Identity, Socialization and Professionalization Process — Contributions of a Study on Cardio-Pneumology Technicians

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Abstract:
It is the aim of this article to contribute to reflection on relations among education, work and professional identities based on the results of a study carried out under the scope of a doctoral thesis. The study examined the influence of the school institution on the production and transformation of the professional identity of Cardio-Pneumology technicians according to socialization processes in both academic and professional entities as well as professionalization processes and projects, the vectors of transformation and identity recomposition.

Cardio-Pneumology technicians are the empirical reference of this analysis. They form a socio-professional group with a diagnostic and therapeutic technical career which, over the last decade, has undergone significant transformations. Exploration of the specificity of this empirical field has made it possible to confirm some of the more dominant principles set out in the studies on this theme and to reveal differences regarding the processes of other socio-professional groups.

The case in question highlights an identity construction process which is highly influenced by the academic institution, not so much as a result of its action as a socialization entity which has a different impact to other groups of reference in the health sector with its more accentuated "ideological" training model, but mainly due to its action in professionalization processes and projects, owing to the strategic guidelines defined for education, which are reflected in the restructuring of professional knowledge and the role played in the institutionalization and legitimation of the knowledge of this socio-professional group.

Key words:
Identity, Socialization, Professionalization process, Professionalization projects.

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The contribution to reflection on the proposed theme for the current edition of *Sísifo* (relations among education, work and professional identities) is based on a study carried out for the dissertation of a doctoral thesis[1] on the influence of the higher education institution on the production and transformation of the professional identity of Cardio-Pneumology technicians[2], through its two-sided intervention: 1) as a socialization entity producing values and structuring identity references; 2) as an entity which pushes forward professionalization processes and projects representing the vectors of transformation and identity recomposition.

The development of the research was accomplished through the intensive method, through a case study based on its empirical reference, namely the Cardio-Pneumology course of the *Escola Superior de Tecnologia da Saúde de Lisboa* (ESTeSL). This particular case belongs to an emerging field in the health sector — health technologies[3] — which, up to now, has been ignored as an object of study by the scientific agenda of social sciences in Portugal, thus, contributing to its low public visibility. Nevertheless, this specific field, affected by such accelerated social change[4], encourages an analysis of the "interpretation of reality", which differs from traditional perspectives that use medicine and nursing as their reference and which have given rise to a considerable amount of writing by many authors over the last few decades. Research in this area will certainly contribute to the production of more global knowledge of the health sector.

Overall, work produced on the current theme, where very different socio-professional groups belonging to distinct areas of activity are taken as the theoretical and/or empirical object, has, with a fair amount of regularity, highlighted the general principle, itself part of the knowledge acquired by educational sciences and social sciences in relation to this theme. It is based on the premise that school education and work contexts influence the production of professional identities, more so since they are socialization entities carrying a symbolic code conveyed through contents, ideas, values (and common system of values), roles, norms and criteria of professional practice, which are partially and internalised[5] in a sustainable manner by the social actors and on which the main identity references of professional individuals and groups are based. From this perspective, professional identities are social constructions created in successive multidimensional and continuous socialization processes, occurring simultaneously in different contexts, on both formal levels, within the different entities (school, work contexts, mass media, family, etc.), and informal ones.

Research on how school education and work contexts influence the production of the professional identity of Cardio-Pneumology technicians confirms, to a certain extent, the aims set out, despite reinforcing the idea that these principles, along with other theoretical principles related to the analysis of the current theme and others referring to social reality may vary considerably according to the different contexts. Therefore, it is a fact that the influence of

school socialization and professional processes in the production of Cardio-Pneumology technicians is far less accentuated in comparison with other socio-professional groups within the health sector, namely doctors (Baszanger, 1981; Carapinheiro, 1993; Ruivo, 1987) and nurses (Abreu, 2001; Lopes, 2001; Melia, 1987).

