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The Spatial Dimension of Educational Inequalities

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1.1. Introduction

Educational inequalities can be understood as a specific type of social inequality, in that they involve institutional systems that play a crucial role in the construction of social trajectories. Meritocratic ideology, which goes hand in hand with the idea that each pupil should have access to the best possible education, can thus justify practices of differentiation (adapting curricula, creating streamed classes, suggesting school orientations corresponding to the "skills" of each pupil, etc.). As inequalities are always associated with a school *system,* the history of these systems plays a decisive role in understanding the ways in which socially differentiated schooling trajectories are constructed and justified. As Felouzis (2009, §3) reminds us, "each national education system constitutes a response to the universal and recurring problem of inter-individual inequalities linked to social stratification". Using the French system as a starting point and comparing it with elements describing other school systems, this chapter shows how geographical approaches can contribute to an understanding of educational inequalities.

This question is far from obvious, since the spatialization of social issues can present an obstacle to the analysis of the mechanisms producing inequalities (Tissot and Poupeau 2005). Indeed, the use of spatial categories – such as the neighborhood, priority education zones or schools in the Paris suburbs – can reinforce "a homogenizing vision of populations that are *irreducibly different*" (*ibid*., p. 8).

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Moreover, for Tissot and Poupeau, this spatialization "leads to thinking about the situation of the most segregated territories independently of overall mechanisms" (*ibid*., p. 5). How then can we construct a geographical approach that does not spatialize social issues, and that makes it possible to grasp the mechanisms of production of social inequalities at and/or through school[1]? It seems to us that the concept of spatial dimension which we define in line with the work of Veschambre and Ripoll (Ripoll and Veschambre 2005; Veschambre 2006) makes it possible to avoid the pitfalls of the spatialization of social issues while also taking into account mechanisms which would otherwise be invisible.

This concept is part of a Bourdieusian reading of the social world, the key features of which are presented in this introduction. The theory of reproduction (Bourdieu and Passeron 1970) describes the school as a product of the social world and as a way of maintaining its structures. Social hierarchies are reproduced from one generation to the next through their transmutation into school hierarchies. While the school presents itself as indifferent to social differences, it legitimizes a relationship to the world and to culture which is specific to the dominant classes (relationship to the written word, to speech, to authority, the "legitimate culture" of the arts and letters, etc.). In this approach, the exceptional trajectories of social mobility, whether upward or downward, contribute to enriching the meritocratic ideology of school, without calling into question the reproduction of social positions[2]: "The relative leeway of the school game enables the reproduction of social positions – in complete invisibility" (Palheta 2012, p. 326). This conception is often presented as being opposed to Boudon's individualistic approach, in which individuals make cost/benefit trade-offs at each school level. The Boudonian reading of trade-offs describes the social filtering operated by the school system, but understands it as resulting from social stratification, without the school's autonomy in producing social inequalities. The Bourdieusian reading, on the contrary, emphasizes the active role of the school system in the production of inequalities, through reproduction mechanisms (guidance councils, assignment mechanisms, school mapping, etc.) on which the school system is based. We revisit these later in the chapter.

The Bourdieusian approach, which can be qualified by its author as structuralist constructivism or constructivist structuralism (Bourdieu 1987, p. 147), describes the

1. By "school" we mean the educational system, which implies considering different levels (primary, secondary, post-secondary, higher education), sectors (private, public) and a wide variety of social agents (teaching and administrative staff, pupils, students, etc.).

2. In the Bourdieusian relational perspective, we are interested in social positions relative to a social space, and not in the social conditions of existence: having a baccalaureate (high school diploma) does not have the same social meaning today as in the 1960s.

positions (and trajectories) of social agents in a social space structured by capital (economic, cultural, social and symbolic). The proximities between agents outline social groups, or even social classes. The link between the individual action of the agents and the objective social structures is made by the *habitus*, which is the result of the incorporation by the agents of the system of norms, practices and dispositions associated with their social position. This approach makes little room for space in the geographical sense[3], and even underlines the errors[4] made by an observation of "physical" space detached from a reading of social structures (Ripoll 2013): "One can only break with the false evidence, and with the errors inscribed in the substantialist thought of places, if one proceeds to a rigorous analysis of the relations between the structures of social space and the structures of physical space" (Bourdieu 1993, p. 250). We find here the limits related to the spatialization of social problems, stated in the introduction following the works of Tissot and Poupeau.

The work of Veschambre and Ripoll allows us to place the Bourdieusian theory in a geographical approach based on a dimensional definition of space. According to Veschambre (2006), the term "spatial dimension" spread slowly from the 1970s onwards in French social geography. For proponents of the dimensional approach, space spans society like time: it is not as aligned with society as the term "socio-spatial" would have us believe. Space as a dimension then allows us to "reveal the social construction of the inequalities by and faced with the material and ideal relationships with space" (Ripoll and Veschambre 2005, p. 481). Thus, "the spatial dimension not only raises the question of forms of inequality that have remained in the shadow of statistics, but it also questions all of the processes that (re)produce social conditions and positions, and therefore social relations" (Ripoll and Veschambre 2005, p. 467). Space is "an inherent *dimension* of social relations: the social is *always already* spatial" (Ripoll and Tissot 2010, p. 5). Ripoll and

3. Bourdieu sometimes underlines geographical variations (the difference between Paris and other places, for example). In a late text, entitled "Effects of Places", he clarifies the relations between "social space" and "physical space" on a theoretical level, the latter being a "reified social space" functioning as a social catalyst: "The gathering in the same place of a homogeneous population in dispossession also has the effect of redoubling the dispossession, notably in matters of culture and cultural practice" (Bourdieu 1993, p. 261).

4. See in particular the notion of the screen effect, which shows that observation at certain scales masks social structures: "This properly social delimitation is specified by the effects of spatial delimitation in that agents are always (more or less) attached to a locally based social space, the position in this space (village, neighbourhood, set of classmates, colleagues, etc.) tends to obscure the position in the global space of the familiar subspace which can be experienced as a microcosm of the social world as a whole (with its dominants and its dominated, etc.)" (Bourdieu 1984, p. 15).

Veschambre (2005) show that we can analyze the spatial dimension of different types of capital: properties (holdings, concentration and location of surfaces) objectify the spatial dimension of economic capital and living spaces objectify the spatial dimension of social capital. It is also possible to work on the spatial dimension of the conditions of accumulation and use of social resources through concepts such as mobility or the capital of autochthony, which is the way in which "inscription in local social networks can generate real resources for the working classes" (Ripoll and Tissot 2010, p. 6). This dimensional approach of space allows us to analyze the effects of places "without empowering them, to identify unevenly distributed relative advantages without making a new spatial capital" (Ripoll 2013, p. 371).

Drawing on the Bourdieusian analysis of the three states of cultural capital (1979), which distinguishes between the objectified state (cultural goods, such as paintings, books), the institutionalized state (school titles, status), and the embodied state (*habitus* or disposition of agents), Ripoll shows that "space [...] exists (at least) three times: in things in the material sense, but also in institutions and in heads" (2013, p. 377). The materiality of the social world constitutes the most obvious state of the spatial dimension: it refers to things, thus to bodies, architectural elements or landscapes, localizations and displacements. But the spatial dimension allows us to link these material elements to the representations of social agents (what is close or accessible, familiar or even appropriate places, places from which one feels excluded, etc.) and to institutional functioning (administrative networks, action zones and perimeters defined by public policies). Understanding the spatial dimension through the three states of cultural capital thus helps us not to forget that space runs through institutions and representations and helps us to avoid reducing it to its materiality or to locations.

