France. From invisible transitions to institutional change

Christine Musselin and Catherine Paradeise

Introduction

French public institutions are often assumed to be reform adverse. This statement is confirmed by many events in the history of French higher education and research systems. Still recently (2003), the government withdrew a project of law before submission to the Parliament to avoid students’ and academics’ unrest. It aimed at increasing the strategic and operational resources of public universities. A social movement also developed in 2004 among researchers protesting against awkward manoeuvres by the government to induce more flexibility in the public sector research labour force. Reforms are usually opposed because they might favour differentiation between universities and jeopardize the national dogma of equality of treatment. The 1986 Devaquet act collapsed because it allowed universities to set, within a very restricted frame, their fees. The same happened in 1993 when the Fillon act offered new status choices to universities. They could have replaced the uniform status created by Savary in 1984 by a more managerial one, first created to help developing newly created universities in the 1990s. The unions opposed the proposal as they saw it as a threat against the principle of equality (see Merrien and Monsigny, 1996 or Merrien and Musselin, 1999).

Such past and recent experiences should nevertheless not lead to the conclusion that inertia and conservatism prevail in France. Yet change has been large and deep over the last 30 years when observed from a pragmatic viewpoint. The final success in passing acts such as the research pact in 2006 and the university autonomy act in 2007 would not be understandable without this background of recent change.

To make this point, the two first sections describe two main transformations of the French higher education systems that directly affected the steering of research within French universities. (1) First, we expose the transformations of the relationships between public authorities and universities and its effects on growing autonomy, government and strategic ability of university. As a result, we show how universities developed an increasing appetite for steering research activities by their own. (2) The second change deals with the blurring divide between research and higher education institutions that led to the relocation of most research activities and researchers into French universities.

---

1 The paradox is that, while enhancing the dogma of equality, the same students and academics at the same time long did not question the very unbalanced national organization along two major divides: universities and grandes écoles on one side, education and research on the other.

2 These two issues do not sum up all the changes. We could also mention transformations in teaching conditions and organization such as the second massification of the French higher education that more than doubled student numbers from 1988 to 1995, or the professionnalisation of the university and the diversification of curricula. But in this paper, we will focus on changes that directly affected the public steering of French universities.
The third section discusses how and how far these transformations directly or indirectly impacted two specific issues: budgets resource allocation processes and budget structures in universities, and the content and organisation of the doctoral studies through the creation of the doctoral schools.

It then will be time to come back to the impact of NPM and network governance with regard to the history of the last 30 years in French Higher education and research. We make a major point in this chapter. New Public Management has not been used as a frame for reforms of the French higher education system. French public sector (including higher education) reformers, have long simply ignored this narrative. Reforming the French administration and its public services (universities being one of them) was nevertheless on the agenda. Public management was promoted to fight against rigidities of a bureaucratized administration. Most of these reforms in the public sector included measures in favour of decentralisation and extended the range of actors enabled to participate to decision making. As a result the networks of actors involved in the steering of the higher education and research considerably increased. But policies on the one hand remained disconnected from the NPM wave submerging some other European countries at the same moment. They furthermore much more on rely on the traditional discourse about decentralisation (versus Jacobinism) than on any explicit move towards network governance.

Before developing these points, a brief description of the French higher education and research systems is needed. In 2003, the French higher education system is attended by more than 2.2 millions students\(^3\), 1.5 of them being trained in universities, by almost 90 000 teachers, 57 000 of whom are higher education faculty members. To put it in a nutshell, this system is predominantly a public system. Up to the 2007 act, salaries were managed by the Ministry. In 2002 for example, only 20% of the national budget dedicated to universities were managed by universities themselves. Part of these subsidies (39%) are based on a formula derived from students number, the remaining 61% are allocated through pluri-annual contracts between the universities on the one hand and respectively the Ministry, research organizations, regional contributions, etc. on the other (Warta K., Moriceau C., Bussillet S. 2003). The French system is furthermore characterized by two main divides. A first one concerns the separation between the highly selective and renowned Grandes Ecoles training French elites, and the less prestigious sector of universities. A second divide results from the creation of national research institutions after World War II, in charge of basic (CNRS) and applied (INSERM, INRA, etc) research counterbalancing the low commitment of French universities as institutions and faculty members in fundamental research activities.

1. Changes in the relationships between public authorities and universities and their impact on university institutional autonomy

Descriptions of state-universities relationships in France usually focus on centralization. Such a view is obviously merely incomplete. It neglects the crucial role of the academic profession that co-managed the French higher education system with the national public authorities. It oversees the counterpart of this intertwined partnership between the state and the academic profession. For a century and a half, French universities remained weak and irrelevant interlocutors for the higher education system as they could not emerge as “institutions”. This

\(^3\) They were 1.174.000 in 1980.
university configuration (Musselin 2004) experienced a rather deep transformation in the 1990s. It is therefore worth discussing this evolution and its impact on French universities and on their capacities to develop their own research policies. Yet it would be wrong describing such changes as resulting from the diffusion and implementation of the new public management (NPM) narrative on the French higher education system. Which reform was rather a very French process, poorly influenced by European or international trends.

1.1. A profound transformation achieved by the introduction of four-year contracts

A brief historical recall on French higher education will help understand what happened during the last decades. Until recently, the French higher education system was mainly characterized by the absence of universities, suppressed during the French revolution. Before 1968, strong faculties led by powerful deans appeared as the only relevant levels of decision between the ministry and the academics. Universities were a weak administrative body, a territorial gathering of faculties under the control of a high civil servant called “recteur”. In 1968, the Faure Act suppressed the old faculties and favoured the creation of multidisciplinary universities led by an elected president, always an academic. Current French universities are therefore not older than 35 years.

Parallel to the non-existence of universities, the French academic profession played a crucial role. While strengthening central administration, Napoleon reforms promoted a national academic corporation organised by disciplines and led from Paris, mostly by Parisian academics. It created the academia as a vertical, hierarchical, centralised profession whose representatives in Paris were able to develop contacts with, to influence and even to get positions at the ministry. It favoured the development of co-management between public authorities and parts of the academic profession. Over almost two centuries, it impeded the emergence of universities as collective actors and relevant partners of the ministry.

Even the Faure Act in 1968 and the rebirth of French universities it promoted were unable to really modify this situation. It did not impact the management of the academic profession. It left intact the role of the central bodies in charge of careers. It did not introduce any change within the ministry. It confirmed the prevalence of the discipline-based logics in the central administration. The same holds true for the Savary Act that replaced the Faure Act in 1984. It provided French universities with new status, bodies, missions, etc. but did not threaten the co-management practices and the dominance of the disciplines as major actors of the higher education system.

As a consequence, universities (re)created by the Faure act were not able to develop as collective actors and to behave as intermediary bodies between national administration and lay academics. They were poorly managed, better at making no decision than at setting priorities, not recognised as relevant partners by the disciplines, the ministry or local actors.

In September 1988, four months after being appointed as Education Minister, Lionel Jospin announced a change in allocating university operating budgets (which do not include the salaries). A small proportion of university budget would now be allocated through negotiation between each university and the ministry in the framework of four-year contracts rather than according to fixed criteria (number of students, square meters…). Among several, two circumstantial reasons have been decisive in inventing this new allocation technique. First, the newly appointed Rocard government announced that education would be its priority: it
pushed Jospin to make announcements, but also to be creative as the presidential program of Mitterrand for the presidential elections of May 1988 did not contain any reform proposal about higher education. Second, Jospin and his cabinet were urged to react as everybody was expecting a second wave of massification in French institutions and university presidents feared a “hot autumn”. The relatively good shape of public budget at the time allowed allocating more money using the contractual process as a policy tool.