This is primarily due to the absence of a specific model for supervising the socialization processes of Cardio-Pneumology technicians, whether initially in a school context or where the profession is actually practiced, contrary to what happens with the afore-mentioned groups (medicine and nursing). The effect of such absence of an a specific Cardio--Pneumology "ideological model" or a technical model when health technologies are taken as reference, has a visible impact on the values, attitudes and professional practices adopted, which are positioned between the two main reference models of the health sector, the technicist model, dominant in medicine, and the relational model dominant in nursing[6]. Thus, they frequently display greater proximity to the typical approaches of one of these models or, in most cases, a mixed approach between the two models.

Approximation to the two dominant reference models in the health sector is strictly related to the essence of the professional practices of the Cardio--Pneumology technicians. Generally, such practices imply the simultaneous mobilization of competencies which integrate relational components closer to dominant nursing practices and also technical and scientific components closer to dominant medical practices. The predominance of technical and scientific components is not divorced from the fact that the medical model is the main reference for most of the Cardio-Pneumology technicians in comparison to nursing, according to what has been found through direct observation carried out in a hospital context and which is reinforced by the results of the survey, in the context of which around two thirds (62,7%) claim to present more similarities with the doctors and around one third (36%) with the nurses (1,3% of the participants did not answer the question), in spite of there being greater similarity between the Cardio-Pneumology technicians and nurses, in terms of their social and professional status.

Nevertheless, the similarities with medicine are found on a number of different levels: 1) the origin, evolution and emergence of Cardio-Pneumology derive primarily from the actual development of medicine and the progressive delegation of medical activities, the scientific and technical essence of which is based on technologies theoretically supported by medical sciences in terms of language, conceptual framework, technical procedures and behaviour forms; 2) a significant number of Cardio--Pneumology technicians use the medicine course as the dominant reference and, consequently, the medical profession, before initiating their academic training; 3) the professionalization process and projects of the group are developed according to the medical model as an "ideal-type" to be achieved.

On the other hand, different studies carried out on this theme have also stressed that the school and work contexts are carriers of distinct dynamics. The school socialization process focuses on theoretical references aiming to "educate" future professionals, while the professional socialization process is centred on pragmatic references which, in the case of health, aim to diagnose and treat patients (Carapinheiro, 1993). There is a discontinuity between the socialization processes in these two entities (which simultaneously complement and contradict each other), usually occurring at different stages, while, at the same time, there is also a re-definition of values in the professional context, which frequently produces a detachment from the school learning process.

The performed study re-confirms such arguments on the influence of the school and work contexts as socializing entities in the construction of the professional identity of Cardio-Pneumology technicians. As pointed out by several other authors such as Schon (1983), Melia (1987), Carapinheiro (1993), D'Espiney (1997) and Abreu (2001), it highlights the asymmetries between the representations of teachers and professionals. The discontinuities between the school context and professional context are displayed through the fact that around three quarters (74%) of the participants stated that their idea of the profession when they finished their course was different to the one they currently have. This was evident in the expressions used by some of the participants, such as a Cardio-Pneumology technician who described the feelings aroused by the transition from the school experience to the professional experience in the following way: "when I came to

the hospital, I realized that there were, in fact, sick people, people I could hardly even touch because as soon as I did they would scream or be in tremendous pain. I think it was at that point that I began to see the reality of the situation and I found it hard. At the beginning, I did nothing but cry (...) we are not prepared for working with really sick people".

These studies have also shed light on the fact that the representations and practices generally adopted by professionals tend to discord with the representations and practices defended by most of the teachers, reflecting the more profound differences between "theoretical" conceptions, traditionally associated with educational institutions and "pragmatic" conceptions, frequently linked to work organizations. Thus, a duality is established "between the 'ideal model' which characterizes the 'dignity of the profession', its brand image and symbolic importance, and the 'practical model' related to 'daily tasks and heavy work' which has few dealings with the former" (Dubar, 1997, p. 136). On this level, "one of the abiding problems of occupational socialization has to do with the differences between the idealized version of work as it is presented to new recruits and the work as it is practiced daily by members of the occupation" (Melia, 1987, p. 1) and there are also "difficulties in transferring the learning carried out in the training context to real work situations" (Canário, 1997, p. 137). This problem becomes more serious as the distance between the training context and professional practice situations increases.