This approach is particularly interesting for understanding schools because cultural capital plays a crucial role in the school field and in social reproduction. Indeed, school qualifications (diplomas) are one of the ways of objectifying cultural capital. The place of other types of capital in the field of education depends on the system observed and the period. In France, for example, economic capital has historically played a less central role in educational trajectories than cultural capital, insofar as the public and free system forms the structure of a large majority of the primary and secondary educational field, including the most prestigious establishments, which are in the public domain. The current role of economic capital is, however, in dispute because the increase in school competition reinforces residential strategies or the choice of private schools, which presuppose families having sufficient financial resources. In Helsinki, for example, the very strong

correspondence between school sectors and student catchment areas makes residential mobility one of the only strategies that families can use to change schools (Bernelius and Vilkama 2019), and this requires economic capital.

The spatial dimension allows us to grasp school inequalities through the prism of this Bourdieusian reading, attentive to the different kinds of capital and their states. Thus, measuring the unequal distribution of pupils implies a reflection on the *materiality* of school segregations (location of pupils, staff and schools). The latter cannot be understood without at the same time considering *institutional* issues (the administrative network that often constitutes the framework for statistical measurements of disparities, the specificities of schools), or the *representations* of this school social space, which are always spatial, that political and professional actors, or students and their families, make of themselves, and which contribute to structuring their trajectories in the school space. To this end, this chapter first focuses on school segregation as a synthetic object of socio-geographical approaches to school inequalities (section 1.2), and then looks at public policies and school trajectories as elements of understanding school inequalities that need to be approached in their spatial dimension (section 1.3).

1.2. School segregation as the central object of socio-geographical approaches to school inequalities

By analogy with urban segregation, work on "school segregation" focuses on the unequal distribution of students in schools. Barthon (1998a) defines school segregation as the spatial concentration of disadvantaged pupils, which results at least in part from a distancing in a hierarchical school space, which can generate inequality of access to school goods and lead to school captivity. Work on school segregation thus encounters *measurement* issues (variables used to define groups, and scales of analysis of the concentration of these groups in classes, schools, departments, etc.) and analyses of the *mechanisms* for producing these differentiations, as well as their effects on school trajectories. Since the term "segregation" has negative connotations, it implies highlighting an institutional "distancing" that causes inequality or social exclusion (van Zanten 1996). Some definitions specify the ways in which these inequalities are produced, expressing inequality in access to resources and in the contexts of socialization: "Segregation distributes groups in unequal spaces in terms of resources, and at the same time distributes them in spaces where the configuration of the groups in co-presence, which contributes to defining the conditions of local sociability, is variable" (Oberti et al. 2012, p. 74).

This unequal distribution of social groups in schools can be objectified, depending on the national context, the time period and the data available, on the basis of variables describing the social origin of pupils (parents' occupations, income, etc.), their migratory or racial origin and their academic results. For example, research on school segregation shows that French secondary school populations are distinguished according to social origin (often objectified by the parents' socio-professional category), "ethnic" profile (the migratory trajectory of the parents and/or the student) and school characteristics (marks, grades, results) (Felouzis 2003a). These different variables describing school populations go hand in hand – "ethnic, academic, and social segregation are clearly correlated with each other" (Merle 2012, p. 17) – which "justifies the generic use of the term 'school segregation'" (*ibid*., p. 18). School trajectories (established on the basis of socially differentiated school "successes", but also of socially differentiated orientations, even at equivalent school grades for pupils) gradually transform social position (objectified by the social origins of parents and their migratory trajectory) into school capital. The school variables thus gradually absorb the variables linked to social position when describing students' trajectories statistically, which explains the correlation between these variables (social origin, academic skills, migratory origin) and the need to consider them together.

This unequal distribution of students is partly related to the form of the school system considered. Indeed, a comparison based on the PISA 2003 survey (Felouzis 2009) shows that the strongly differentiated distribution of students according to streams or schools may reflect the strong correlation between social origin and academic skills in some countries. This is the case in Hungary, Germany, Turkey, Belgium, Austria and the Czech Republic, where there is an unequal distribution of students across the different streams of the education system. In Brazil and Indonesia, this unequal distribution is linked to the institutions rather than to the differentiation of the educational tracks themselves. In other countries, the school systems are more unified (a single curriculum is offered) and there is little difference at the school level, which goes hand in hand with less pronounced social inequalities, for example in Poland, Iceland, Norway and Finland. Intermediate situations, however, underline that the relationship between the more or less unified structure of the education system and the production of socially based educational inequalities is not mechanical, but involves other factors: "The United States and Great Britain have low indices of social and academic segregation [i.e. varying social origins and academic levels among students in different streams or schools] while having high social inequalities [i.e. a strong correlation between individual academic levels and trajectories and social origins, author's note]" (Felouzis 2009, §18). In the United States, the long history of research on school segregation stems from the role played by schools in the racial desegregation movement that began in

the 1950s. Indeed, Coleman's 1966 report, "Equality of educational opportunity", considered not only the role of social class or "race" in student achievement but also regional disparities and institutional effects.

Another way of presenting the geographical diversity of school systems and their more or less differentiated character is to consider a gradient in which Finland (which has a mainly public and uniform system, based on a sectorization leaving little choice to families) is compared to Chile (which has a mainly private and differentiated system, where school strategies are central), paying particular attention to systems whose differentiation brings into play a confessional dimension, as in Germany, Belgium, Scotland or the Netherlands (Boterman 2019).

1.2.1. *The 1980s: from national sociological theories to localized approaches to educational inequalities in France*

In France, research on educational inequalities has long focused on the link between social class (or social stratification/mobility) and educational success (Bourdieu 1966). At the end of the 1990s, Barthon (1998b) noted a rich conceptual and theoretical debate on school segregation in France, but it was not until the 1980s that the "urban dimension" (sometimes referred to as the "spatial dimension") of school inequalities was considered (Léger and Tripier 1986). Since then, research in France has shown that school choice could be reflected in residential strategies that affected real estate prices, for example in Paris (Fack and Grenet 2009), or that peri-urban municipalities could use the school map as a tool to attract certain social classes (Charmes 2007). Most analyses consider the "urban dimension" (van Zanten 2001; Oberti 2005, 2007b) in the sense of "context", while others, from a more geographical perspective linked to spatial analysis (François and Poupeau 2005), construct a "school space" marked by discontinuities (administrative networks), polarities (gradients, high points, center–periphery organization) and flows (student mobility).

School segregation often raises questions about the relationship between city and school: How do urban discontinuities and differentiations translate into inequalities in access, recruitment or academic success? And, conversely, how do schools contribute to the reproduction of spatialized inequalities in cities? Few researchers, however, explain the theoretical status of space or the spatial dimension in the construction of school inequalities, with the terms "space", "geography" and "spatial dimension" being used as quasi-synonyms in some analyses, in the same way as the terms "urban", "city" or "residential". It seems to us that the dimensional approach put forward in the introduction makes it possible to grasp this subject of school segregation without reifying space (i.e. without attributing to it a role that is

independent of social structures), and without reducing it to material locations (a fortiori "urban" ones), by expressing the latter with institutional elements (school map), or strategies of both students and schools.