At first glance this decision looked like an administrative and neutral technical change in procedures rather than a reform impacting universities as such. Universities would be asked to prepare a four-year strategic plan and then to negotiate with the ministry the allocation of a pluri-annual budget dedicated to the achievement of some of the objectives included in this plan. 5% to 10% of the operating budget (outside salaries) would be allocated on this contractual basis. The rest remained based on a student number based formula and other operating criteria. While universities had almost no leeway on the formula-based budget covering nonflexible operative costs, the very small percentage resulting from negotiation appeared as opening exceptional margins of maneuver.

Neither did the ministry, nor presidents, nor medias, nor unions foresaw the impact of this decision when announced at the Conference of University Presidents in September 1988. It was even described as the simple continuation of the contractual policy introduced in 1983 on “university research” budgets. Even Claude Allègre (1993), then special advisor of the Minister of Education Lionel Jospin, and one of the main political entrepreneur of these contracts did not consider it as a radical change. External observers also barely identified this decision as an important one: the administrative circular that describes the contractual procedure is, for instance, not considered as a “relevant legislation” or a “policy document” in the Eurydice report (2000).

Three major reasons may explain this lack of discernment. First the Ministry did not label the new procedure as an innovation or a reform. Second, the introduction of contracts looked to central administration staff as an additional procedure that was limited in scope. Third the word “contract” was not strongly ideologically loaded in France. It was acceptable from opposite points of view. For those longing for neo-liberal reforms, contracts could be seen as a managerial instrument. For those fighting against, contracts could be understood as a weakening of the state fiat and as a way to promote negotiation, discussion, etc. Therefore the very notion of contract enjoyed a high political viability (Hall 1989). It was seen as politically and ideologically neutral (as opposed to notion like privatisation or nationalization for instance). As a result, the contractual procedure took advantage from favourable coincidences and raised no ideological conflicts, no interest groups reaction, no partisan action. It was not necessary to convince, argue, negotiate in order to implement it. No new “policy paradigm” (Jobert, 1992; Hall 1993; Surel, 1995) was to be imposed in order to make it acceptable.

Yet this decision induced major effects. First, it challenged the discipline-based assessment and procedures within the central administration by introducing institutional logics in the ministry decision-making processes. In addition to its academic value, the quality assessment of a given project had to consider its relevance for and its coherence with the collective

---

4 As mentioned in the introduction, national research organizations like CNRS were created with their own budget and staff after WWII in order to compensate for the alleged weakness of research led in universities. When located in universities, those research labs which were not affiliated to institutions such as the CNRS, belonged to the so-called “university research”. Since 1983, some of them received some resources from the ministry on a four-year contractual basis.
priorities of a given university. In parallel, the ministry reoriented its relationships towards the university presidents and restricted access to the representatives of the disciplines. From this point of view, the creation of a small share of contractual grant in universities budgets strongly departed from the “university research” contractual policy that had reinforced the impact of the disciplines and ignored the university level.

20 years after the 1968 Act which created them, central administration recognized the existence of universities thanks to a new tool that did not fit any pre-existing rhetoric or theory to be implemented. The central bureau, the DPDU (Direction de la programmation et du développement universitaire), which was in charge of this contractual policy progressively created, improved, consolidated and diffused the norms attached to the implementation of this new procedure. Its members developed a whole “doctrine” (as they used to say) arguing that the contractual policy deterred from the traditional practices of the ministry. They also defined operating norms. For instance they stated that each university should prepare its negotiation with the ministry by analysing its situation and collectively building a strategic plan setting its orientations and priorities for the four coming years. They also insisted that strategic planning required not just adding projects fostered by each faculté but building a collective piece. They developed procedures to reach such a shared proposal. They emphasised the critical role to be played in management by the university presidential teams.

A second effect deals with the transformation of the state – universities relationships. Presidents became relevant interlocutors for central administration (as documented by the increasing influence of the CPU, the conference of university presidents). Developing negotiation changed the nature of their relationships from hierarchical to more symmetrical. It also changed their content by forcing university transparency and ministry openness. Rather than a withdrawal of the State, contracts were starting a radical change in State intervention, based on more trust, more transparency but also more control (Berrivin and Musselin 1996).

A third effect will be discussed more extensively later. It deals with the strengthening of university governments as contracts were used as an opportunity to foster collective university identity by universities managers themselves (which thus became allies of the DPDU).

1.2. The (re)discovery of the potential role of universities on the local development

At about the same period, local public actors undergone a rather radical change. While higher education was not concerned by the devolution of power to local authorities organized in 1982 by the decentralization law, regions found ways to clearly express interest in higher education institutions by the mid eighties though (Filâtre1993). They reckoned the long tradition of intense interactions between cities and universities (Laferté 2002, Filâtre (1993), which had faded away after World War II as higher education and research became national concerns and the State monopolized public funding.

Local public actors (regions, departments or cities) were concerned by research as well as teaching. On the one hand, each level of local government would become partner of research organizations as well as of universities, at various extent according to their interest for such an investment. Regions started being involved in the 1980s, thanks to the newly created Region-

---

5 According to the 1983 contractual procedure, research labs were also asked to prepare four-year proposals but the ministry then directly allocated budgets to each research unit, leaving no leeway to the university level.
State five years contracts (CPER, for Contrat Plan Etat Région). They gained importance in the process of funding, at first with a rather opportunistic approach. It took them a long time to develop structured research or university policies and define their niches among various levels of government. Some wealthy regions, such as Rhône-Alpes or Midi-Pyrénées, started organizing quite early. Ile de France, French capital region grouping over 45% of research and education national resources, did not get involved in research and higher education before the beginning of the 1990s, and really started building a policy in the mid’ 2000s by creating new funding schemes and choosing to dedicate 5% of the regional budget to research by 2009.

On the other hand, higher education became an issue for local authorities confronting industrial crisis and high unemployment rates. Many middle-size towns tried to develop higher education programmes in order to attract firms and inhabitants by creating new opportunities. As a result, new branches of nearby existing big cities universities were created (sometimes without the agreement of the ministry), offering undergraduate programmes in buildings and operating budgets funded by the hosting municipality.

The commitment of local authorities for higher education and research has been expanded to patrimonial issues. By the beginning of the 1990s, the ministry could launch the “University 2000 policy”. It clearly recognized the appetite of the French local authorities (in particular the Regions) by associating them for the first time to the planning and funding of university building policies in each region. The so-called “U3M” (Université du troisième millénaire) repeated the same experience by the end of the nineties. In the meantime, the pluri-annual contracts signed between the Regions and the state included work-packages on higher education and research, further institutionalising the development of regional policies on these two issues. As a result, the higher education and research infrastructure policies and funding are now shared between ministries (still bearing a large part of it) and multiple regional, departmental and municipal partners, and very often EU through the FDER.

It is important to notice that this renewal of the relationships between universities and public local actors occurred at institutional level and thus completed the interpersonal relationships faculty members already had with local actors. University presidents interact as representatives of their institution with the elected executives of the different public levels and develop partnerships. This became even more true after the four-year contracts had strengthened the collective capacity of universities. As shown by recent works (Malifet 2004; Aust 2004), local authorities have become non-escapable partners because of their role as “funding bodies”. They often have a weak bargaining power on the content of the funded programmes, but they have contributed to a shift from a bilateral, hierarchical and central steering of higher education and research to a more polycentric and horizontal kind of steering. In this new configuration, universities also appear as relevant actors, interlocutors and partners.

1.3. Impacts on the institutional level: the empowerment of French universities

The transformation of French universities into more collective actors is the third major change that occurred in the French higher education system. This growing government capacity of

---

6 Comparing decision-making processes on university building matters in the 60s and nowadays, Aust (2004) showed that the university presidents were able to develop collective strategies and become allied of the recteur d’académie to impose their views to the regional, departmental and city representatives.
French universities mainly resulted from the contractual policy. According to the study\(^7\) by Mignot-Gérard and Musselin, four main changes occurred at this institutional level.