To confirm this argument, the discourse of teachers in the area of Cardio-Pneumology regarding Cardio-Pneumology technicians and vice-versa tend to reveal asymmetrical representations. Generally, the teachers highlight a certain negligence towards the scientific demands required through the performance of tasks in a professional context ("doing things in a way that is completely wrong as far as I'm concerned (...) the problem is that a lot of bad work is carried out in some areas"). On the other hand, the Cardio-Pneumology technicians tend to represent the teachers as people who are detached from "reality" and professional practice ("people who are constantly in school and have attained the status of theoretician (...) they are people who have detached themselves considerably from professional reality").

In addition to these aspects, one must also bear in mind the actual limitations of the academic institutions as socialization entities, since much of their knowledge and the values and identification forms of the social actors are re-defined and altered in the work context. This often gives rise to a clear detachment from the academic learning process and partially dilutes the effects of the school socialization process. The limited nature of the influence of the academic institution is directly related to the fact that the latter is not the sole educational site and also to the fact that the values and references assimilated at school refer back to an initial socialization phase, occurring within a relatively short and limited period of time.

Taking the above-mentioned factors into consideration, the study confirmed the influence on the identity construction of Cardio-Pneumology technicians, which initially took place through the socialization processes at the academic institution and later on, in work contexts. Nevertheless, the development of the study revealed less of an influence in relation to this aspect in comparison with other socio-professional groups and, also explored a less studied line of research in the field of social studies, referring to the unavoidable influence of the professionalization process and projects[7] in the identity construction of emerging groups, bearing significant school capital.

Since the 90s, the professional identity of the Cardio-Pneumology technicians has been in constant transformation and largely determined by the accelerated rhythm of the professionalization processes and projects. The latter are strongly backed by the academic institution as a result of the strategic guidelines defined for teaching with effects on the recomposition of professional knowledge, and owing to the role played in the institutionalization and legitimization of the knowledge of Cardio--Pneumology technicians.

The strategic guidelines defined for the teaching of Cardio-Pneumology in the last decade have brought about significant transformations in the main identity traits of the grouping question. The following are three of these guidelines: 1) The considerable broadening of the theoretical component of the course, with implications in the practices and underlying conceptions of the professional task;

2) The growing multidisciplinarity of the curricula and program content of the course is at the heart of the progressive transformation of main identity references; 3) The broadening of teaching to new specialization and activity areas in terms of the internal diversification of the group.

The first of these transformations, common to the process of other socio-professional groups (in the health sector the best example may be found in nursing[8]), is consubstantiated as the nucleus of the group's identity transformations and focuses on the great increase in importance attributed to the theoretical component of the course (41% in 1980 and 65,7% from 1998 onwards), with the explicit aim of "trying to bestow increasingly profound and complex theoretical knowledge upon the student regarding the application foundations of some techniques" (Interview with a teacher from the area of Cardio--Pneumology of the *Escola Superior de Tecnologia da Saúde de Lisboa*). The main effect of this alteration lies in the gradual recomposition of the knowledge of the socio-professional group which moves away from the practical knowledge category, acquired through experience (conducive to the performance of practical tasks), to the category of analytical knowledge, sustained by a systematic theory corpus, conducive to the performance of more complex tasks.

This change is reflected in the mobilizable activities performed by the Cardio-Pneumology technicians, and also in the competencies contained in legislation which, in the 80s, are basically related to practical accomplishments (registering, measuring, carrying out, guaranteeing preparation, setting up and handling). From the 90s onwards, they go on to include attributes related to tasks habitually associated with the professional model as defined by the functionalist school. In this case, they include identification, selection, analysis, interpretation, evaluation, comprehension, definition, choice, decision, explanation, estimation and calculation.