1.2.2. *How can we objectify the unequal distribution of students in the school system?*

Working on school segregation implies highlighting a differentiation of learning contexts, and then looking at the mechanisms and effects of this unequal distribution of pupils (and staff). How can we objectify these school segregations?

The emergence of this socio-geographic research object[5] as school segregation is partly due to changes in school systems. Taking France as an example, the massification of education and the social generalization of access to the secondary level of the lycée (high school, students aged 15–18) from the 1980s onwards have gone hand in hand with a strengthening of distinctive school behaviors in the middle and upper classes, which are marked by segregation between baccalaureate streams and/or between establishments (Merle 2012) "in [a] context of strong stigmatization of working-class and immigrant spaces" (Oberti 2005, p. 15). The former exclusion of children from working-class backgrounds has now been replaced in part by their relegation to stigmatized fields (Bourdieu and Champagne 1992). This deferred elimination is constructed not only through a hierarchy of streams but also through mechanisms of self-elimination of the students with the least capital (dropping out or academic failure). The spatial dimension of this relegation and the diversification of the school system are visible in particular through school policies, which are spatialized in France with the priority education zones (ZEPs) set up in 1981, and local education contracts, or local education plans, which contribute to the institutional differentiation of schooling contexts (Rouault 2005). The French priority education policy "aims to correct the impact of social and economic inequalities on educational success by strengthening pedagogical and educational action in schools and establishments in the territories with the greatest social difficulties", according to the website of the Ministry of National Education (consulted on June 29, 2020) and can thus be read as a "re-translation of the social question into territorial categories" (Tissot and Poupeau 2005, p. 7). With these

5. As Oberti (2005) notes, geographers play an important role in this "spatial turn" in French research on educational inequalities (Rapetti 1990; Renard 1990; Augustin 1993; Hérin 1993a; Hérin et al. 1994; François 1996; Rhein 1997; Barthon 1998b). Hérin thus emphasizes early on the relevance of a geographical approach to educational inequalities: "The training of young people, in an education system that is nevertheless well centralized, is strongly marked by the diversity of local and regional contexts" (1993b, p. 145).

changes in the education system, the differentiation of schooling contexts is becoming a central theme in French research in the sociology of education, as illustrated by van Zanten's *L'École de la périphérie* (2001). This movement corresponds to that observed in other countries: school segregation is now a lively area of research, as illustrated by a recent special issue of *Urban Studies* (Boterman et al. 2019)[6].

In France, this research highlights the construction of local hierarchies in secondary (Oberti 2005) and post-secondary education (Frouillou 2017). These configurations are inscribed in urban history and the social division of space, and therefore go beyond the strict framework of school. Rhein shows from school flows in the Paris region that there is "a genealogy of different types of establishments [that] highlights the links between structures of the school apparatus and the pattern of social division of space" (1997, p. 65). In concrete terms, as opposed to schools whose educational offer was centered on technological and vocational courses, general education lycées were located in the old, bourgeois town centers of the Paris region. The 1970s and 1980s saw the construction of lycées in more working-class communes, which had been left out until then despite their demographic growth and their place in the urbanization of the Parisian metropolis (Rhein et al. 1999). This contrasts with the more abundant and diversified school offer in the "beaux quartiers" (upmarket districts).

This historical perspective can be supplemented by a synchronic analysis of the differentiated configurations of secondary education, understood as local micro-hierarchies by certain authors (Oberti 2005). The structure of the educational offer (public and private share, diversification of courses of study, density of schools, etc.) and its inclusion in a residential area sometimes marked by strong segregation thus define competitive school spaces that require localized approaches (Broccolichi and van Zanten 1997). However, as Merle explains, "the social transformations of urban and peri-urban space raise the problem of the relevant territorial scale for measuring urban or school segregation phenomena: commune, group of communes, département, or region" (2012, p. 103). This question of scale invites researchers to define neighborhoods in order to think about issues in school, neighborhoods that are not clearly delineated, unlike administrative grids, because "the immediate environment of each school may partially cover that of neighboring schools" (François and Poupeau 2008b, p. 98).

6. As the authors point out (*ibid*., p. 3056), "the intertwining of school system segmentation and residential segregation has become even more crucial for understanding the socio-spatial mechanisms of social reproduction and intergenerational social mobility".

Work on school segregation thus distinguishes several levels in the differentiation of students' schooling contexts. The class effect may involve both the role of the teacher and the school's policy on grade levels and/or options (Moignard 2007), which may be reflected spatially in the school by the segregation of certain classes, such as Segpa classes (adapted general and vocational education sections), which, in France, take in students aged 11–15 with major learning difficulties (Caro et al. 2010). Blanchard and Cayouette-Remblière (2011) point out that while questions about the choice of pathway and options are old, those about school choice are more recent in France. Indeed, with the work on school segregation, it is the level of the school (especially at collège, or middle school) that is most often mobilized (Ballion 1991; Broccolichi and van Zanten 1997; Oberti 2007b; van Zanten 2009). This "desire to break with macro-sociological analyses and to reflect on the productivity of the school on the basis of local specificities" (Cousin 1993, p. 401) brings together several lines of analysis: from the effects of the place of schooling on students' trajectories (social selection, academic selection and socialization) to the identities constructed by the schools, and even to the implementation of strategies for recruiting students and/or staff (Delvaux and van Zanten 2006). The school is thus considered "one of the most relevant places for understanding schools today" (Cousin 2000, p. 139). The other levels of analysis make it possible to broaden the context of schooling by including it in the local micro-hierarchies mentioned above (communal and supra-communal scale), in administrative meshes such as the départements, academies or regions, where significant inequalities in educational success can be highlighted (Broccolichi et al. 2006; Caro et al. 2010), or finally on a national scale, with surveys such as PISA (OECD) making it possible to compare the weight of social inequalities at school in the different education systems.

Research often involves empirically objectifying these school segregations. Ly and Riegert (2015) show, for example, that intra-school segregation, that is, segregation between school classes in French collèges (for children aged 11–15) hardly varies between départements and is mainly related to academic performance. On the contrary, inter-school segregation, which is highly correlated with social origin variables and academic results, varies greatly between départements. Inter-school segregation according to students' social origin is particularly strong in urban départements with metropolitan areas, "firstly because the collèges reflect residential segregation more accurately, and secondly because a situation of competition arises, leading to the emergence of 'desirable' collèges and collèges 'to be avoided'" (*ibid*., p. 5). The study by Oberti et al. (2012) on the effects of the relaxation of the school map in the Paris region confirms that school segregation is greater than residential segregation, due to the difference in the distribution of young populations compared to the general population and school practices (avoidance, private sector, etc.).

School segregation can thus be read as an accentuated reflection of residential segregation, especially in collèges, and it is particularly strong in the private sector. This complex link between residential and school segregation calls for localized approaches at the level of neighborhoods or districts, such as the one developed by Audren (2012) which focused on Marseille collèges, making it possible to grasp local configurations with regard to the policies and strategies of the students, which is the subject of the next part of the chapter.

