finally, over the whole half of the Nineteenth century, medicine was characterised by its diversity of approaches and practices relying on different general principles. Starr describes three main groups: regulars, homoeopaths and the "eclectics". He stresses that the respective principles which regulars and homoeopaths relied on were antinomic. Nevertheless, for political reasons (they needed to strengthen their position), those groups got together against their competitors without proper training, to the extent that homoeopaths were granted access to universities. Far from being considered as abnormal, the diversity of those practices was encouraged by the States. Thus, in those days, fundamental medical principles were controversial issues, and those controversies were seen as a necessary step towards the development of an activity still trying to figure out its own scientific base. It was also because this base was still uncertain that the solutions experienced physicians using their sense of discrimination managed to patch up were greatly valorised.

Casework as a prudential device for training

The conception of professionalism which emerges in this briefly sketched history is particularly embodied by the specific practice of casework, so commonly used in the professional world. I will provide three examples of its use in three different fields. As a matter of fact, medicine was overrun by law, but became the reference for social work.

Law has paved the way by its use of casework in training, under the form of commentaries on judgements or, to put it more clearly, by discussing *jurisprudence*. Judgement is definitely the central element. The subtlety required for this exercise is quite remarkable. The difficulty lies in how to fit a concrete case into an abstract rule which has not been written to deal with this particular case. Selecting the appropriate rule entails avoiding quick simplification of the case, whose complexity is the very reason for practising the exercise. Case law commentaries imply mastering both legal concepts and case analysis since its particulars may be determining.

In medicine, training by the patient's hospital bed used to be the prestigious form of casework. It has long played a fundamental part in the training, even though it is less so now for reasons that will be partly developed (Peters, ten Cate 2013). What's more, this type of training leaves room for thinking ethics out (Siegler 1978), hence room for considering that several solutions are possible and that the elements to be taken into account are not exclusively scientific. According to Osler (1905: 331-332), «for the junior student in medicine and surgery it is a safe rule to have no teaching without a patient for a text». The interpretation of that "text" relies on observation, a key competence to understand the case. No automatism, no systematic approach is possible. This is both the greatness and the vulnerability of clinical medicine.

That central character of the late Nineteenth, early Twentieth century medical professionalism was used as a model for other activities. Social work failed in its attempt to be regarded as a profession, but it is iconic insofar that it went down the path initiated by doctors, so as to put forth the complexity of the tasks and the prudential dimension of the activity. In 1915, Flexner argued that social work lacked the basic attributes needed to be considered as a profession. Richmond's answer to Flexner represents a textbook case for our field (Richmond 1922). In her arguments to claim recognition of social work as a profession, casework is so central that it even provides the book's title. In Richmond's book, there is no substantial reference to the scientific knowledge required. On the contrary, she insists on the complexity and resulting uncertainties social workers have to be able to handle. One chapter is devoted to individual differences and shows that no individual case can be compared to another one without a prudential approach. All the dimensions of the environment in which people live are described, highlighting complexity. The interdependent connections between all the actors are also described as they often generate many contingencies. Thus, Richmond attempted to obtain the recognition of social work as a profession not by insisting on the scientific certainties supposed to solidify the tasks, but, following in the steps of medicine, by focusing on the complexity of the activity generating uncertainty (Gravière 2014).

During the Nineteenth century and early Twentieth, when professions were trying to gain access to a legal status that would protect them from competition, considerations on professionalism were far from the applied sci-

ence model. This model, whose importance was demonstrated by Schön (1983), will only become dominant later. At first, professional rhetoric went for a description of work activities where contingencies (to use Strauss's word) played a major part. Richmond's or Osler's approaches to professionalism are very different from what functionalists described later. Theirs demonstrated that the claims for legal protection actually came from those professions that were made vulnerable by the contingencies they had to face. This does not mean that any professional action would be equally relevant. But reflexive practice and experience are particularly valorised against merely implementing scientific knowledge or rules as the only tools to determine what should be done. Objectivity is not a professional value because neither any rule nor any knowledge likely to establish this objectivity can adapt to the complex reality of those activities.