The growing multidisciplinarity which has characterized the Cardio-Pneumology course since the mid 90s, sustaining the knowledge in this area within a framework covering the various areas of knowledge, is reflected in the conceptions inherent to professional identity while the limited forms of identification, exclusively associated with the biological nature of professional identity, are progressively discarded by the Cardio-Pneumology technicians. Identification forms based on broader references, tending to simultaneously express the "technological" and "multidisciplinary" aspects have emerged, which are interpreted complementarily, based on the assumption of articulation between the technological and scientific dimensions and the incorporation of multidisciplinarity in the knowledge and performance of the group's professional activity.

The broadening and diversification of the study areas of Cardio-Pneumology has stimulated the internal diversification of the group, whose identity has ceased to be so centered on one area of professional activity (electrocardiology) and an exam (electrocardiogram), to increasingly adopt forms of (self)identification which reflect the differentiated set of intervention areas (electrocardiology, ecocardiography, study of respiratory function, invasive cardiovascular intervention, extracorporeal/perfusion technology and vascular ultrasonography).

It is within the scope of electrocardiology that, in a general way, most professional activity has taken place over time and, even today, it is the area of activity in which most (67,4%) of the Cardio-Pneumology technicians work. Furthermore, electrocardiology crosses over most areas of activity developed in the field of Cardio-Pneumology, where an electrocardiogram is almost always present. This is why the exam is seen as the "emblem" of the collective activities of the socio-professional group, strongly influencing the symbology connected to the group's image. On the other hand, the tendency towards diversification of the professional areas is conveyed in the estimated (almost) half (48.8%) of the Cardio--Pneumology technicians belonging to the National Health Service who work in central hospitals but not in electrocardiology. Most (53.3%) of the qualified Cardio-Pneumology technicians from the *Escola Superior de Tecnologia da Saúde de Lisboa* also dedicate most of their time to other areas and not to electrocardiology. This percentage increases (60%) when those who practice in central hospitals are taken into consideration.

The influence of the academic institution on the production of the professional identity of Cardio--Pneumology technicians, through the impact of the strategic guidelines defined for training in this area

at different periods is reflected in the generational differences within the group. The more recently trained generations tend to defend conceptions and perform professional practices which are closer to the tendencies found during the professionalization process. The collected data always reinforce this fact, whether they come from the application of techniques with a potentially more qualitative slant, such as the interview and direct observation, or from the survey, based on a more quantitative approach and more easily objectifiable, when the crossing of the variables "age" and "year of Cardio-Pneumology course conclusion" takes place, which, in this case, take on the status of independent variables, with other variables under study, such as : "opinion regarding the type of more important Cardio-Pneumology competencies"; "opinion regarding the degree of autonomy"; "opinion regarding the broadening of the field of Cardio-Pneumology intervention"; "opinion regarding the competencies needed in order to carry out exams"; "tasks performed regularly"; "specificity of the tasks"; "ability to perform tasks that are not attributed to the work place"; "opinion regarding the possible accomplishment of tasks which are exclusive to medical practice"; "professional expectations" and "expectations regarding academic training".

On the other hand, the role performed by the academic institution in relation to the professionalization processes and projects of Cardio--Pneumology technicians, with crucial effects on the production and transformation of the group's identity, is connected to legitimation parameters, produced by the institutionalization of the knowledge taught there and provided for by means of a diploma issued by a higher education institution (Baccalaureate, initially and later the degree course). In the form of school capital, these academic qualifications have been constituted as the main resource for the acquisition and/or claim of new specialized competencies, with a higher degree of recognition and autonomy for organizing/ regulating activities in the work place, with a reinforced social and professional status, and also in the actual evolution of the group's formal titles over time: "Cardiology Technical Assistants" — 1953; "Cardiology Preparers" — 1973; "Cardiographists/ Physiographists" — 1981; "Cardio-Pneumography Technicians" — 1985; "Cardio-Pneumology Technicians" — 1999); The current self-designation is "Cardio-Pneumologists" and there are future proposals such as "Clinical Physiologists". On this level, the statement of a Cardio-Pneumology technician interviewed for the study and which serves as the basis for this article, that "the school has clearly been the great engine of this profession's development" is taken for granted by most of the group members and expresses well the arguments presented.