Thus, the spatial dimension of educational inequalities crystallizes in school segregations because the latter draw a hierarchical school space, where local configurations and the scale of analysis are crucial to grasp the ways in which learning contexts are differentiated. Boterman et al. (2019, p. 3057) thus speak of educational landscapes, "formed where national, regional and local regulations and policies are combined with historically developed geographies of education" (Boterman et al. 2019, p. 3057). But understanding these processes of segregation between courses, classes or schools implies going beyond the debate on measurement or indices[7] to articulate two complementary perspectives on the mechanisms at work. The first is related to current policies, which promote free school choice and thus the establishment of school markets. The second concerns school "choices", based on questions of school mobility or avoidance, and the effects of different schooling contexts (classes, schools, departments, academies, etc.) on students' trajectories. Taking into account the spatial dimension of these two perspectives is the subject of the next part of the chapter, and this makes it possible to reason more generally about the spatial dimension of educational inequalities without restricting them to the urban areas where this segregation is strongest.

1.3. The spatial dimension of educational inequalities: from policies to trajectories

An understanding of the mechanisms of production of school segregation allows us to reflect on the spatial dimension of school policies as well as on the construction of the trajectories of agents, students and staff in this hierarchical school space.

7. These methodological debates, which are common to studies of urban segregation, concern: the type of index used (and therefore their mathematical properties of decomposition, monotonicity or comparison), the variables and modalities used (which social groups are compared, which breakdowns of the social structure) and the geographical scales of analysis (national, regional, departmental, and the size of the units whose social, educational and racial recruitment are being compared).

1.3.1. *The spatial dimension of school policies that produce inequalities*

Public policy plays a vital role in understanding school segregation. For example, it is important to understand the recruitment processes of schools. In the Netherlands, both schools and parents have a high degree of autonomy in the choice of school and the admission processes, but this does not invalidate the role of residential segregation in the unequal distribution of students according to their migratory origin and social class (Boterman 2019). In France, this institutional aspect refers rather to the "school map", which still largely organizes catchment areas for primary and secondary schools. The term "school map" refers to much more than just the allocation of students: it is a "set of measures aimed at defining the public school offer and dealing with the educational demand of families" (van Zanten and Obin 2010, p. 3). It was set up in France in the early 1960s and suggests a territorial division associating each school with a recruitment area and the means to accommodate it. This forward-looking instrument for managing educational resources, set up in a context of increasing school enrolment, later became an instrument for promoting social diversity in schools (Fack and Grenet 2009). In primary schools, the management of student assignments is the responsibility of mayors. In secondary schools, a distinction must be made between the assignment procedures for collèges and those for lycées. Since 2004, the drawing up of the sectorization of lower secondary schools has been the responsibility of the general councils, while the inspectors of the academy remain competent a posteriori for the assignment and de-allocation procedures (Barrault 2012). At the lycée level, the greater diversity of educational opportunities (e.g. vocational) implies that students can deviate from a strict school map. School sectors (called "districts") often include several schools (Fack et al. 2014).

The "relaxation" of the school map in French secondary schools has gone through several stages since the 1980s. In 2007, the use of exemptions was made public and official in a context where several years of low birth rate had created a large number of available places, which were unequally distributed according to the academies and schools. The right of families "to choose between the local school and any other where places are available" was affirmed (van Zanten and Obin 2010, p. 38), and a list of prioritized criteria (disability, medical care, scholarships, special schooling, siblings, proximity to home) was established for accepting exceptions if they exceeded capacity. However, the introduction of a socioeconomic criterion (scholarships) has not resulted in a significant reconfiguration of school recruitment. For example, for the start of the 2009 school year in the sixth grade, "applications granted to scholarship students represented only 9.2 percent of waivers for France as a whole (13.7 percent for the Paris Academy), while waivers granted to students

wishing to follow a particular pathway – most often a language option that would allow them to avoid the collège assigned to them according to the school map – represented 12% of waivers granted (40.1% for the Paris academy)" (Merle 2011, p. 39). More generally, there is a relative permanence of previous management methods: "The resistance of the school map to change is at once political, technical and social" (Barrault 2012, p. 125). Local administrative officials retain a margin of action (van Zanten and Da Costa 2013), notably through the weighting of priority criteria for exemptions. Above all, "maintaining the priority given to students in the school sector has [...] authorized only a limited number of waivers, especially to the most attractive collèges, insofar as the capacity of the establishments has remained the same" (Oberti et al. 2012, p. 141).

Despite these continuities, the relaxation of the French school map reflects a policy of promoting "free choice" in education, which has been reflected since the mid-2000s in the implementation of assignment management systems that reconfigure the production of inequalities in access to secondary and higher education. The 2007 reform coincided with the generalization of the Affelnet application to all academies in 2008. It is an algorithm that allows students to be prioritized according to their preferences, their academic record, their scholarship status and their geographic proximity. The weighting varies by academy (Fack et al. 2014). In Paris, Affelnet corresponds to the establishment of "a regulated school choice system" (*ibid*., p. 33). The status of scholarship holder is taken into account, but the weighting leaves an important place, in addition to the criterion of geographical belonging to the district, to the criterion of academic results (van Zanten and Obin 2010; Merle 2011; Fack et al. 2014). In higher education, the Admission post-Bac national assignment system was generalized to all the Academies in 2009, sometimes replacing regional systems of sectorization of university assignments, such as Ravel (automated census of students' wishes), which offered "sector" universities in Île-de-France between 1990 and 2008 for baccalaureate holders from the region in order to limit the demographic pressure on Parisian institutions (Frouillou 2016). This post-Bac admission system, which originated in engineering schools and preparatory classes, was replaced by Parcoursup at the start of the 2018 academic year. This system generalizes selection processes based on applications to all French higher education programs, whereas in the past, a large proportion of university programs were accessible with the baccalaureate, without evaluation and ranking of all applicants (Frouillou et al. 2019). The French assignment system thus emphasizes the continuity between secondary and post-secondary education in the promotion of "free choice" at school, with academic results playing a crucial role when the courses applied for are full.

The segregative effects of the design of school sectors have been highlighted by French researchers (Rouault 2005; Dubet and Duru-Bellat 2006). In the Paris academy, for example, the sectorization of public secondary schools "ratifies the separation brought about by the social division of residential space" (François 2007, p. 205). But several studies also point to the accentuation of inequalities in the distribution of pupils following the relaxation of the school map. In secondary schools, research has shown an increased hierarchy of schools (especially in collèges), which is more or less pronounced depending on the context (more or less diversified school offer) and the scale of analysis for segregation measures (Merle 2011; Oberti et al. 2012).

> In Paris, but also in regional capitals such as Bordeaux and Lille, the privileged collèges have become gentrified; the disadvantaged collèges have hardly benefited, if at all, from the overall gentrification of the population of large metropolises. The research highlights a phenomenon of relative, or even absolute, ghettoization for the most disadvantaged schools, which results in the loss of staff and the loss of students from privileged backgrounds. (Merle 2011, p. 47)

The increased importance of academic results, combined with a priority criterion for scholarship recipients, goes hand in hand with segregation between schools that is more closely linked to students' academic backgrounds than to their social origin. Affelnet has thus contributed to the increased stratification of Parisian lycées according to academic results, even if the scholarship bonus has made it possible to limit segregation according to social origin (Fack et al. 2014). More generally, the principle of liberalizing school assignments has led some researchers to denounce the "trap of free school choice" (Oberti 2007a), a "free choice" that is in fact socially situated, as we shall see in the following section.