Practical wisdom as described by the Aristotelian philosophical tradition is strong attention given to the singularity and complexity of the actual situations to be addressed. That is why the prominent role granted to casework in both training and discourses so as to gain public and State recognition is strong evidence of the way those activities were guided by a prudential approach. But the representations of professionalism were to change radically in the Twentieth century. I will now show how science gained a core position in these representations, at the expense of the understanding of the prudential dimension of professional work, and to what extent that contributed to the emergence of organisational professionalism.

SCIENCE, OBJECTIVITY AND ORGANISATIONAL PROFESSIONALISM

By the end of the Nineteenth and early Twentieth century, the concept of practical wisdom was no longer to be found except in philosophical work. But the idea of practical wisdom still prevailed in the way actions in situations of uncertainty were addressed, as illustrated by the debates carried out in the fields of medicine and social work. We will now see how, in the Twentieth century, the idea of practical wisdom declined in favour of what Schön called the applied science model in those very activities standing for the ideal type of prudential activities, in particular medicine. That decline of the idea of practical wisdom paved the way for the growing success of organisational professionalism, as opposed to occupational professionalism, the former advocating values that are often difficult to reconcile with a prudential approach.

I will once again take up the case of medicine, which illustrates particularly well this development for three reasons: because it is the ultimate prudential activity; because scientific medical progress has greatly contributed to mask the prudential dimension of its work; because it is still often used as a reference for other professions. But the developments described here have a broader scope. They impact society as a whole: the inability to understand practical wisdom is a "total social fact", to borrow the expression of Marcel Mauss[5]. In addition, these developments are both cultural and social under a variety of aspects (in technical devices, rules, division of labour), hence reinforcing their impact. The decline of the prudential approach is evidenced in so many intricate ways that it would be pointless to try and bring to light any specific chronology nor any unidirectional causalities: the developments in the medical field have been affecting other professions and, beyond, a broader cultural context which, in turn, has impacted medicine.

The emergence of a scientist conception of professional work will not be systematically studied here as it would necessitate some considerable historical survey which is not needed here to support the theory. My ambition is simply to emphasise the connections between the developments in medicine, wider social changes, the emergence of organisational professionalism and the current difficulties met by professionals in a number of activities to act in a prudential way in situations of irreducible uncertainty.

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[5] On this point, allow me to refer to my work in the sociology of risks, on the misuse of the precautionary principle (Champy and Lepiller 2016) and the type of rationality adopted in the issues of food safety (Champy 2018c). Finance, whose risk models are basically non-prudential or even antiprudential, would be another relevant instance, as already exemplified by Nicolas Bouleau's research or Nassim Taleb's famous essay (Bouleau 2009; Taleb 2007).

Scientific medical breakthroughs

At the beginning of the Twentieth century, scientific medical progress was much faster and more significant than in the Nineteenth century, when improvements mostly concerned hygiene, hence preventive healthcare. In the Twentieth century, the authority of physicians increasingly relied on their capacity to cure patients, and scientific progress was the key element of this capacity.

> The continuing growth of diagnostic skills and therapeutic competence was sufficient to sustain confidence in their authority. And with the political organization they achieved after 1900, doctors were able to convert that rising authority into legal privileges, economic power, high incomes, and enhanced social status. (Starr 1982: 142)

From the 1910s onward, medical innovations contributed to the development of an increasingly shared scientific base which helped reduce the diversity in training programs. The number of hospitals increased, and residential training in hospitals became a more widespread teaching practice. That was how the institutions which were later to be used as a base for the growing technologisation of medicine were gradually set up soon after the training reforms promoted by Osler at John Hopkins and by Welsh at Harvard.

Medical breakthroughs were even more decisive after the Second World War. «Americans now gave science unprecedented recognition as a national asset» (ibid.: 334), and medicine played a major part in this cultural development, thanks to penicillin, sulphonamides, better vaccines, etc. Physicians gradually gained further authority. What is more, in the years following the Second World War, hospitals reinforced their influence through an increasingly technical organisation. Finally, later in the second half of the Twentieth century, Evidence-Based Medicine decreased the uncertainty related to the choice of treatments, thanks to therapeutic trials to assess their respective effectiveness. This technique is iconic of the new dominant paradigm.