A considerable broadening of the competencies of this socio-professional group is currently being observed. They are generally obtained at an early stage by means of delegation by doctors and are carried out in the different work contexts in a consensual and non- conflictual manner, without directly questioning the dominance of doctors[9]. However, during this transitional phase, there are also reverse tendencies within a framework characterized by the variability of the specific situations which arise on a day to day basis in the different work contexts. So, in many work places there is a strong phase shift between the field of knowledge legitimized by the academic training process and the field of tasks that are actually performed, which are basically simple, practical tasks.

By the same token the level of autonomy of the Cardio-Pneumology technicians varies considerably according to the degree of complexity inherent to the accomplished tasks, but it varies particularly according to the forms of work organization in the different contexts where the same task takes on different characteristics and is accomplished in a number of ways with varying degrees of complexity, scientific knowledge mobilization and indeterminacy. A general tendency for the level of autonomy to be more restricted is observed when the work organization forms favor greater interaction with doctors than when the exam circuit begins and ends within the context exclusive to Cardio-Pneumology technicians. Paradoxically, in the first case the most prestigious areas of activity may be found within the socio-professional group, since they involve "high technology" and precisely owing to the symbolic status inherent to the proximity to specialist doctors.

The construction of the professionalization projects of the Cardio-Pneumology technicians is

based on the school capital as the main resource, and focuses, on a greater or lesser scale, on the greater delegation of doctors' prerogatives in relation to diagnosis, and consequently, on the progressive conquest of new duties and competencies framed by the increasing performance of analytical tasks. On the other hand, the attempt to gain greater autonomy in order to organize and regulate professional activities is also an important factor. The aim of controlling access to the profession is to guarantee the exclusivity of the professional group in terms of its competencies and specific tasks, which are frequently performed by other professionals in the health sector or by people without any type of qualification. Finally, the importance of implementing specific research in this area which would lead to the production of knowledge and bring greater visibility to the socio-professional group should be stressed.

The importance taken on by the professionalization process and projects of Cardio-Pneumology technicians has been so strong and the transformation of the group has been so profound over the last decades that it is perfectly possible to insert their identity in a type, referred to by Castells as "project identities", which occurs "when the social actors construct a new identity capable of redefining their position in society by using any kind of cultural material within their reach" (2003, p. 5).

To conclude, I would say that professional identities are constructed by means of successive socialization processes which affect different types of formal and informal social relations and different entities. The educational institutions and organizations where the professional activity occurs take on particular importance in such situations. Cumulatively, they are also constructed in the individual and collective projects and histories which have dynamics that are specific to their permanent state of construction, production, reproduction and transformation. Therefore, they are not crystallized essences or finished products, but rather relatively stable constructions within a continuous process based on social activity (Mendes, 2001).

The analysis on the production of professional identities can only be understood when the specificity of the social relations and contexts in which they occur are taken into consideration. This case regarding Cardio-Pneumology technicians reveals an identity construction process that is strongly influenced by the academic institution, even more so due to the fact that it is consubstantiated as the engine of the professionalization process and projects and less as a socialization entity when compared with other groups of reference in the health sector, namely medicine and nursing.

Endnotes

1. Doctoral Thesis in Educational Sciences (Specialization in Sociology of Education), presented to the Faculty of Psychology and Educational Sciences of the University of Lisbon, under the supervision of Professor Rui Canário, defended in *a viva voce* in December 2006 and published in 2007 (Tavares, 2007).