The spatial dimension of sectorization policies seems obvious. The introduction of assignment systems in secondary and post-secondary education, which make these institutional boundaries more flexible, does not, however, erase this dimension: the priorities set out in the algorithms often retain a spatial character, as the Education Code partly constrains assignments on a geographical basis. Moreover, the selection practices of certain programs are based on geographic criteria, as Orange (2010) has shown, for example, for the "higher technician" sections. This allows us to propose a synthetic approach to grasping the spatial dimension of school institutional logics that produce inequalities. It can be analyzed, again using the French system as a starting point, through two complementary elements: on the one hand, the definition of the perimeters or the location of certain policies, measures or projects (priority education, boarding schools of excellence,

social opening measures, school projects, etc.) and, on the other hand, the spatial dimension of the orientation processes and procedures.

The first element invites us to work on the *institutional* differentiation of learning and teaching contexts. In the French university sector, this differentiation can easily be highlighted by the progressive autonomization of institutions (Musselin 2001). Recent reforms (LRU 2007; Fioraso 2013; ORE 2018; LPR 2020) have reinforced the autonomy of universities and encouraged them to develop attractive (and distinctive) training offers. The differentiation of universities goes hand in hand with "complex processes of multilevel territorialization of higher education and research" (Benninghoff et al. 2012, p. 12). As in French secondary education, institutions, which can refer to a site, a branch, or the institution to which these sites are attached, are now relevant units of analysis: "In the university, as elsewhere, 'context makes a difference'" (Felouzis 2003b, p. 213). The incentive to enable increased modularity of courses contributes to this differentiation of institutions. This concerns post-secondary education, but also secondary education, where modularity and the promotion of "free choice" have been reflected in the recent reform of the baccalaureate (2019), with general courses of study being replaced by a more individual choice of specialties and an increased share of continuous assessment. In general, the differentiation of pathways from secondary to post-secondary education is a crucial element of the spatial dimension of educational inequalities as it contributes to the structuring of quasi-markets of schools, where schools are in competition and must develop strategies around their educational offer and recruitment (Felouzis et al. 2013). The way in which school systems are financed is also part of the analysis of this differentiation and does not completely overlap with the distinction between the public and private sectors: in Denmark, the Netherlands and Spain, the private sector is largely financed by the state (Boterman et al. 2019).

The second element of a general analysis of the spatial dimension of educational inequalities linked to institutions lies in the functioning of the orientation process. Research highlights a "channeling of school aspirations", which is not only achieved through a selection of the courses of study presented to students (brochures, invitations to professionals, open days, career forums, etc.) but also through more or less individualized monitoring of the construction of wishes by students, depending on the school (van Zanten 2015). The construction of the space of possibilities for further study is thus differentiated according to class and school, with STS (advanced vocational courses), for example, often presented as a logical continuation for students in technological streams in lycées where these higher education programs are present (Orange 2010). The algorithmic procedures of the allocation systems, although rarely made public, can then reinforce these

institutional links through geographical priorities or the practices of recruitment committees that take into account the applicants' schools of origin. The consideration of schools in the orientation process thus plays a role in the construction of educational trajectories, which also make it possible to read this hierarchical school space.

1.3.2. *Understanding inequalities based on school placements and trajectories*

Many French studies focus on school "choices" (Ballion 1991; Barthon, Oberti 2000; Oberti 2007a; van Zanten 2009; Beaud 2011; Ben Ayed 2011; Blanchard and Cayouette-Remblière 2011; Œuvrard 2011; Poullaouec 2011; Orange 2012). A comparison of studies of school choice in different national configurations (Wilson and Bridge 2019) shows a link between high levels of school segregation and systems that promote family school choice, in countries with "*open enrollment*" systems, such as England and Chile, but also in countries with sectorization and the opportunity to opt-out, such as the United States. Socially situated, these school "choices" are based on families' and students' more or less detailed knowledge of the school system, or on an unequal capacity to resist institutional injunctions, for example, in the French case, to refuse a vocational orientation (Palheta 2011) or to reclassify an academic difficulty as a medical problem (Garcia 2013), or finally, on mechanisms of self-exclusion that concern the working classes in particular (Poullaouec 2011).

School "choices" make it possible to grasp the spatial dimension of school inequalities because the options and streams are, as we have seen, unevenly distributed between schools (Œuvrard 2000). The term "choice" poses a problem in a Bourdieusian approach, which favors an understanding of the structures or mechanisms linked to the construction of educational trajectories rather than a reading that assumes a relative freedom of choice for individuals, a reading that, as we have seen, echoes the policies of relaxing sectorization and diversifying educational paths. Talking about school "placements" makes it possible to grasp the practices and representations of pupils and families, which can be expressed in terms of "choices", "trade-offs", "strategies" or "constraints" with other approaches. The term "placement" is thus part of a "practical sense" that reflects a "dynamic and open-ended logic" of the social world rather than a mechanistic one (Bourdieu 1994, p. 5). Placements then describe the objective arrangement of social practices without assuming conscious calculations. This adjustment through "practical sense" constitutes for the ruling classes "a decisive advantage whenever the 'sincerity' and 'naivety' of the 'vocation' or the 'conversion' are part of the tacit conditions of occupation of the position, as in the case of the artistic professions" (Bourdieu 1974, p. 14).

School placements, limited or favored by the institutional functioning described above, always have a spatial dimension: it is a question of (re)positioning oneself in the school field, which we have seen is spatially hierarchical. We can define a sense of school placement: "Rather than 'schooling choices', placement practices are the product of an incorporation of the conditions of existence, integrating local offers in terms of housing, culture and education, public services, but also the possibilities of doing without public services by resorting to 'private' services. Linked to the volume of capital possessed by families and to the structure of the distribution of cultural and economic capital in the areas under consideration, school placement thus requires a form of 'mobility capital' offering families the ability to orient themselves in hierarchical school spaces" (François and Poupeau 2008b, p. 104).

Some placements can be read a posteriori as schooling circuits (Broccolichi and van Zanten 1997), in other words, recurrent flows between certain primary, secondary or higher education establishments. Other school placements result in mobility between schools and are the subject of much research. School avoidance can be defined as "the group of practices by families who send their children to a school other than the one in their catchment area" (François 2002, p. 308). It includes both transfers to other public schools and enrollment in the private sector (Ballion 1982; Léger and Tripier 1986; Ballion 1991; Broccolichi 1995; Broccolichi and van Zanten 1997; van Zanten 2001; François and Poupeau 2004). François and Poupeau show the importance of neighborhoods in the avoidance strategies of students and their families, which must be placed not only socially but also spatially in a local configuration of the educational offer (distance/accessibility to training), because "the spatial inscription of social inequalities reinforces the social sorting exercised by the educational system" (François and Poupeau 2008b, p. 112). Finally, taking into account the spatial dimension strengthens the understanding of school placements: "The variables of social affiliation appear to be all the more efficient in predicting students' avoidance practices when larger spatial scales are taken into account [...] In the end, the more spatial variables are integrated, the more the importance of social variables is revealed" (François and Poupeau 2008a, p. 156).