Technically-focused hospitals and Evidence-Based Medicine are by no means representative of the whole healthcare activity. Instances of alternative trends do exist as well, as we will see later. But these two trends are iconic of the paradigm, whose impact, far from affecting only medicine, is spreading to other fields of activity.

Professionalism and the siren song of objectivity

Indeed, medicine is not the only professional activity in which objectivity is being increasingly valued. On the contrary, in the second half of the Twentieth century, the theme of objectivity widely established itself both in professional rhetoric (Sarfatti Larson 1977; Paradeise 1985; Abbott 1988) and in professional practice. To have a better idea of this valorisation of objectivity, architecture may be a clearer illustration than medicine, as one would have expected this activity not to be affected, considering its aesthetic dimension. The following is taken from two successive surveys concerning public procurement in France (Champy 1998; 2011). In the 1980s and early 1990s, state administrations selected architects after their proposals were assessed by a technical committee and thoroughly discussed by a jury. Discussions clearly revealed that the proposed projects could neither be measurable nor objectively comparable. One of them could be more satisfactory in terms of proper functioning, whereas another one would be much better in terms of aesthetic criteria. The choice actually depended on the way the qualities expected from the project were ranked, and there was no question of assessing a project as *objectively* better than the others. In the contests of the early 1990s that were observed, the uncertainty inherent to the architectural activity was accepted.

In the early 2000s, the procedure used to select projects evolved. The work carried out by the technical commission held before the jury grew more systematic. It particularly consisted of assessing the project compliance with the programme by measuring the difference between the surfaces proposed by the project and those required by the programme. Conversely, the jury's deliberation got shorter. Besides, in a number of contests, the chairman of the jury would remind his colleagues that their judgement should reach the greatest possible objectivity. Hence, the construction of a collective judgement gradually vanished to be replaced by a decision based on a technical approach.

The dominance of the value of objectivity has seriously impacted the conception of professionalism. Without claiming to be exhaustive, I will focus on medicine again to develop several consequences. First, the growing representation of medical work as relying on objectivity is leading to changes in teaching. The training at the bedside, enabling students to gain clinical expertise, is being gradually replaced by a focus on scientific knowledge. This knowledge is indeed necessary, and the medical breakthroughs achieved clearly account for the increasing part it plays in medical training. But the part it plays in the students' assessment and selection is nonetheless quite striking. In France for instance, their choice of a career as a specialist depends on their ranking in the national classifying end-of-study test taken at the end of their sixth year and based on multiple choice questions. But MCQs are made up of questions about schematic cases for which only one answer is possible. They consequently convey a simplified image of the medical activity whose complexity and contingency are definitely underestimated, when not ruled out. They select and train assertive doctors, convinced that their knowledge would provide *the* best possible answer.

Broadly speaking, systematically looking for objectivity is achieved at the expense of the prudential dimension of the activity, i.e. of the awareness of the irreducible uncertainties that make it impossible for decisions to be objective. The determination to obtain results that would conform to so-called objective criteria may lead to bypassing the complexity of the situations or of the cases addressed by the activity, since these criteria can only account for a few dimensions of the case. Porter's book *Trust in Numbers* (1995) is a clear illustration both of the triumph of this idea of objectivity far beyond professions and of its actual limits. Porter used historical examples to show that this confidence in numbers has nothing to do with their reliability. On the contrary, figures, as well as their uses, are socially constructed, and the modalities of their construction always alter and provide a partial view of reality. Even though they may prove useful, believing in their objectivity is often naïve.

Some professionals are trying to react against an increasingly oversimplified technical practice. For instance, since the 1990s, narrative medicine has paid particular attention to the patients' own story of their illness. The purpose is to help physicians get a better idea of the psychological and social dimensions of each case, as opposed to a strictly biomedical approach to illness. First initiated at Columbia University Medical Centre, narrative medicine has further been taught in other universities. Similarly, in order to help the students to realise that, because of some uncertainties about diagnoses or of the respective effectiveness of various treatments, it may be relevant to propose several clinical judgements for ill-defined cases, Montréal University has designed script concordance tests (SCTs). The examinees can provide several likely solutions, and they receive, for each item of the test, a credit that depends on the number of the panel of experts who chose the same solution. SCTs are gradually being adopted in France and meant to replace MCQs. Finally, in many countries, physicians are promoting an interprofessional deliberative practice which enables them to take into account all the dimensions of the cases. But these developments are unable to counterweigh the trend towards reducing medicine to the mere technical application of scientific knowledge.