2. The Cardio-Pneumology technicians are one out of eighteen groups belonging to a diagnostic and therapeutic technical career (as well as audiology technicians, clinical testing and public health technicians, pathological, cytological and thanatological anatomy technicians, Dieticians, pharmaceutical tehnicians, physiotherapists, oral hygienists, nuclear medicine technicians, neurophysiology technicians, prosthetic dentistry technicians, orthoptists, orthoprothesis technicians, radiology technicians, environmental health technicians, speech therapists and occupational therapists). In general terms, the career statute defines their duties and activities which focus on the "development of technical activities for a functional study and an examination of the anatomophysiopathological capacity of the heart, vessels and lungs, activities in terms of programming, application of diagnostic resources and their evaluation as well as in the development of specific therapeutic actions under the scope of cardiology, pneumology and cardiothoraxic surgery". Activity performance is structured around the accomplishment of exams leading to the study and diagnosis of cardiovascular and respiratory diseases in six areas of activity: electrocardiology, ecocardiography, the study of the respiratory function, invasive cardiovascular intervention, extracorporal/perfusion technology and vascular ultrasonography.

3. "Health Technologies" is the term used to refer to the socio-professional groups which belong to the diagnostic and therapeutic technical career.

4. As regards the context of change in the health sector in Portugal, the contribution of Rui Canário (1997) is to be noted.

5. This internalization occurs within the framework of an interactive process which "assumes a transaction between the socialized parties and the socializers" (Dubar, 1997, p. 30) and not the "imposition of rules, norms or values on the part of the institutions towards passive individuals who, thus, are progressively shaped by such schemes of thought and action" (Dubar, 1997, pp. 33-34). In these processes, the social actors tend to adjust their original *habitus* by incorporating disposition systems inherent to the culture(s) of the profession and consubstantiated in professional knowledge which has underlying technical procedures and social values belonging to the symbolic and ideological universe of the socio-professional group (Pinto, 1985).

6. The reference to these models aims only to characterize traditional approaches dominant within these socio-professional groups which are clearly not exclusive to such groups and are by no means representative of the totality of their members, since relational conceptions are also present in medicine (Carapinheiro, 1991) and, by the same token, there are nurses who adopt technicist approaches.

7. The professionalization process is understood as being "the means by which an occupation procures a considerable number of professional model attributes" (Rodrigues, 1997, p. 21) and professionalization projects as "the complex of expectations, aspirations, desires, representations regarding the future" (Pinto, 2000, p. 10) related to groups which establish strategies in order to alter their socio-professional situation.

8. See Lopes, 2001; Abreu, 2001; Canário, 2005.

9. As referred to by different authors (Carapinheiro, 1993; Chauvenet, 1972; Couture, 1988; Freidson, 1968), the dominance of doctors is the main structural characteristic of the social division of work in the health context, which guarantees them the authority to control, manage and evaluate the work of the other socio-professional groups which work with their field of activity. Consequently, the level of autonomy of the non-medical socio-professional groups is restricted to the boundaries of medical power (Carapinheiro, 1993), in other words, their "structural barrier is formed by the limits that are generated by the professional dominance of medicine" (Lopes, 2006, p. 110). Nevertheless, in different contexts and in different countries, indicators of change are beginning to emerge, as Tousijn (2000) points out, referring to the "partial decline of medical dominance" in Italy, in terms of less control over the market, patients, the training of new professionals, the health policy, professional practices and over the other socio-professional groups in the health sector. On the

other hand, based on professional knowledge, different groups in the non-medical health sector have re-questioned the issue of inter-professional boundaries. An interesting example is given by Stevens *et al.* (2007) on the basis of a comparative study carried out in Holland among socio-professional groups that develop their activity in the area of vision.

Bibliographical references

Abreu, Wilson (2001). *Identidade, formação e trabalho*. Lisboa: Educa.

Almeida, João Ferreira & Pinto, José Madureira (1986). Da teoria à investigação empírica — problemas metodológicos gerais. *In* Augusto Santos Silva & José Madureira Pinto (orgs.), *Metodologia das ciências sociais*. Porto: Afrontamento, pp. 55-78.