A doctoral study (Frouillou 2017) on university segregation in the Ile-de-France region at the turn of the 2010s highlights the collective logic of the placements corresponding to entry into higher education. Their spatial dimension is formed around the lycée, a place that partly defines the spaces of possible further education because of the institutional channeling of aspirations and the role of peer groups in the construction of school "choices". More precisely, this work highlights a sense of university placement, which can be read in relationships to studies (which are also relationships to places of study), in strategies of avoidance or symbolic requalification of a university such as Paris 8 Vincennes-Saint-Denis, one of the

fields of investigation. This "practical sense" allows students to adjust to the Francilian university space. It stems from an internalization of material (location of university sites and accessibility) and institutional constraints (modes of assignment, selectivity of institutions, reputation, etc.). The meaning of placement is constructed according to the social position of students, defined according to the structure and volume of capital (cultural, economic, social, symbolic). The spatial dimension of this social position refers to residential location, inclusion in institutional perimeters (academy), and representations of distances (which can, for example, lead a university to be "too far" both spatially and socially). While economic capital seems to be secondary in the construction of the sense of university placement in relation to high school enrollment (which defines access priorities in the Admission post-bac system, and often corresponds to peer groups), it may be more decisive in the construction of other strategies for entering higher education (private schools, guidance coaches, private preparation for competitive exams, renting a studio apartment to be closer to the place of study, etc.). This example shows that the spatial dimension of educational inequalities can be grasped at the level of pupils or students, by inscribing their "choices" in institutional contexts, whose constraints are always both material and embodied.

Taking a dynamic look at the sense of placement means reintroducing time as a complementary dimension to space in order to understand school inequalities on the basis of the trajectories of students and schools. These trajectories highlight the construction of the sense of school placement, and therefore the learning processes associated with the dispositions to orient oneself in finely hierarchical school spaces. Indeed, the longitudinal approach makes it possible not only to reveal inter-institutional trajectories that show hierarchies, with the most academically endowed pupils or students often joining institutions that correspond to their academic characteristics (Frouillou and Moulin 2019) but also to grasp the importance of time in the construction of school placements. Retrospective analysis shows the importance of avoidance attempts, repetition of grades and moves in the construction of placements at each stage of an educational trajectory, thus deconstructing the often implicit linearity of pathways as we imagine them (Frouillou 2017). More quantitative surveys make it possible to question the link between school segregation and educational trajectories. Oberti and Savina (2019) thus link a typology of collèges in the dense urban area of Paris with the results obtained by students (these results then allow for relatively easy access to certain courses of study or schools), based on the "Scolarité 2009" database and the results of the Brevet between 2006 and 2012. They show that, regardless of their social origin, students perform better if they are enrolled in a privileged rather than an underprivileged school, and this is particularly true for boys from underprivileged backgrounds. But the effect of school type on academic performance is not the same

across the board: there is an advantage in attending a disadvantaged school in Paris rather than in the suburbs, and a clear disadvantage in attending a disadvantaged school in an advantaged suburb such as the Hauts-de-Seine. This may be linked to local patterns of school competition (avoidance of private schools, greater or lesser stigmatization of disadvantaged schools, etc.), or to hidden variables that reveal the importance of the spatial dimension (do the Parisian working classes reflect the same social positions as the working classes living in another more or less privileged area of the Parisian suburbs?)

Finally, while the spatial dimension of students' placements and educational trajectories seems essential for understanding the construction of inequalities in a system that promotes "free choice", it is necessary to shed light on the trajectories of staff working in the field of education with this approach that is sensitive to mobility, places and contexts of education. In France, the spatial dimension of national education staff assignment systems, which complements approaches focused on the public, constitutes a lively avenue of research, which could be included, for example, in the perspective of a recent contribution on the inter-academic algorithm that manages secondary school teacher assignments (Terrier et al. 2019).

1.4. Conclusion: spatial dimension of inequalities and the interweaving of levels of analysis

While school segregations are a crucial object for understanding the spatial dimension of school inequalities, these inequalities are not limited to residentially segregated urban contexts. The dimensional approach provides a theoretical framework for understanding the articulation between institutional, material and embodied aspects of school inequalities, which are always spatial. Analyses in terms of opportunities, mobilities, placements or local configurations thus make it possible to renew the theories of reproduction considering a national school space, by showing the consequences in terms of inequalities of recent policies favoring a differentiation of the educational offer and a "free choice" of school. The space approach thus makes it possible to understand not only the *form of* school inequalities by documenting the distribution of students and schools and its evolution over time, linked to residential issues, but also to bring out the *mechanisms* of production of these inequalities by highlighting discontinuities (academic network or sectorization), material (accessibility of schools) and symbolic (stigmatization, channeling of school aspirations, etc.) and mobility understood as school placements (avoidance, assignments, etc.). These elements intersect with a

critical analysis of public policies and a comprehensive reading of the trajectories of students and staff.

Empirically, the spatial dimension of school inequalities can be understood at different scales, which raises questions about school data, often produced for administrative purposes, and their availability for research (geolocation of student databases, for example). The reflection on the relevant geographical scales for thinking about school inequalities is thus crucial and depends in part on the areas of competition between schools, whose basis is more or less local depending on the level (primary, secondary, higher education), the institutional constraints (sectorization) and the resources of students and families. Recent work on child socialization and its consequences in the construction of inequalities (Lahire et al. 2019) invites us to link research on socialization (relationship to the body, to the written word, to time, to authority, etc.), the construction of pedagogical practices (Bonnéry 2011), with research on the differentiation of learning and teaching contexts, in order to understand how the inequalities in trajectories that mark school systems today are concretely constructed, in classes, in schools, in families and in groups of peers – in other words, in specific areas of a hierarchical and segmented school space.

1.5. References

Audren, G. (2012). Dynamiques scolaires et recompositions socio-territoriales : quels impacts sur la ségrégation à Marseille ? *Géographie, économie, société*, 14(2), 147–170.

Augustin, J.-P. (1993). La ville, la scolarisation et l'inégalité des chances. *Espace populations sociétés*, 2, 355–364.

Ballion, R. (1982). *Les consommateurs d'école : stratégies éducatives des familles*. Stock, Paris.

Ballion, R. (1991). *La bonne école : évaluation et choix du collège et du lycée*. Hatier, Paris.

Barrault, L. (2012). Les résistances de la carte scolaire. *Politix*, 98(2), 109–127.

Barthon, C. (1998a). Espaces et ségrégations scolaires : l'exemple des enfants d'immigrés dans les collèges de l'Académie de Versailles. PhD Thesis, Université de Poitiers, Poitiers.

Barthon, C. (1998b). La ségrégation comme processus dans l'école et dans la ville. *Revue européenne de migrations internationales*, 14(1), 93–103.

Barthon, C. and Oberti, M. (2000). Ségrégation spatiale, évitement et choix des établissements. In *L'école, l'état des savoirs*, Van Zanten, A. (ed.). La Découverte, Paris.