First, university presidents became more proactive. They previously (Friedberg and Musselin 1989) acted as mediators of internal conflicts and representatives of university interests outside the university, but not as managers or leaders. This is no more the case for most. They now define themselves as managers running projects, defining orientations and priorities, interfering and making decisions. They are not only committed and active, they are also said to be influential or very influential on major decisions made within the university\(^8\). More generally they stress the professionalisation of their position: it has become a fulltime job\(^9\) requiring increased competencies (technical, relational, managerial) and team work with vice-presidents and very often the leading administrators of the university. A university president can no more behave as an “enlightened amateur”.

Second, deliberative bodies\(^10\) became more decisional. In the eighties, they were described as “rubberstamp chambers” and their main style of decision-making was “not to make decision” (Friedberg and Musselin, 1989). Things have deeply changed. About 70% of the non-elected members of deliberative bodies surveyed in the above-mentioned study, agree that the three university councils work well. In particular, the university board is considered by 78% of the respondents as “a place where decisions are made” and “as an important body” in 82% of the cases. A qualitative study confirms that current university bodies make decisions they did not make previously (such as ranking the list of teaching positions they ask the ministry to create).

Third, four-year contracts promoted better-shared and more collective identities, norms and values within each university. As in other countries (Altbach, 1996), French academics increasingly have a dual commitment, one to their discipline and one to their institution. The elaboration of strategic plans favoured the development of the latter (Chevaillier, 1998), because it enhanced collective debates within each institution, overcoming traditional faculty supremacy in French higher education (Musselin, 2004). As a result, contracts eased collective decision-making. In the Mignot-Gérard and Musselin’s study mentioned above, 66% of the respondents declared that contracts work as a benchmark for decisions and allocation of additional resources.

\(^7\) Two large field work studies on university government were organised. In 1998, a qualitative study based on 250 interviews was led in four universities (Mignot-Gérard et Musselin, 1999). Drawing on the results of this first study, a questionnaire was built and sent to 37 universities in 1999. About 1660 answers were received (on 5000 questionnaires sent), 1100 from academics and 560 from members of the administrative staff (Mignot-Gérard et Musselin, 2000, Mignot-Gérard 2006).

\(^8\) 24 of the presidents (65%) of the 37 universities questioned in the above mentioned quantitative study were said by the respondents to be influential or very influential on major decisions made within the university.

\(^9\) Recently a president who just left his office after a five year period (1996-2001), told us that he worked full time as president while his predecessor (1991-1996) spent 3 days and a half each week, and the predecessor of the latter (1986-1991) one to two days a week.

\(^10\) Since 1984, three university deliberative bodies are to be found within French universities. Two of them, the Board of Studies (Conseil des études et de la vie universitaire - CEVU) and the Academic Council (Conseil scientifique - CS) deliberate on issues that before submission to the third body, the Governing Board (Conseil d’administration – CA). The latter is moreover responsible for every issue dealing with resources. These bodies are made of elected professors, assistant professors (maîtres de conférences), members of the administrative staff, students and, on the governing board, external personalities. The 2007 act maintains the three bodies but reduces the size and modifies the composition and the election rules for the CA.
Fourth, and as a consequence of the two previous changes, universities get involved in new issues and develop strategies that were not on their previous agenda. Considerable variations can be observed from one university to another, but most developed “rationalization strategies”, i.e. implementation of managerial softwares, improvement of expenditures follow-up, construction of indicators, respect of national budgeting rules, etc. They also try to improve the management of curricula (Simmonet 1999), a domain revitalised by the implementation of the Bologna process, and in fewer cases to develop teaching quality assessment. Furthermore, they often become more involved in developing and formalising their own research policies. Efforts were led to improve the information on research activities and especially on research contracts (many institutions tried to centralize their research contracts management. After the 1999 Innovation Act, some created more market oriented transfer technology offices (called SAIC) in order to stimulate patenting, contractual partnerships etc. As will be stressed in the second part of this chapter, universities claim for being recognized as active and responsible actors in the definition of their research strategies, and are increasingly critical about national research institutions imposing their choices and decisions on universities.

Patterns of decision-making within French universities have thus clearly evolved. They reflect the emergence of universities as collective actors and their increasing institutional autonomy (Berdahl, 1990). It cannot be denied that this autonomy is criticized, that strategic plans are easier to write than to implement, that more decisions are made but that they generally are more incremental than radical or that presidential teams are stronger but often lack support from the deans (Mignot-Gérard and Musselin, 1999 and 2000). A recent evaluation of the contractual policy (Rapport Frémont, 2004) also stresses some limits of the contractual policy and among them the fact that contractual procedures dealing with the university research strategy remain strongly isolated from the rest of the contract.

1.4. Trends and recent evolutions

As will be argued in the second part of this chapter, the emergence of more autonomous higher education institutions brought them to position in research and consequently increased their role in the definition and implementation of research policies.

Even if incremental, the mutation of French universities into organizations (Brunsson and Sahlin-Anderson 2000, Musselin 2006a) resulted from continuity of recent higher education policies. Despite numerous governmental and ministerial changes, their main orientations

---

11 In particular those developed by the GIGUE (Groupement pour l’Informatisation de la Gestion des Universités et Etablissements) which became the Agence de Modernisation des Universités et des Etablissements in 1997: Nabuco for finance and budget, Apogée for the management of the students (inscriptions, diplomas, statistics…), Harpège for human resources management...

12 Academics sometimes try to escape this constraint and develop alternative solutions for the management of their research contracts, solutions about which the university is unaware or unable to avoid.

13 One of them, and not the minor one being that the outcomes of the contracts outcomes are not assessed.

14 The two procedures were managed separately between 1989 (introduction of four-year contracts based on university strategic plans) and 1995. The ministry decided then that research four-year contracts and institution-based four-year contracts should be managed at the same moment and jointly. But in fact the directions in charge of research in Paris lead the contractualisation of the research part, with a rather centralised style of steering, while the directions in charge of higher education lead the contractualisation of the more institutional part and promote more the autonomy of each university.
remained the same\textsuperscript{15}. The contractual policy initiated by Allègre and Jospin experienced more or less favourable times: from a period of disenchantment in 1993 due to restrictions in budget to a renewal in 1997 when Allègre became Minister of Education followed by a progressive routinisation of the whole process after the exciting first years, etc. But the contractual part of the budgets steadily increased and no one tried to come back to the previous system. The ministry even pushed forward pluri-annual university contracts when the LOLF\textsuperscript{16} (a new act reforming French public budget mechanism towards project budgeting) was introduced in 2006. He argued that universities were already in phase with the spirit of the LOLF and were ready to negotiate the indicators to be used in the forthcoming years (Younes 2006).

More broadly, the contractual policy can be seen as a first move of the French central administration in charge of higher education in the direction of a more “evaluative state” (Neave 1988, Neave and Van Vught 1991), relying on procedural rather than substantial interventions. Even if command and control types of decision-making remain, more and more reforms and policies are developed according to the “contractual policy model”: no act but a selected number of decrees or circulars; no detailed rules but some broad principles designing the frame within which higher institutions may define their own way, no constraining national schemes to conform, etc. From this point of view, the implementation of the bachelor/ master scheme in the frame of the Bologna process, strongly resemble the contractual policy: it emphasized innovation within, and differentiation among higher education institutions. But at the same time it relied on procedural normalization (Musselin 2006b).