Baszanger, Isabelle (1981). Socialisation professionnelle et contrôle social. Le cas des étudiants en médicine futurs généralistes. *Revue Française de Sociologie*, XXII, 2, pp. 223-245.

Canário, Rui (1997). Formação e mudança no campo da saúde. *In* Rui Canário (org.), *Formação e situações de trabalho*. Porto: Porto Editora, pp. 119-146.

Canário, Rui (2005). Ser enfermeiro hoje. *Caderno de Currículo e Ensino*, V, 8, pp. 9-24.

Carapinheiro, Graça (1991). Médicos e representações da medicina: humanismo e tecnicismo nas práticas médicas hospitalares. *Sociologia, Problemas e Práticas*, 9, pp. 27-41.

Carapinheiro, Graça (1993). *Saberes e poderes no hospital*. Porto: Afrontamento.

Castells, Manuel (2003). *A era da informação: economia, sociedade e cultura*. *Volume II — O poder da identidade.* Lisboa: Fundação Calouste Gulbenkian.

Chauvenet, Antoinette (1972). Professions hospitalières et division du travail. *Sociologie du Travail*, 2/72, pp. 145-163.

Couture, Denise (1988). Technologies médicales et statut des corps professionnels dans la division du travail socio-sanitaire. *Sociologie et Sociétés*, XX, 2, pp. 77-89.

d'Espiney, Luísa (1997). Formação inicial/formação contínua de enfermeiros — uma experiência de articulação em contexto de trabalho. *In* Rui Canário (org.), *Formação e situações de trabalho*. Porto: Porto Editora, pp. 171-188.

Dubar, Claude (1997). *A socialização — construção de identidades sociais e profissionais*. Porto: Porto Editora.

Freidson, Eliot (1968). *Professional powers*. London: The University of Chicago Press.

Lopes, Noémia (2001). *Recomposição profissional da enfermagem — Estudo sociológico em contexto hospitalar*. Coimbra: Quarteto.

Lopes, Noémia (2006). Tecnologias da saúde e novas dinâmicas de profissionalização. *In* G. Carapinheiro (org.), *Sociologia da Saúde — Estudos e Perspectivas*. Coimbra: Pé de Página, pp. 107-134.

Melia, Kath (1987). *Learning and working — The occupational socialization of nurses*. London: Tavistock Publications.

Mendes, José Manuel (2001). O desafio das identidades. *In* Boaventura de Sousa Santos (org.), *Globalização: fatalidade ou utopia?* Porto: Afrontamento, pp. 489-523.

Pinto, José Madureira (1985). *Estruturas sociais e práticas simbólico-ideológicas nos campos*. Porto: Afrontamento.

Pinto, José Madureira (2000). Flexibilidade, segurança e identidades sócio-profissionais. *Cadernos de Ciências Sociais*, 19-20, pp. 5-37.

Rodrigues, Maria de Lurdes (1997). *Sociologia das Profissões*. Oeiras: Celta.

Ruivo, Fernando (1987). A construção de um projecto profissional: o caso da medicina. *Revista Crítica de Ciências Sociais*, 23, pp. 129-139.

Schon, Donald (1983). *The reflective practitioner — How professionals think in action*. London: Avebury.

Stevens, Fred *et al.* (2007). Exclusive, idiosyncratic and collective expertise in the interprofessional arena: the case of optometryand eye care in The Netherlands. *Sociology of Health & Illness*, 29, 4, pp. 481-496.

Tavares, David (2007). *Escola e identidade profissional — o caso dos técnicos de cardiopneumologia*. Lisboa: Colibri/IPL.

Tousijn, Willem (2000). Medical dominance in Italia: a partial decline. *3rd Interim Conference Research Committee 52 — The Sociology of Professional Groups*. Lisboa: International Sociological Association (policopiado).

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