Being trapped into unreachable objectivity

Finally, the most significant consequence to be noted is that the image the claim for objectivity gives of medicine, and of professions in general, makes them vulnerable. It accounts for most of the difficulties many members of prudential professions face, particularly in organisations. Medical achievement is seen as the achievement of science, which is true but only partly, as irreducible contingencies also remain, making the use of judgment still necessary. And yet, that science should have limits seems to be almost inconceivable. The development of knowledge and technical performance has given rise to growing expectations: patients have experienced impressive breakthroughs as a promise, hence their increasing difficulty in accepting the limitations of care. Yet, the discrepancy between discourses valorising objectivity and the actual tasks for which objectivity cannot be reached exposes professionals to some degree of risk. They make promises they cannot keep. And if they disappoint the public, they are all the more unable to defend themselves as they are no longer aware, as they used to a century ago, of the prudential nature of

their actual work. Scientific progress also makes it more difficult to say that the actual work has both an intuitive and a political dimension.

The criticism by interactionist sociologists of professional work evidences the inadequacy of presenting prudential activities as scientifically objective. As early as 1970, Freidson's criticism of medicine focused on the diversity of practices[6]. He first acknowledged that doctors relied on scientific, hence objective knowledge. His main argument was that, by contrast, their practices lacked objectivity since professionals went beyond what could be strictly determined by their knowledge. This is where the concept of practical wisdom is useful to throw some light on this criticism. First, what Freidson describes is nothing else than the difficulty faced by anyone dealing with a situation which requires an approach based on practical wisdom. In these uncertain situations, in which scientific knowledge alone is not enough, one is bound to go beyond scientific prescriptions. Thus, Freidson's criticism does imply the idea of a prudential profession. But when one is familiar with the concept of practical wisdom or merely acknowledges the significant part played by contingency in medicine (following Strauss for example), his criticism loses some of its relevance. Professionals cannot be blamed for lacking objectivity, since science precisely fails them. Moreover, making decisions that are not predefined by science does not mean they are arbitrary. The concept of practical wisdom helps define conditions for acting reasonably, aiming at adapting decisions in the best possible way to concrete individual cases. The professional's judgement, enhanced by the experience gained in the course of both training and practice, is one of the prerequisites for practical wisdom. The concept helps to realise that if professional action cannot be satisfactorily legitimised by scientific knowledge, experience may well make up for the deficit. Finally, keeping in mind the unavoidable obstacles to objectivity in situations of irreducible uncertainty, criticising professionals for their lack of objectivity is not relevant. Thus, the actual problem is not so much what they are doing but what they claim to be able to do when they pretend to give in to the demands for objectivity.

As the increasing valorisation of objectivity impacts the whole of society, all prudential activities may be affected by their inability to meet people's unrealistic expectations. It has been demonstrated that, even some activities with an artistic dimension, such as architecture, are not spared. However, the threat to those professionals working in organisations is particularly serious. Now, let us see why it is so and how the idea of practical wisdom could help rethink the organisation of their work environment.

Adapting the regulations of professional work to the need for practical wisdom

Freidson's criticism would have had little impact if it had been confined to sociology. Similar themes have fuelled the offensive launched by management against the autonomy of professionals. The undue diversity of professional practices is being criticised (Kerleau 1998). New control "at a distance" (Evetts 2006; Fournier 1999) is meant to make work more predictable and more consistent with a conception of professionalism enforced from the outside[7]. It aims at reducing professional autonomy and the diversity of practices, while demanding increased performance and better adaptation to users' real or imagined expectations. To this end, tools (rules, technical monitoring systems, evaluation indicators) have been adopted, making professionals accountable. The use of the concept of practical wisdom allows for further observations on the consequences of NPM and organisational professionalism for professional work.