Slowly but steadily, more autonomy is recognized to French universities. The new act taken in August 2007 to increase “autonomy and accountability of universities” enlarged the scope of intervention of university presidents by rebuilding their institutional relationship to their scientific and executive Boards, by transferring them authority on their technical staff, by giving them new responsibilities on recruitment and management of technical and academic staff, as well as decision power on real estate. Altogether, the new act increases the power resources of individual universities on their internal organization and strategy. Added to global funding by objectives (LOLF) and the contractual policy, it can be expected that this increase in responsibilities will not lead to the withdrawal of the state but rather to the development of new forms of accountability and regulation. It is certainly too early to assess how French universities will reposition as a result of these institutional changes, also depending upon how research organization will themselves evolve in a near future. At least, one may expect increased diversification among higher education institutions. It is sufficient here to outline that within the last 15 years, French universities have imposed themselves as relevant actors in the French higher education system, which they had not been at least since the French revolution. Over the same period, they also succeeded becoming the main places where research activities take place, as will be argued in the next pages.

\textsuperscript{15} Between 1988 and June 2007, nine different ministers have been in charge of higher education, four from the socialist party and five from the right.

\textsuperscript{16} Loi Organique relative aux Lois de Finance. According to this new law, public budgets have to be linked to precise objectives the attainment of which can be assessed with established indicators. The next budget should depend on the achievement of the past year objectives and on the forthcoming new ones.
2- The blurring divide between research and higher education institutions

The emergence of French universities as organizations can also be stressed by observing changes in the divide between research and higher education institutions over the last decades. As mentioned in the first section, contractual policy first separated university contracts from research contracts. Moreover, for the latter, the link between the “university research” and the research funded by the national research institutions was (and still is) rather problematic. This largely reflects the heavy legacy of the divide produced after World War II by the multiplication of national basic or applied research institutions (CNRS, INSERM, INRA, INRIA, etc.) aiming at counterbalancing the weakness of universities.

The 2004 crisis in the public research sector favoured intensive brainstorming among a large variety of actors of the higher education and research system in France (university presidents, academies of science and technology, research organizations like CNRS, Nobel prize winners, members of the Parliament, academics, ministry administration, etc). Amazingly, most published reports share by and large a same vision about which changes should help the urgent modernization need of French research organization. Yet, most ignored the deep changes already experienced by French higher education and research. They did not perceive the blurring divide between research and higher education institutions.

This section deals with the recent history of the relationships between research and training in higher education institutions and principally universities. It shows that disjoint incremental reforms contributed integrating research work within higher education institutions over the last decades. New segmentations develop in the higher education institutions and research organizations that overcome institutional barriers. New organizational agendas favour renewed visions of science, research and teaching.

2.1. The French divide between research and universities

Until the 1980s, French public research was basically the turf of national research organizations, following the post World War II decision to create a specific institution (the CNRS) dedicated to basic research apart from universities. This first creation was followed by others with applied research focus: medical research for the INSERM, agronomic research for the INRA, research on space for the CNES, etc. Although some quite relevant research activity remained inside universities, this division of labour between higher education...
institutions and research organizations did not help overcoming the structural imbalance between both.

Research and teaching institutions partitioning was redoubled by a divide between employment statuses in each. Professors were and remained civil servants. Researchers were state employees on permanent contracts. This labour market organization was supposed to allow for career mobility, and it did to a certain extent. In disciplines well staffed in universities, the CNRS was often a first step towards more prestigious academic careers. In other fields, it could be a path to industrial careers. In 1982, after the socialist party came in office, full-time researchers became civil servants. As curious as it may seem, reformers argued that this would facilitate reciprocal mobility. Facts showed this would not occur. Actually, the growth of the students’ tide and its impact on teaching and administrative loads in widely opened and impoverished universities discouraged mobility from researchers, and developed relative deprivation among academics. These perceptions were so deeply rooted that, when the Minister of Education tried in 1998 to enhance the mobility rate from research organizations to universities by offering very good career deals to researchers, he could not find more than 30 interested persons in the whole country!

2.2. Joint ventures between research organizations and HEI

The divide between universities and research organizations has been perceived as problematic well before the 1990s. In the 1960s, CNRS developed what was to become a large number of “associate research centres” in universities. They were almost a thousand at the beginning of the 1990s, almost half of them in Social sciences and humanities. These associate research centres where accredited by the CNRS in consideration of their quality assessment rather than of their contribution to the specific strategy of their hosting university. The research organization allocated them some resources that decreased when their number increased. Altogether, associate research centres were loosely coupled both to universities and to the CNRS (or to other national research institutions).

One first step to build a tighter link between research and higher education institutions was taken from the beginning of the 1990s onwards by the CNRS. This huge organization that counted around 12 000 researchers in all basic fields expected a low rate of labour force growth, most resources being absorbed by university massification. Over the last 20 years, research organizations have recruited one person when universities have hired ten. Due to the growth of the students’ population over the years 1965-1995, the number of professors was booming. The number of equivalent full-time researchers in the 1970s roughly equated research organizations and universities (Laredo 2002). There are today four times more professors making research (in equivalent full-time) than researchers, so that France altogether counts 50 000 higher education teachers against 20 000 researchers. At the same

21 The CNRS, with 26 000 salaried member, among which 12 000 researchers, is by far the biggest of the French research organizations. It is an omniscience organization dedicated to basic research. The largest other research organizations are INRA and INSERM, both dedicated to applied research. A large number of smaller organizations also specialize on specific fields of research, like development (IRD), transportation (INRETS), etc.

22 Considering time dedicated to research tasks, a professor is defined as half a researcher in equivalent full time.
time, CNRS experienced an increasing burden of human resources fixed costs on research flexibility.

By expanding UMR (Unités mixtes de recherché), joint ventures with higher education institutions, the ministry aimed at taking advantage of massive recruitments of teachers involved in research in universities that were turning more strategic. This policy generated two joint effects. The dissemination of research centres in universities and to a lesser extent in Grandes écoles multiplied almost mechanically human resources, infrastructures, ordinary budgets by adding various sources of funding. Joint ventures with universities helped distributing public research centres all over the country, until then largely concentrated in the Parisian area. It also favoured funding diversification by rooting research in political Regions and local settings.

At the beginning of the years 2000s, about 60% of public sector researchers are established outside the Parisian region, while 80% of CNRS units are joint ventures with universities or Grandes écoles\(^{23}\). The net contribution of universities to joint ventures with CNRS is now bigger than the share funded by CNRS. Being part of a research centre, preferably joint with the CNRS (or other national research institutions), has become an academic norm among professors in most disciplines.

As shown in table 1, both UPR (Unités propres de recherche), research groups that are 100% CNRS and associate research centres decreased in number to the benefit of joint ventures. This growth of joint ventures expressed the changing balance of forces between universities and CNRS. But the overall stability of the total units number shows that both remained unable to select common units according to their relevance in backing their institutional policies. On one side, they often could not preclude local often politically backed resistance against disassociations that was felt by academics and universities as a loss of status. On the other side, universities met intrinsic difficulties matching CNRS national and sectored strategies with universities localized emerging policies.

The shift of power in favour of universities resulted in their growing call for more involvement in the CNRS assessment and accreditation process of joint ventures. They increasingly refused to acquit the consequences of decisions made without them, insisting to be recognised as relevant actors in the definition of the research landscape.

Such developments help understanding further CNRS efforts towards concentration on strategic research in the framework of its own programs. Before 2006, two ways have been explored. The first one focuses on merging units to decrease their overall number. The second one fosters the reconstitution of Associate research centres by outplacement of strategically irrelevant units in universities with a simple quality certification, disappearance of joint ventures and recreation of a small number of 100% CNRS centres in strategic areas. Social sciences and humanities are major targets for such actions, since they count a large number of small size units, more than a fifth of the overall CNRS labour force, and provide only a

---

\(^{23}\) Until recently, CNRS was the only national research institution to set common research units with universities and grandes écoles. Similar initiatives were developed later in other research organizations, such as INSERM and INRA.
marginal contribution to scientific programs currently developed by the CNRS (Rapport Larrutourou and Megie, 2004).