Beaud, S. (2011). Par delà les choix scolaires : les rapports de classes. *Revue française de pédagogie*, 175(2), 77–80.

Ben Ayed, C. (2011). À qui profite le choix de l'école ? Changements d'établissement et destins scolaires des élèves de milieux populaires. *Revue française de pédagogie*, 175(2), 39–57.

Benninghoff, M., Fassa, F., Goastellec, G., Leresche, J.-P. (eds) (2012). *Inégalités sociales et enseignement supérieur*. De Boeck, Brussels.

Bernelius, V. and Vilkama, K. (2019). Pupils on the move: School catchment area segregation and residential mobility of urban families. *Urban Studies*, 56(15), 3095–3116.

Blanchard, M. and Cayouette-Remblière, J. (2011). Penser les choix scolaires. *Revue française de pédagogie*, 175(2), 5–14.

Bonnéry, S. (2011). D'hier à aujourd'hui, les enjeux d'une sociologie de la pédagogie. *Savoir/Agir*, 17, 11–20.

Boterman, W.R. (2019). The role of geography in school segregation in the free parental choice context of Dutch cities. *Urban Studies*, 56(15), 3074–3094.

Bourdieu, P. (1966). L'école conservatrice. Les inégalités devant l'école et devant la culture. *Revue française de sociologie*, 7(3), 325–347.

Bourdieu, P. (1974). Avenir de classe et causalité du probable. *Revue française de sociologie*, 15(1), 3–42.

Bourdieu, P. (1979). Les trois états du capital culturel. *Actes de la recherche en sciences sociales*, 30(1), 3–6.

Bourdieu, P. (1984). La représentation de la position sociale. *Actes de la recherche en sciences sociales*, 52(1), 14–15.

Bourdieu, P. (1987). *Choses dites*. Éditions de Minuit, Paris.

Bourdieu, P. (1993). Effets de lieu. *La misère du monde*, 249–262.

Bourdieu, P. (1994). Stratégies de reproduction et modes de domination. *Actes de la recherche en sciences sociales*, 105(1), 3–12.

Bourdieu, P. and Champagne, P. (1992). Les exclus de l'intérieur. *Actes de la recherche en sciences sociales*, 91(1), 71–75.

Bourdieu, P. and Passeron, J.-C. (1970). *La reproduction : éléments pour une théorie du système d'enseignement*. Éditions de Minuit, Paris.

Broccolichi, S. (1995). Orientations et ségrégations nouvelles dans l'enseignement secondaire. *Sociétés contemporaines*, 21(1), 15–27.

Broccolichi, S. and van Zanten, A. (1997). Espaces de concurrence et circuits de scolarisation. L'évitement des collèges publics d'un district de la banlieue parisienne. *Les annales de la recherche urbaine*, 75, 5–17.

Broccolichi, S., Ben Ayed, C., Trancart, D. (2006). Les inégalités socio-spatiales d'éducation. Processus ségrégatifs, capital social et politiques territoriales. Report, Ministry of National Education, the Ministry of Research and DATAR, Paris.

Caro, P., Rouault, R., Cassan, D., Hérin, R. (2010). *Atlas des fractures scolaires en France : une école à plusieurs vitesses*. Éditions Autrement, Paris.

Charmes, É. (2007). Carte scolaire et "clubbisation" des petites communes périurbaines. *Sociétés contemporaines*, 67(3), 67–94.

Cousin, O. (1993). L'effet établissement. Construction d'une problématique. *Revue française de sociologie*, 34(3), 395-419.

Cousin, O. (2000). Politiques et effets-établissements dans l'enseignement secondaire. In *L'école, l'état des savoirs*, Van Zanten, A. (ed.). La Découverte, Paris.

Delvaux, B. and van Zanten, A. (2006). Les établissements scolaires et leur espace local d'interdépendance. *Revue française de pédagogie. Recherches en éducation*, 156, 5–8.

Dubet, F. and Duru-Bellat, M. (2006). Carte scolaire : la fin d'un tabou. *Le Monde* [Online]. Available at: https://www.lemonde.fr/idees/article/2006/09/08/carte-scolaire-la-fin-d-un-tabou-par-francois-dubet-et-marie-duru-bellat_811039_3232.html.

Fack, G. and Grenet, J. (2009). Sectorisation des collèges et prix des logements à Paris. *Actes de la recherche en sciences sociales*, 180, 44–62.

Fack, G., Grenet, J., Benhenda, A. (2014). *L'impact des procédures de sectorisation et d'affectation sur la mixité sociale et scolaire dans les lycées d'Île-de-France*. Institut des Politiques Publiques, Paris.

Felouzis, G. (2003a). La ségrégation ethnique au collège et ses conséquences. *Revue française de sociologie*, 44(3), 413–447.

Felouzis, G. (2003b). *Les effets d'établissement à l'université : de nouvelles inégalités ? Les mutations actuelles de l'Université.* Presses Universitaires de France, Paris.

Felouzis, G. (2009). Systèmes éducatifs et inégalités scolaires : une perspective internationale [Online]. Available at: https://journals.openedition.org/sociologies/2977#notes.

Felouzis, G., Maroy, C., van Zanten, A. (2013). *Les marchés scolaires : sociologie d'une politique publique d'éducation.* Presses Universitaires de France, Paris.

François, J.-C. (1996). Discontinuités dans la ville l'espace des collèges de l'agglomération parisienne, 1982–1992. PhD Thesis [Online]. Available at: http://cybergeo.revues.org/1851.

François, J.-C. (2002). Évitement à l'entrée en sixième et division sociale de l'espace scolaire à Paris. *L'Espace géographique*, 31(4), 307–327.

François, J.-C. (2007). La carte scolaire en ses contours. La métropole parisienne. *Centralités, inégalités, proximités*, 185–207.

François, J.-C. and Poupeau, F. (2004). L'évitement scolaire et les classes moyennes à Paris. *Éducation et sociétés*, 14, 51–66.

François, J.-C. and Poupeau, F. (2005). De l'espace résidentiel à l'espace scolaire, les pratiques d'évitement scolaire en Île-de-France. Ministry of National Education and DATAR, Paris.

François, J.-C. and Poupeau, F. (2008a). *Le sens du placement : ségrégation résidentielle et ségrégation scolaire*. Raisons d'agir, Paris.

François, J.-C. and Poupeau, F. (2008b). Les déterminants socio-spatiaux du placement scolaire. *Revue française de sociologie*, 49(1), 93–126.

Frouillou, L. (2016). Admission post-bac : un "libre choix" sous contrainte algorithmique [Online]. Available at: http://www.jssj.org/article/admission-post-bac-un-libre-choix-sous-contrainte-algorithmique/.

Frouillou, L. (2017). *Ségrégations universitaires en Île-de-France : inégalités d'accès et trajectoires étudiantes*. Observatoire de la vie étudiante éditions/La Documentation Française, Paris.

Frouillou, L. and Moulin, L. (2019). Les trajectoires socialement et spatialement différenciées des étudiants franciliens. *Formation emploi*, 145(1), 7–28.