One would be unable to understand why professional activities are differently affected by cultural change by resorting to the uniform view of occupations as inherited from interactionists. On the contrary, the concept of practical wisdom helps to understand why those activities are particularly vulnerable both to the control of NPM and to the rise of the values of organisational professionalism, that is «bureaucratic, hierarchical and managerial controls rather than collegial relations; budgetary restrictions and rationalizations; performance targets, account-

[6] His main arguments will be presented again, later, in a more general study (Freidson 1986).

[7] The similarity between the sociological and management arguments is all the more striking as management usually does not enjoy a good reputation among sociologists.

ability and increased political control» (Evetts 2003: 407). Professions with a prudential practice (medicine, magistracy, architecture, social work, police, research, etc.) are the most affected precisely because organisational professionalism aims at reducing contingency in their tasks. Professionals are required to progress towards meeting the promised goals: predictability and objectivity. Indeed, the more uncertain the actual work, the more likely it is that NPM will try to regain control so as to put an end to the diversity of practices seen as a breach of objectivity. These prudential activities are also the most vulnerable to the attacks which insist that professional tasks should be predictable, which is impossible. It means that any member of a prudential activity may be held accountable for the consequences of any error of judgement. For example, psychiatrists have sometimes been blamed for releasing involuntarily committed patients who later perpetrated acts of violence. It is, of course, quite normal that professionals should be held accountable, yet the way they are being confronted clearly shows that the constraint of irreducible uncertainty characterising their task is not taken into consideration. They are not being blamed for some irresponsible decision they would not be able to justify, but simply for making a mistake, as if mistakes could be completely avoided in such activities. They are not actually often given a chance to explain their decisions. Finally, the difficulty they are now confronted to is that, no longer being aware of the prudential dimension of their activity, they are not in a position to refuse these orders. How could one claim not to be objective, efficient or predictable? Yet, at the same time, professionals keep experiencing their inability to meet these demands, their tasks being far too complex. The increasing distance between the reality of prudential professionalism and the image it is given in discourses has led them to a deadlock.

One cannot construct any alternative discourse to the conception of organisational professionalism without revisiting the theme of professional autonomy discredited by the misuses it has been criticised for[8]. Constructing such discourse implies breaking away with what is disseminated as self-evident by both management and professions, and leaving out the idea that rationality can be reduced to the implementation of scientific knowledge or rules and the search for objectivity. An important contribution of the concept of practical wisdom is to provide an alternative approach to this inadequate conception of rationality. In a situation of irreducible uncertainty, it is pointless to wonder whether one's treatment of a problem is objective: it cannot be. Practical wisdom is rationality in contingent situations: unassuming rationality (without any claims to universal production), but realistic and challenging (taking full responsibility for the complexity and the singularity of the world). Thus, the remaining question is then to know whether work is carried out in a prudential way. The phenomenology of practical wisdom proposed by Aristotle's specialists, particularly by Aubenque, allows opening specific research avenues on the actual work of professionals as well as on the work environment which constrains them. It can also be used to help build more favourable social conditions that would facilitate prudential work.

The key social conditions for allowing practical wisdom are as follows: an overall view of a case; sufficient attention paid to evidence (even minor details) showing that the case may be more complex and difficult than it appears at first sight; enough time to deliberate on the case as required; the ability to deliberate, not only on the suitable means to achieve the goals of professional work, but also about the way that these goals should be prioritized; and the ability to criticise, avoid and replace the usual solutions when there are justifiable reasons to believe that they are ill-adapted (Champy 2018a). When studying professions more concretely, these general conditions may contribute to defining research programmes on rules, the division of labour or professional training.

Let us take the example of the division of labour. Looking at it from the point of view of practical wisdom, I will argue that it is justified: it ensures that each task is performed by a specialised actor mobilising the knowledge available in his/her field. But the division of labour may pose a threat to other prudential dimensions, such as

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[8] Professional autonomy cannot be restored after it has been so repeatedly criticised over the last decades. Freidson's latest work illustrates this difficulty (Freidson 2001). Freidson attempts to approach professionalism by stressing its complementarity with both market and organisation logics. He seems to be going back to the defence of professionalism as if aware of the necessity to fight the concrete consequences of a criticism he pioneered. But, because he fails to grasp all the significance of complexity and uncertainty and as he does not know the concept of practical wisdom, his defence is mostly the same as functionalists' and falls under similar interactionist criticism. The book is not Freidson's best nor the most successful one.