2.3. Pluri-annual research contracts

The rising universities interest for research activities can also be set observing the development of four-year research contracts.

Contractual research policy begun in 1983, i.e. earlier than the contractual university policy presented in the first point of this paper. Its impact on university management was limited because it remained rather centralised and discipline-based. While its contribution to institutional autonomy remained weak, presidents’ role on university research strategies were enhanced by the creation of a new tool: presidents were encouraged to withdraw 15% of all research centres budget allocated by four-year research contracts, and to reallocate them on their own research priorities. A few universities went further. They negotiated with the Ministry the right to dedicate part of their vacant academic positions to support their research policy. It was an important and highly controversial innovation. Until then, allocation decisions on academic position had been dealt by the Ministry using a number of students based formula.

Furthermore, universities pushed for a tripartite negotiation on research in four-year contracts between themselves, the ministry and national research organizations, as a way to secure coherence between research strategic plans developed by each institution. As a result the three separate contracts existing by the beginning of the 90s progressively linked and were finally merged by the end of the 1990s. Research had become a relevant component of university identities, requiring global and coherent strategies, involving a better fit between temporalities of research and training.

The promotion of universities strategies irresistibly push them to differentiate according to the variety of their contextual resources and objectives. Data show increasing gaps according to their share of research. Thus, by 2002, less than 30% of the 85 French universities dwelled half of the “professors researchers” and researchers of all research units labelled by CNRS, while 73 higher education institutions (among which 18 universities) regroup less than 10% of the research forces.

---

24 With a few exceptions. In the late 1990s, the Ministry for research made some attempts to develop evaluation procedures that were taken into account in the negotiation. This attempt was limited to some research intensive universities which were considered able governing themselves and setting priorities. In such limited cases, a small part of the funds were globalized and directly attributed to the university presidential teams.

25 The four-year contract based on the institutional strategic plan, a research contract with the ministry(ies) of Education and Research and a third one with the national public research institutions like CNRS.

26 This is more true on paper than in the day to day practices. The merger of the three contracts is more symbolic than effective. The procedures and central directions dealing with the institutional contracts remain quite separated from those for the two others. The contracts between the universities and the national research institutions remain quite unbalanced und universities do not feel like being in a situation enabling them to really negotiate.
2.4- The 2006 “Pact on research” and research Act

Two years after unrest and intensive debate on the French research system started, the “Pact on research” offers new institutional frames that confirm and prolong former evolutions. It bases a diagnosis of decreasing performance in citations and patenting on the obsolescence of the very complex French research institutional structures. The actual distribution of research human resources in micro-level research centers does not match institutional decision-making borderlines. Research is both dispersed in numerous centralized institutions, which variable perimeter and operational and assessment rules diversity discourage strategic efforts and wastes human energy and public money. This situation results from institutional crystallization of former missions that have been incrementally redistributed. It has become highly inappropriate to the development of both strategic research and human capital creation in higher education that are both major trigger mechanisms economic growth in knowledge-based societies.

The vision of the desirable future is based on a somewhat idealized vision of other national research and innovation systems. In the best performing ones, efficiency is rooted into university organizations that form the single envelops for teaching and research activities. Research teams compete for money by answering calls that originate in the national, local, supranational public sector, usually originating from scientific councils, as well as in industry. Research structures are flexible since they can legally adapt their human resources according to the competitive grants they get, even though the also received basic grants. Management of structures, human resources and money is simplified by the substitution of item budgeting, line accounting and ex ante control by global budgeting, cost accounting and ex post control. Quality of research and training projects and human resources is assessed by single independent evaluation and accreditation agencies. Universities identities and budgetary structure and origin vary according to the missions they fulfill. Because they are comprehensive organizations, they can fit their own strategy to their contextual resources and constraints.

The Pact takes inspiration in these observations to offer new organizational and institutional frames. In order to create new dynamics without generating paralyzing social unrest, it chooses to superimpose its new offers to the old structures, to develop them on a bottom-up optional basis. It counts on the dynamics of the newly created structures to impulse a gradual global rearrangement resulting from rising obsolescence of the old owns.

Firstly, it creates three new agencies. Two of them (Agence nationale de la recherche – ANR – and Agence de l’innovation industrielle – AII27 -) concentrate public funding of basic and applied research without discriminating among institutional status of applicants. A third one (AERES- Agence d’évaluation de la recherche et de l’enseignement supérieur) is meant to concentrate assessment and evaluation of public research and teaching institutions and teams, whatever their status.

Secondly, it offers three new optional networking schemes with the ambition to join and sometimes merge research and/ or training efforts of different institutions under shared strategies of economies of scale and cross fertilization. Each scheme may be of interest for

---

27 The AII has been recently merged with another national public agency, OSEO.
universities. The first one invites territorial total or partial clustering on teaching and research in PRES (Pôles de recherche et d’enseignement supérieur) by offering a new facilitating legal status and some incentives in terms of human and financial resources. Universities, Grandes Ecoles research organizations are all eligible to this scheme and over 10 of them have already been created. The second scheme invites localized and thematic networking on edge research into RTRAs (Réseaux thématiques de recherché avancée). They benefit from a high level of funding (State subsidies amounting to 15 Millions of euros on the average for the first round of 13 RTRA created in 2007, plus additional funds provided by founders, buildings, equipments and public salaries of human resources involved), with the ambition to reposition France at the best level of world competition. The last one, “Pôles de compétitivité”, fosters territorial clustering of industrial research with applied public research activities developed in universities and research organizations, with financial incentives that vary according to size and ambition of the clusters.

Thirdly, the Pact offers legal frames and rules of management facilitating operation of such complex new organizations. In particular, PRES and RTRA can create foundations allowing for self-government and ruled under private law. It can build its own capital, possess real estate and recruit employees. This opens the way to further transgressions of civil servants statuses. PRES and RTRA can now offer private contracts on a competitive market basis. It can for instance create chairs for notorious researchers offering high salaries and a good work environment. It can offer doctoral and postdoctoral positions on its own programs. It can decide upon its own organization of work allocating research and teaching according to its own needs and constraints, and to preferences of its scholars.

While it does not reform higher education and research organizations statuses, the 2006 Pact deepen and accelerate the blurring of barriers between them. It develops strong financial and legal incentives for research excellence, for clustering and for cross-fertilizing institutions. It does not force any of them to play that game, but it sends strong signal on what a positive dynamic should be. Leaving organization building to bottom line actors like university presidents, heads of research organizations, regions, local industry, it reinforces and extends the organizational trend that has localized in universities for three decades. Doing so, it also gives a hard time to research organizations. It largely deprives them from financial resources by the development of the research council (ANR), it make them loose their monopoly on evaluation and accreditation in favor of the evaluation agency (AERES). Finally, the massive development of cluster policies of various kinds, largely territorially-based, makes it difficult for these nationally-based institutions to keep on developing autonomous strategies and impose them to Higher education actors or local stakeholders.