Frouillou, L., Pin, C., Van Zanten, A. (2019). Le rôle des instruments dans la sélection des bacheliers dans l'enseignement supérieur. La nouvelle gouvernance des affectations par les algorithmes. *Sociologie*, 2(10) [Online]. Available at: http://journals.openedition.org/sociologie/5543.

Garcia, S. (2013). *À l'école des dyslexiques : naturaliser ou combattre l'échec scolaire ?* La Découverte, Paris.

Hérin, R. (1993a). La formation scolaire : les dimensions géographiques de l'inégalité des chances. *Espace, populations, sociétés*, 11(2), 343–354.

Hérin, R. (1993b). Y a-t-il une façade atlantique de la formation scolaire et universitaire ? *Norois*, 157(1), 137–153.

Hérin, R., Rouault, R., Veschambre, V. (1994). Atlas de la France scolaire : de la maternelle au lycée. Centre d'études régionales et d'aménagement, Montpellier.

Lahire, B. (ed.) (2019). *Enfances de classe. De l'inégalité parmi les enfants*. Le Seuil, Paris.

Léger, A. and Tripier, M. (1986). *Fuir ou construire l'école populaire ?* Méridiens Klincksieck, Paris.

Ly, S.T. and Riegert, A. (2015). Mixité sociale et scolaire, ségrégation inter- et intra-établissement dans les collèges et lycées français. Study, CNESCO, Paris.

Merle, P. (2011). La carte scolaire et son assouplissement. Politique de mixité sociale ou de ghettoïsation des établissements ? *Sociologie*, 2, 7–50.

Merle, P. (2012). *La ségrégation scolaire*. La Découverte, Paris [Online]. Available at: http://www.sudoc.fr/160866162 [accessed May 25, 2012].

Moignard, B. (2007). Le collège comme espace de structuration des bandes d'adolescents dans les quartiers populaires : le poids de la ségrégation scolaire. *Revue française de pédagogie. Recherches en éducation*, 4(158), 31–42.

Musselin, C. (2001). *La longue marche des universités françaises*. Presses Universitaires de France, Paris.

Oberti, M. (2005). Différenciation sociale et scolaire du territoire : inégalités et configurations locales. *Sociétés contemporaines*, 59–60, 13–42.

Oberti, M. (2007a). Le piège du libre choix scolaire. *Mouvements*, 52, 145–152.

Oberti, M. (2007b). *L'école dans la ville : ségrégation, mixité, carte scolaire*. Presses de Science Po, Paris.

Oberti, M. and Savina, Y. (2019). Urban and school segregation in Paris: The complexity of contextual effects on school achievement: The case of middle schools in the Paris metropolitan area. *Urban Studies*, 56(15), 3117–3142.

Oberti, M., Préteceille, E., Rivière, C. (2012). Les effets de l'assouplissement de la carte scolaire dans la banlieue parisienne. Report, Presses de Sciences Po, Paris.

Œuvrard, F. (2000). La construction des inégalités de scolarisation de la maternelle au lycée. *L'école, l'état des savoirs*, 311–321.

Œuvrard, F. (2011). Quels choix ? Pour quelle école ? *Revue française de pédagogie*, 75(2), 73–76.

Orange, S. (2010). Le choix du BTS. Entre construction et encadrement des aspirations des bacheliers d'origine populaire. *Actes de la recherche en sciences sociales*, 183(3), 32–47.

Orange, S. (2012). Interroger le choix des études supérieures. *Genèses*, 89(4), 112–127.

Palheta, U. (2011). Enseignement professionnel et classes populaires : comment s'orientent les élèves "orientés". *Revue française de pédagogie*, 175(2), 59–72.

Palheta, U. (2012). *La domination scolaire : sociologie de l'enseignement professionnel et de son public*. Presses Universitaires de France, Paris.

Poullaouec, T. (2011). Choix du destin et destin du choix. *Revue française de pédagogie*, 175(2), 81–84.

Rapetti, D. (1990). Disparités sociales et retards scolaires en milieu urbain : l'exemple des collèges du Grand Nantes en 1985. *Espace, populations, sociétés*, 8(1), 159–162.

Renard, J.-P. (1990). Aspects de la préscolarité en France. *Espace, populations, sociétés*, 8(1), 63–71.

Rhein, C. (1997). De l'anamorphose en démographie. Polarisation sociale et flux scolaires dans la métropole parisienne. *Les annales de la recherche urbaine*, 75, 59–69.

Rhein, C., Le Pape, A., Grosbras, P.-A. (1999). Division sociale de l'espace et inégalités de la scolarisation. Report, LADYSS, Paris.

Ripoll, F. (2013). Quelle dimension spatiale des structures sociales chez Bourdieu ? Localisations résidentielles et jeux d'échelles. In *La distinction, trente ans après la distinction de Pierre Bourdieu*, Coulangeon, P., Duval, J. (eds). La Découverte, Paris.

Ripoll, F. and Tissot, S. (2010). La dimension spatiale des ressources sociales. *Regards sociologiques*, 40, 5–7.

Ripoll, F. and Veschambre, V. (2005). Sur la dimension spatiale des inégalités : contribution aux débats sur la "mobilité" et le "capital spatial". In *Rural-urbain. Nouveaux liens, nouvelles frontières*, Arlaud, S., Jean, Y., Royoux, D. (eds). Presses Universitaires de Rennes, Rennes.

Rouault, R. (2005). Les dimensions spatiales de la scolarisation, entre espaces prescrits et parcours choisis. *Espace populations sociétés*, 3, 355–366.

Terrier, C., Combe, J., Tercieux, O. (2019). Améliorer la mobilité des enseignants sans pénaliser les académies les moins attractives ? *Administration Education*, 163(3), 91–101.

Tissot, S. and Poupeau, F. (2005). La spatialisation des problèmes sociaux. *Actes de la recherche en sciences sociales*, 159(4), 4–9.

Veschambre, V. (2006). Penser l'espace comme dimension de la société. Pour une géographie sociale de plain-pied avec les sciences sociales. In *Penser et faire la géographie sociale. Contribution à une épistémologie de la géographie sociale*, Séchet, R., Veschambre, V. (eds). Presses universitaires de Rennes, Rennes.

Wilson, D. and Bridge, G. (2019). School choice and the city: Geographies of allocation and segregation. *Urban Studies*, 56(15), 3198–3215.

van Zanten, A. (1996). Fabrication et effets de la ségrégation scolaire. In *L'exclusion, l'état des savoirs*, Paugam, S. (ed.). La Découverte, Paris.

van Zanten, A (2001). *L'école de la périphérie : scolarité et ségrégation en banlieue*. Presses Universitaires de France, Paris.

van Zanten, A. (2009). *Choisir son école : stratégies familiales et médiations locales.* Presses Universitaires de France, Paris.

van Zanten, A. (2015). Les inégalités d'accès à l'enseignement supérieur. *Regards croisés sur l'économie*, 16(1), 80–92.

van Zanten, A. and Da Costa, S. (2013). La gestion de la carte scolaire dans la périphérie parisienne. Enjeux, dynamiques et limites de la gouvernance éducative locale. *Éducation et formations*, 83, 99–107.

van Zanten, A. and Obin, J.-P. (2010). *La carte scolaire*, 2nd edition. Presses universitaires de France, Paris.