in hospital work. The split between the medical and the social fields and the growing number of specialities have given birth to a very technical "organ medicine" as opposed to global healthcare, even though treating a problem exclusively at a medical level also has its limitations (Ricœur 2001). It is particularly the case of chronic diseases for which medical education and the way patients relate to their disease over time are crucial: proposing some medical treatment without considering how it can effectively be adapted to the patient may prove harmful in several ways. The first one concerns the patient's consent: is the biomedical logic underlying the chosen treatment accepted by the patient? If not or if the patient accepts without understanding well enough what it implies, he/she may not properly adhere to the treatment and this may hamper its effectiveness, cause harmful effects and extra charges. Last of all, the treatment resulting from the exclusively biomedical approach of organ medicine may be totally ill-adapted to the situation of some patients. For example, an aggressive treatment that would suit a patient with decent living conditions may not be adapted to a homeless patient whose lack of socialisation makes him extremely vulnerable: without some social support, the treatment would prove useless and dangerous.

The phenomenology of practical wisdom developed by philosophers highlights four major issues of the division of labour. First, despite the increasing specialisation of professionals, the division of labour should enable them to comprehend all the dimensions of the cases they have to deal with. Then, despite the constraints of hierarchy and the requirements of efficient coordination, minority views must be allowed and listened to so as to avoid mistakes. Thirdly, the division of labour, even though involving an ever-growing number of actors, must not hinder decision-making and accountability. Finally, to ensure that the division of labour will not prevent making decisions grounded in actual situations, every time managers have to make choices that could affect the organisation of work, they must listen to professionals, to the ones closely involved with the actual cases.

CONCLUSIONS

What can be the contribution of the concept of practical wisdom to the sociology of professions? I shall first make it clear that the identification of prudential professionalism does not aim at proposing another answer to the longstanding debate about the definition of professions. My approach, on the contrary, shows that new research subjects with theoretical objectives can be constructed without reviving that debate (Champy 2018b). As noted by Strauss and his colleagues, the difficulties caused by complexity and contingencies greatly vary according to occupations. We have seen the reasons why the most heavily impacted activities should be referred to as prudential. Those activities do not match the traditional sense of professions[9]. Therefore, what we need to do is to construct a new research subject associated with specific and innovative research programs. Compared to what Strauss and his colleagues noted over thirty years ago, the philosophical concept of practical wisdom brings in three sets of advantages.

It first allows understanding why the specificities of these activities have long remained little known. They have been made difficult to identify because of the growing incapacity of our societies to consider the usefulness of practical wisdom. The second contribution of the concept of prudentiality is more crucial. It enables to open up specific areas of research about the current working conditions of members of prudential activities, particularly about the concrete factors making practical wisdom vulnerable in these activities. Sociological studies could thus use the prism of the philosophical descriptions of the conditions required for practical wisdom to investigate which processes and which social factors are likely to stop using prudentiality: excessive division of labour preventing professionals from having an overall view of the cases; far too rigid rules hindering prudential adaptation required by each case; authority restraining discussions that might have helped to avoid mistakes, etc. The concept of practical wisdom is crucial both to identify societal concerns that go beyond mere professional work and to raise specific questions suitable for actual empirical research.

Last of all, beyond university work, exposing the significance of prudentiality for some activities may give the actors some necessary insight. I do not think that sociology should commit itself to support some causes. But clari-

[9] Practical wisdom is central to occupations such as the police or social work.

fying what is at stake both in terms of theory and practice may strengthen the legitimacy of our field. In France, making explicit the concrete conditions required to act prudentially has already enabled professionals to better adapt their response to those management requirements they feel are undue. This allows them moving away from traditional claims for autonomy, often perceived as corporatist. An area for discussing work activities could then open up, free both from these claims for autonomy and from the attempts to control (through benchmarking for example) which make it difficult to take into account the complexity of situations.

REFERENCES

Abbott A. (1988), *The System of Professions. An Essay on the Division of Expert Labor*, Chicago: Chicago University Press.