3. Implications of changes on research funding and doctoral school

Until now, we have looked at the higher education system as a whole and tried to identify the changes it experienced. In this section, we put emphasis on the two tracers each chapter of this book focuses on, as showcases for the impact of changes at the system level on the micro-level, looking first at funding mechanisms at the level of research units, and second, at the emergence of doctoral schools.
3.1. Funding mechanisms in research units

The fact that research institutions research centres turned into joint ventures with universities, and thus receive funding from the national research institutions and from universities did not increase their resources. As a matter of fact, this turn occurred at a time when the overall budget of national research institutions decreased. The “regular” public funding (allocated through the four-year contracts) is more and more strictly dedicated to fixed costs and is no longer sufficient to cover research programmes. Diversification of funding sources has also become a leitmotiv from the central national authorities, while the ministry and the national research institutions (CNRS, INSERM, INRA…) progressively abandoned their “big programmes” policy in the 1990s. As a result contractual money increases. More and more, resources must be secured for specific projects through call for proposals launched by regions, national ministries or the EU, by firms or foundations, etc. This is reflected in the composition of the budgets of the labs as well as in their co-publications (Grossetti et Milard 2003). Yet, at the aggregate level, diversification in resources does not mean a significant increase in private funding, even though large variations may be found from one research lab to another. Resources remain mostly public but are provided by a wider variety of public bodies (IGF-IGAENR 2007). Time and effort devoted to get access to resources seem to have considerably grown. Moreover, researchers increasingly perceive that mixing different sources of funding is required to build ambitious projects. The number of actors involved in the funding of research thus considerably increased. But the funding instruments also evolved as “big programmes” vanished, and they share two characteristics. They first foster collaborative research among research groups but also with firms. For instance, at the end of the 1990s, networks for research and technological innovation were launched and required the cooperation of a research lab, a firm and a SME. Second these instruments favour co-funding: it is either required to show there exists another source of funding to apply for a supplementary one, or they work as « sesame », a first grant opening the doors to other resources. Researchers often complain about the increase in administrative load resulting from such processes.

In joint venture units, the transformation of the funding mechanisms led to contradictory consequences. On the one hand, it increased their autonomy by diversifying sources. Symmetrically, it increased their dependence towards the universities by imposing their mediation on certain topics that used to be directly dealt with the national research institutions. As long as both institutions remained distant from each other, joint venture research centres could easily play a double game depending on resource offers of each institution. Double game became more difficult as institutions strengthen their contractual links. Universities steering and control on research units increased as they developed their own global strategies including research. First, they gathered more information about their research labs (by gaining better access to evaluation reports and by building central monitoring on their contractual fundings). Second, research intensive universities took advantage of new ministerial or regional sources of funding to select some priority themes and impulse their own research policy, thus acting as. « intermediary actors » (Barrier 2006). The diversification of resources and the stronger integration into universities policies strongly impacts research agendas by profoundly changing the nature of academic work. Researchers must develop abilities in building bridges between different sources of funding, cutting research programmes into pieces that may be funded by different partners, be part of many networks in order to be informed about all possible opportunities (Barrier et Bovy 2007).
3.2. Doctoral schools

In the mid 1990s, the Ministry(ies) of Education and Research encouraged the creation of “doctoral schools”. At first, it was to be done on a voluntary basis, but around 2000 it became mandatory. Giving advantage of a supposed pressure from the EU, the Bologna process helped stabilizing this new organizational template. From the very beginning, the implementation of the Bologna process in France was not limited to the bachelor/master scheme but included doctoral training as well. It is why it has been called the “LMD reform”, (Licence/master/dissertation reform).

Doctoral schools were defined as the locus of doctoral studies. They were based either on a given discipline, generally across universities, or on a multidisciplinary gathering within a given university. Ministry decision-makers were divided on that point. Considering the contribution of the doctoral schools to universities identities, some believed that they should be located in single institutional settings. Others were reluctant to confront and weaken long established academic networks crossing universities boundaries. Therefore, two different templates came to coexistence, as show in Charts 3 and 4.

Each doctoral school had to win accreditation in the framework of the pluri-annual contracts embedding (joint) research centres and diplomas as components of university strategies. In this manner, they contributed to focus universities identities around research and to increase cooperation on research between universities. They were allocated specific resources in this framework (human resources, teaching budgets, bursaries). They had to take care of common needs of doctoral students, such as learning foreign languages or computer software, getting information on available careers, helping students to prepare their vitaes and give presentations, or building interdisciplinary programmes in given fields. Therefore, they had to generate rules as common allocation routines of scarce resources among actors that might be heterogeneous according to the university or the discipline they belonged. In the former state of organization, each academic in charge of a pre-doctoral degree (DEA) was allocated resources from the ministry, with no real consideration of its links with research centres. He was dependant neither upon his colleagues nor upon his president. By regrouping research centres doctoral schools the ministry constrained developing common interests, fostered negotiation and compromise on common purposes and thereby promoted new collective identities within research based universities. Doctoral schools were expected to behave as meso-organizations within the university. Altogether, they enhance new university hierarchies, new partitions of professional groups between teaching and research and new modes of organization of university labour.

Recent developments lead to more specialization of universities in terms of the disciplines in which they are allowed to deliver doctoral degrees. Until recently, in theory, any professor was eligible to deliver a doctorate in any discipline and any university. With the creation of doctoral schools, a first step was taken: professors or researchers could only apply to have to be settled for tutoring doctoral students if settled into research centres belonging to a Doctoral school. A second step was taken in 2007, when a new decree stated that doctorates in a given discipline can only be tutored by professors of the discipline (of course, it was already rather

28 At the beginning of academic year 2001, there were 317 doctoral schools in France, disseminated among the 85 French universities, plus 35 other higher education institutions. See Projet de loi de finances pour 2003.
29 Fortunately, it was not the case! Medical doctorates are delivered in medical schools and not in Social sciences departments. But it was the way to stress the universality of Universities.
common although non-formalized!!) and in doctoral schools accredited in the discipline. This new rule carries along more differentiation across universities according to disciplines.

In terms of differentiation between universities, such a reform upgrades a template where the locus of research excellence would be placed in strong research based universities, and take advantage of other academics in the same geographic poles, without forsaking anyone worth on the side of the road. Such developments might allow skipping the step of institutionalisation of research universities, with a double benefit. It would avoid formalizing hierarchies between universities with the danger to confront the national drift towards equality, and it would avoid stressing an institutional model that might soon become obsolete.

This new template contributes to bringing research into universities. Doctoral schools are organized around research centres rather than teaching departments, with a double effect. They stress that professors have not only to be department members, but also to join research centres and contribute to their programs to be considered as “research active”. If not research active, they are not allowed to recruit doctoral students. They cannot apply for state doctoral scholarship now allocated through the doctoral schools. Therefore, doctoral schools and research centres couple more tightly on doctoral students. On one side, students are required to validate a relevant number of courses inside their doctoral school curriculum. They have to work on their own doctoral dissertation inside a research centre. On the other side, doctoral schools resources are available to supervisors under condition of good integration.

By the same token, in research active universities, these changes favours academic recruitment on the basis of potential contribution to local research units. This movement has started with new position openings based on research profiles. It is eased by the made possible by the downturn of students flows, but hardly understandable bottom line academics when they are not themselves involved into research work. The division between “research actives” and others concentrating on training will become more explicit with the devolution of human resource management to universities. Reciprocally, full-time researchers are encouraged to take an active role in monitoring students, which is not part of their former mandate, nor informal culture. Research centres are invited to integrate students in their programs and to treat them as apprentice labour force. This distinction is critical, since it may displace the source of academic identities from departments to research centres. The institutional fiction of the “professor researcher” may well not resist too long to this shift. Such an institutional segmentation of the labour force might be complemented or substituted by statuses setting better recognition of profiles among university professors and researchers with the new 2007 university autonomy Act.

To apply for accreditation in the framework of pluri-annual contracts, each doctoral school had to stress its coherence and feasibility with regard to its mother institution(s)’ policy, explaining how its topic, size and organization contributes to the general university purpose. As shown by comparing Charts 1 and 3, doctoral schools contributed increasing “university

---

30 It was created at the end of the 1970s as a result of the “drift to equality” in the post-1968 French universities. It defined a single profile for university academics, sharing the same teaching load whatever their position in the academic hierarchy and their activity in research. It forged a niche for free riders. It also helped diversifying tasks in teaching departments to face the increasing administrative workload with the multiplication of students and diversification and degrees.
density” by fostering interdependencies within and between its component subsystems. By the same token, emerging interdependencies enhanced president’s leadership by substituting negotiated links with the president’s team for asymmetric relationships between DEAs leaders and the ministry. Doctoral schools are now well established in universities and other HEI. Yet, decision makers have recently introduced a new proposition on their agenda. They suggest restricting doctoral accreditations within the scientific fields of their accredited doctoral schools. If this step were taken, it would challenge the very definition of professors as self-sufficient supervisors. Yet, in order to use all available human resources, doctoral schools could regroup members on a geographical rather than institutional basis, differentiating between full, partners and associates members. Full institutional membership would be based on the provision of adequate research conditions within a given university, while partnership or association could occur on the basis of individual capabilities of professors.

4. The impact of NPM and network governance on the emergence of French universities

Over the two last decades, French higher education and research underwent rather deep changes. Some of them might at first glance look like implementation of NPM narratives. Others might be related to the network governance model. Yet, in either case, close empirical work shows that it is not the case.

4.1. Can the contractual and the research policies be labelled NPM?

The transformations described above rebuilt multilevel governance of universities, by challenging the discipline-based decision-making processes in the ministry, fostered institutional autonomy and collective capacity of universities and reorganizing at least partly relationships between central levels of government, meso-level of universities and micro-level of research centres, departments, doctoral schools, etc. Should that lead us consider that they result from the implementation of the NPM narrative? We argue below in favour of a negative answer.

At first glance, the French contractual policy shares many features with the NPM narratives. It relies strongly on a decentralised movement towards more autonomous and empowered entities (i.e. the universities). While the ministry defines a general framework, the decentralised units are asked to develop their own policies that are formalised into strategic plans setting priorities and objectives. They constitute the basis on which the central authorities negotiate equipment, budget and staff resources with each single entity. These features may be seen as a move towards the evaluative state (Neave, 1988; Neave and van Vught, 1991) and towards managing by objectives. Furthermore, the doctrine defined by the DPDU insisted on the need to foster evaluation within the universities and emphasised the importance of accountability as a counterpart for the increased institutional autonomy given to each institution and to its leadership.

As often stressed in NPM narratives, decentralisation went along with more monitoring and more hierarchy. On the one hand, contractual policy does not express decreasing commitment from the state, neither in financial terms (they were introduced in time when the economic context was not bad and were associated with increases in budget), nor in steering terms. It is
a “new instrument”\textsuperscript{31} that promotes and values institutional autonomy. The ministry considers it as a mean to better manage French universities, improve their self-awareness, self-control on how “it really works” (Berrivin and Musselin 1996). On the other hand, it pushes towards strengthening and clarifying hierarchical lines, by pushing university presidents at the forefront of decision-making, as the only relevant actors on all issues mediating all relationships between the Ministry, university members and entities. Within each university, the presidential team is expected to behave more like managers, to be more directive, to conceive policies and implement them and to integrate the centrifuge forces of the facultés.

Last but not least, while equality and uniformity are strong national values, the contractual policy favoured, recognized and legitimated differentiation, enhancing complementarities as well as competition among universities. Complementarities because universities no longer try to be alike by drawing on uniform and equalitarian rules but look for their own niche, their own identities on specific areas. But competition at the same time, because being different, universities have to better exhibit their differential advantages, their attractiveness, etc. In this sense, contracts might be considered as “market-like” mechanisms promoted by the NPM.

Indeed, contractual policies can be expressed in the NPM vocabulary. But it is an \textit{ex post} translation of historical facts where the NPM narratives did not play any role whatsoever. First because it occurred before such ideas reached the French public decision-makers and administration. French reforms developed in isolation, i.e. without observing foreign experiences. They rather tried to find local (i.e. French) answers to local (i.e. French) problems using new resources rooted in 1980s political decentralisation? They revitalized local interest for universities as possible sources of dynamism prestige, knowledge and economic strength. It is only late in the process, thanks to a late diffusion of narratives through European discussions, that they discovered they shared common experiences with other European universities and that French public administration discovered NPM narrative. As shown by Bezes (2005) the NPM narratives diffused in France in the mid 1990s and became influential after 1995. The empirical study led by Musselin (1995) on the design and implementation of the contractual policy confirms this result on higher education. None of the political promoters of this policy and none of the DPDU implementers was linked to the NPM epistemic community or had heard of it at that time. They also had very poor knowledge about what was going on in higher education elsewhere in Europe. As shown by Musselin (2004) contracts appeared as a “good” solution more by chance than by choice. They were introduced at a favourable moment and timing and benefited from this positive juncture. They were not part of a more global programme of state reform. They were not implemented to conform with NPM.

Second, in many respects, there is much more distance between the contractual policy and “NPM” than it looks at first glance. Three examples nicely illustrate that point. 1) The contracts for their promoters were in fact very distant from market-like mechanisms. They aimed at reducing inequalities\textsuperscript{32} within the French system rather than differentiating and developing competition among universities. Differentiation and competition are incremental emerging results of contractual policy and in no way the produce of an \textit{ex ante} plan. 2) The contracts were not, and still are not, conceived as management tools intended to allocate funds according to objectives, to assess them and to master expenses. They were seen as

\textsuperscript{31} As argued by Lascoumes and Valluy (1996), conventional instruments are all but new. What is new is how frequently they are used.

\textsuperscript{32} For instance, between the generally rich old universities and the new ones, usually poorer, or between various regions of France.
“institutions builders”. Their major role was to strengthen the collective capacity of universities (against the facultés and individual academics). 3) More emphasis has been put on the preparation and negotiation of the contracts than on their evaluation. Fifteen years after the first ones, assessment remains very superficial and its results do not count for much in the negotiation of the next contract.

About the increased involvement of universities into research strategies, the same observations may be expressed. It is clearly part of the general strengthening of higher education institutions and their transformation into active actors of their own development: therefore, this evolution also appears in phase with the NPM narratives. But, again, there is no evidence of such an influence. Decisions were made which look compatible with NPM: it favoured the empowerment of decentralised higher education institutions, relied on the development of contractual relationships, and aimed at better monitoring the development of research within the universities. Nevertheless the NPM rhetoric was never present in the arguments developed by the actors.

Thus, those decisions (not to speak of their implementation) cannot easily be expressed into the NPM narrative. As compared to the contractual policy, research organization policies did not clearly deviate from the traditional type of higher education steering. Decentralisation, recognition of university leaders as relevant actors, changes in central actors style of involvement have not gone so far as they did on training or institutional management. Until the 2006 Pact, Ministries and national research organizations were openly reluctant delegating (even under control) research policies to higher education institutions. Only some shy attempts were made by the end of the 1990s to authorize piecemeal devolution of resources to the best-managed universities.

As a result, the French reforms, even if they show some similarities with the changes undergone in other countries are neither the result of the adoption of NPM orientations nor an unconscious or involuntary form of NPM, at least until the mid 2000s. Different conclusions will probably be raised about the introduction and implementation of the new law on national budgets (LOLF) and the creation of the new funding and evaluation agencies (ANR and AERES) in 2006. But up to the recent years, changes occurred without being related to or forms of NPM.

3.2. A move towards the governance model?

The governance narrative is often used to describe the shift from a bilateral, hierarchical and central steering of higher education and research to a more polycentric and horizontal kind of steering. Recently, Aust (2004) compared decision-making processes on university building matters in the 1960s and nowadays. No central ministry is nowadays able to carry alone any real estate project: co-funding from the local authorities is required. Aust clearly observes the increasing number of actors involved, mostly newcomers from local/territorial bodies, Yet, this new stand does not fit as a pure governance network pattern (Le Galès, 1995): networks have indeed enlarged but the national state remains a strong and dominant actor. The number of stakeholders involved in the universities steering process has increased. Yet central bureaus control has not loosen or soften even though coordination has developed. They keep enough power at the territorial level to impose their views, demands and controls on local authorities.