Ackroyd S., Kirkpatrick I., Walker R.M. (2007), *Public Management Reform in the UK and Its Consequences for Professional Organization: A Comparative Analysis*, in «Public Administration», 85(1): 9-26.

Aubenque P. (1963), *La prudence chez Aristote*, Paris: Presses Universitaires de France.

Becker H.S. (1962), *The Nature of a Profession*, in «Yearbook of the National Society for the Study of Education», 62: 27-46.

Bledstein B.J. (1978), *Culture of Professionalism: The Middle Class and the Development of Higher Education in America*, New York: Norton & Co.

Bouleau N. (2009), *Malaise dans la finance, malaise dans la mathématisation*, in «Esprit», 352: 37-50.

Broadie S. (1991), *Ethics with Aristotle*, New York-Oxford: Oxford University Press.

Champy F. (1998), *Les architectes et la commande publique*, Paris: Presses Universitaires de France.

Champy F. (2011), *Nouvelle théorie sociologique des professions*, Paris: Presses Universitaires de France.

Champy F. (2018a), *Editorial*, in «Professions and Professionalism», 8(1): 1-8.

Champy F. (2018b), *The Sociology of Prudential Activities. From Collective Commitment to Social Innovations*, in «Sociologia Problemas e Práticas», 88: 79-94.

Champy F. (2018c), *Food Safety and Consumer Rationality. Is a "Food Pact" Possible?*, in L. Augustin-Jean, J.-P. Poulain (eds), *Risk and Food Safety in China and Japan: Theoretical Perspectives and Empirical Insights*, London: Routledge.

Champy F., Lepiller O. (2016), *Le principe de précaution. Robustesse pragmatique et fragilité sociale*, in S. Becerra, M. Lalanne, J. Weisbein (eds), *Faire face aux risques dans les sociétés contemporaines*, Toulouse: Octarès.

Evetts J. (2003), *The Sociological Analysis of Professionalism: Occupational Change in the Modern World*, in «International Sociology», 18(2): 395-415.

Fournier V. (1999), *The Appeal to "Professionalism" as a Disciplinary Mechanism*, in «The Sociological Review», 47(2): 280-307.

Freidson E. (1970), *Profession of Medicine*, Chicago: Chicago University Press.

Freidson E. (2001), *Professionalism: The Third Logic*, Oxford: Polity Press.

Gravière L. (2014), *Comment légitimer le travailleur social? La réponse de Mary E. Richmond à Abraham Flexner*, in «Vie sociale», 8: 85-100.

Hughes E.C. (1958), *Men and Their Work*, New York: Free Press.

Karpik L. (2007), *L'économie des singularités*, Paris: NRF-Gallimard.

Kerleau M. (1998), L'hétérogénéité des pratiques médicales, enjeu des politiques de maîtrise des dépenses de santé, in «Sciences sociales et santé», 16(4): 5-32.

Osler W. (1905), *The Hospital as a College*, in *Aequanimatus and Other Addresses*, London: HK Lewis.

Paradeise C. (1985), *Rhétorique professionnelle et expertise*, in «Sociologie du travail», 37(1): 17-31.

Peters M., ten Cate O. (2014), *Bedside Teaching in Medical Education: A Literature Review*, in «Perspectives on Medical Education», 3(2), 76-88.

Porter T. (1995), *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*, Princeton: Princeton University Press.

Richmond M. (1922), *What is Social Casework: An Introductory Description*, New York: Russell Sage Foundation.
Ricœur P. (2001) *Le Juste 2*, Paris: Esprit.
Sarfatti Larson M. (1977), *The Rise of Professionalism*, Berkeley (CA): University of California Press.
Schön D. (1983), *The Reflective Practitioner: How Professionals Think in Action*, New York: Basic Books.
Siegler M. (1978), A Legacy of Osler. Teaching Clinical Ethics at the Bedside, in «Journal of the American Medical Association», 239(10): 951-956.
Starr P. (1982), *The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry*, New York: Basic Books.
Strauss A., Fagerhaug S., Suczek B., Wiener C. (1985), *Social Organization of Medical Work*, Chicago: Chicago University Press.
Taleb N.N. (2007), *The Black Swan*, New York: Random House.