---

33 J.-F. Mela, former head of the Mission scientifique universitaire at the Ministry of research, interview.
through the active mediation of the *Recteurs d'académies* (representing the State on educational matters at the level of administrative districts called departments).

As shown by the different graphs picturing the higher education system in France in this paper, the system is getting more and more complex. It went through a clear increase in the number of actors and structures involved. In particular, public authorities and political and administrative actors interested in and concerned by the steering of this system steadily grew: city, departmental and regional players became partners (or opponents) of the national, traditional actors, and most of them are interacting with the EU level. Some, even used the latter as a resource to weigh on the national scene.

But, again, this incontestable evolution cannot described as the result of the overwhelming success of the network governance narratives over the French higher education landscape. It rather belongs to the very traditional French debates and tensions between the Girondins (in favor of decentralization) and Jacobins (in favor of decentralization) on the one hand; the financial constraints met by the central state, confronted with a second massification, on the other hand; and the increasing development of European commission-based or intergovernmental initiatives on higher education and research at the European level.

Nevertheless, this general observation on the overall transformation of the higher education system has to be nuanced when one looks at specific parts of the sector. The transformation introduced on the funding of research in the 1990s can more easily be interpreted as a shift from a centralized conception (with big programs and national research planning) to a network-based conception. It aimed at introducing a new paradigm, which can not be interpreted with the traditional center-periphery French dilemma. Not only should researchers seek for multiple collaborations (with other disciplines, countries, teams…) but they should also diversify their funding sources and mobilize a large range of heterogeneous funding partners: industrials, local and national public actors, European bodies…

Two intermediary conclusions can thus be drawn from the French case and its relationships to the NPM and network governance narrative. First, all and every change in the public sector should not be to quickly automatically attributed to the influence of a specific narrative. Even if the results may look close to a certain doctrine, it does not mean that the latter infused the change process from the beginning. In France, the reform of the state and its administration aiming at a “stronger management of the public sector” (cf. introduction of this book) has been on the agenda for many years, even if the NPM narrative only diffused in the recent years. In other words: all reforms of the public administration should not be labeled NPM. Second, the influence of some narratives may be limited to some specific parts of a sector, as shown by the stronger impact of the network governance narrative on the allocation of research funding, rather than on the architecture of the all higher education system.

There is therefore a need to try and distinguish the impact of the narratives as motors of change and the use of these narratives as an analytical tool aiming at assessing how far or how close are the change observed in a country from the ideal-typical model of this or this narrative. In the case of France, the second option is more accurate and shows that the outcome of the change experienced by the French system for some can be interpreted as a move towards forms of NPM and others as a move towards network governance, and they are articulated one with another rather than leading to incoherence and contradictions.
Conclusion

As argued and documented in this paper, French higher education and research institutions experienced rather important and significant changes over the last decades. But these transformations present specific features. They do not link to very visible reform processes and programmes. They resulted from discrete and disconnected actions with a strong and partly unforeseen impact when implemented. Reformers action was mostly incremental, new instruments chained without being embedded into ex ante planning. Reform in French higher education is an excellent exemplar of the “art of muddling through” (Lindbom, 1959). For that very reason, no specific narrative can circumscribe it, inasmuch as narratives are considered as theories for action. It would be a misleading ex post facto reconstruction to analyze the observed changes as NPM inspired. Nor did the NPM narrative influence whatsoever, nor did the implementation of change follow paths and used tools described as specific to NPM.

One major change certainly results from the increasing number of actors involved in the steering of universities over the two last decades. Yet, its actual impact remains to be further questioned. It clearly invites to explore the hypothesis of an emerging governance model. But further investigation is needed to establish what degree of co-construction and co-decision has been reached, how much new stakeholders actually impact universities policies and how far the national state has repositioned.

The overall description and conclusions should also be further detailed to account for diversity of emerging organizations. Joint ventures seem to have different impacts depending upon the part played by research in universities, the balance between researchers and professors in specific disciplines and the importance of large equipments and division of labour in various fields. Pluri-annual contracts do not impact all universities to the same extent. Some used contract as a resource to enhance internal co-construction of purposes and means and to improve external relations with stakeholders. Others restricted the contract to a formal constraint, collecting claims of departments and research centres without developing internal collective coordination, leaving the selection of ends and means to central administration as in good old times. In certain places, doctoral schools enhanced collective innovation spirit, brainstorming on common needs of students, building of common rules, cooperating between departments and research centres. In others, it just meant pouring old wine in new bottles, refusing to elaborate common norms and managing to allocate resources according to former customs.

Academic values and norms can resist organizational changes when they provide enough rewards to part of the academic communities. New incentives may remain unseen from many, especially where they do not impact their personal organizational environment. For instance, it does not really matter who decides on state bursaries allocation in fields or universities that do not care about providing scholarships to students, that have no chance to capture any, or that are able to find other funds for students. The promotion of teamwork may simply not fit in disciplines essentially based on individual work, where the need for rationalization of resources is usually not felt as strong enough to enhance coordination, economies of scale and division of labour. In such cases, organization costs are not considered worth engaging.

Reforms that developed over the last decades clearly foster specific types of local organization that obviously do not fit as well in all scientific sectors. They contribute building conditions for scientific performance that require costly equipments, cooperation, division of
labour, flexibility of human resources, etc. To a certain extend, they facilitate and rationalize organizational forms that already existed.

They may also help renewing organization in sectors that are more reluctant to change in such a direction. What is a necessity in molecular biology, astrophysics or nanotechnologies can also be a resource in social sciences and humanities. It is very likely that collective organization of research will change work content and research products in these fields like in others. Therefore, it may well be that some types of research work just do not fit this pattern. But it may also be that such changes are rejected because they might endanger both free riding and traditional powers based on personal confusion between training and research.

References


Musselin C. (2006b) : « Les paradoxes de Bologne : l'enseignement supérieur français face à un double processus de normalisation et de diversification », in Leresche Jean-Philippe,


Chart 1- The HE landscape at the beginning of the 1980s

* Associate research centre
** Diplôme d’études approfondies (advanced studies degree, 17th year of education and last year in the curriculum before entering doctoral studies)

Table 1- Evolution of CNRS research centres since 1992

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100% research centres</td>
<td>237</td>
<td>222</td>
<td>204</td>
<td>192</td>
<td>198</td>
<td>190</td>
<td>183</td>
<td>161</td>
<td>136</td>
<td>109</td>
<td>108</td>
</tr>
<tr>
<td>Joint ventures</td>
<td>100</td>
<td>117</td>
<td>134</td>
<td>273</td>
<td>385</td>
<td>522</td>
<td>521</td>
<td>624</td>
<td>743</td>
<td>936</td>
<td>1060</td>
</tr>
<tr>
<td>Associate</td>
<td>960</td>
<td>941</td>
<td>928</td>
<td>813</td>
<td>678</td>
<td>529</td>
<td>507</td>
<td>397</td>
<td>291</td>
<td>108</td>
<td>43</td>
</tr>
<tr>
<td>Research centres</td>
<td>1297</td>
<td>1280</td>
<td>1266</td>
<td>1278</td>
<td>1261</td>
<td>1241</td>
<td>1211</td>
<td>1182</td>
<td>1170</td>
<td>1153</td>
<td>1211</td>
</tr>
</tbody>
</table>

Source: Labintel, UNIPS-CNRS.
Chart 2- The HE landscape after the creation of joint ventures, pluri-annual contracts

Chart 3- The HE landscape after the creation of doctoral schools (type 1)
Chart 4- The HE landscape after the creation of doctoral schools (type 2)