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Land use and soils disposal: From competition to territorial governance (examples from land use conflicts in the greater Paris region)

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Abstract

Rural, natural and peri-urban areas seem nowadays to become the object of conflicts and tensions because of their multi-functional nature. If these conflicts issue from opposing views about the use of land, they are also determined by the spatial parameters that characterize the pieces of land affected by the projects of land-use transformation, and by the antagonistic relationship between two or several units of action (farmers and local planners, for example). Therefore, there is a need for a new management of rural (and peri-urban) areas, and this is the role of territorial governance, which is the engine of local development, and the tool for better local compromises, involving periods of opposition and streams of negotiation. Territorial governance has to take into account not only negotiations but conflict relations as well and to include both interaction schemes into its framework. Our study assesses the role played by conflicts in land use within a peri-urban context, based on studies on the Greater Paris region, and a case study on the use of agricultural soils on the urban fringe.

Key words: land use, conflicts, governance, urbanization, agricultural soils

Introduction

Many authors nowadays consider that a new paradigm of rural development is emerging in developed countries. In reaction against the agro-industrial and hygienic model of production based on the use of chemical inputs and sanitary control of products, it builds a representation of rural spaces that differs from the exclusive dependence on agriculture or urbanization[1,2]. Additionally significant is the rise of environmental and sustainable-development issues, which are strongly impacting the design of rural activities, especially agricultural activity, as well as influencing public policies through their local implementations, in particular via zoning processes (for example, in Europe Natura 2000, habitat directives, green and blue belts, etc.).

This new paradigm emerges both in the local actors' practices and procedures and in public policies, with rural development seen as a multi-level, multi-actor and multi-faceted process[3]. Multi-level in the diversity of policies and institutions designed to address the issues of rural development, as well as the evolution of the agriculture–society relationship, taking into account the production of public goods, the construction of a new agricultural production model incorporating interactions between agriculture and other activities, and the combining of activities at the enterprise scale in rural areas. Multi-actor because of the interactions between farmers and other rural-area actors and because of the rural development policies designed to bring about new links between the local and the global. Finally, multi-faceted because rural development unfolds into a range of differentiated practices, some of which are emerging and sometimes interconnected (landscape management, nature conservation, agritourism, organic farming, specific agricultural products, short supply chains, etc.) so that elements considered redundant in modernist paradigms acquire new roles in farm-to-farm relationships and in those between farmers and the urban population.

Land use occupies a peculiar position in this new paradigm. One has to notice that soils in rural areas were

for a long time used predominantly for agriculture and farming, especially when agricultural activity was dominant in rural spaces. However, the great mutations of the 20th century brought huge changes with regards to this ancient organization. The constant decrease in the number of farmers and of the surface of agricultural soils, combined with the emigration of the rural population to urban areas, has been compensated for by a constant increase of non-agricultural activities and land uses for services and industry, or for the extension of natural spaces and forests. Nowadays, the competition between various uses of rural areas is at stake, and agriculture is often a marginal activity in terms of regional or local gross domestic product (GDP) and labor, whereas it often occupies a large portion of local soils. However, its occupation is under fierce competition from other uses like natural areas, tourism resorts, transport, energy and waste infrastructures, and most of all by a constant urban sprawl which becomes predominant in peri-urban areas and urban regions. The variety of land uses is constantly increasing and the competition between various users or local stakeholders raises the question of the use and the future of agricultural soils. At the moment, an increasing share of agricultural land is transferred every year to other non-agricultural uses.

As a consequence, rural, natural and peri-urban areas seem nowadays to become the object of conflicts and tensions because of their multi-functional nature. Indeed, they are considered as a medium for three types of functions that imply opposing uses and as a result lead to competition and oppositions between the local economic and social actors: an economic and productive function (farms, plants, energy settings, roads or railways), a residential and recreational function (the countryside as a living environment for permanent or temporary residents), and a nature conservation function (preservation of biodiversity, of the cultural, natural and geographical heritage). The users of rural land (farmers, craftmen, neo-rural residents, tourists, migrants, residents of urban outskirts, workers, enterprises and public services) often have different and even opposing views concerning what the land should be used for, concerning its development and that of the infrastructure allowing access to it.

These tensions, regardless of their nature, can turn into conflicts[4]. As shown in the literature, the dynamics of land occupation and of land-use transformation are an important source of land-use conflicts. If these conflicts issue from opposing views about the use of land, they are also determined by the spatial parameters that characterize the pieces of land affected by the projects of land-use transformation, whether they are linear infrastructures (a road, for example) or facilities confined to one or more sites (a factory, etc.) (see[5], or[6]) and some specialists[7] suggest that apart from the 'material' dimension of conflicts, which supposes its integration in a spatialized framework, one has to take into account the social and economic point of view, which is that of an antagonistic relationship between two or several units of action (farmers and local planners, for example).

As a matter of fact, there is a need for a new management of rural (and peri-urban) areas. Indeed, social and political rules and the management of land require that the users of rural and peri-urban land consult one another to decide on how to use land, how to manage the environment, the landscape and productions, and how to contribute to the uniqueness of each territory. This is the role of territorial governance, which is the engine of the development of local areas, and the tool for better local compromises, involving periods of opposition and streams of negotiation. As we will demonstrate later, territorial governance has to take into account not only negotiations but conflict relations as well and to include both interaction schemes into its framework.

Indeed, contemporary research tends to focus on consultation and negotiation procedures at local level and seeks to identify the means of promoting cooperation between groups of actors with different interests, and to reveal governance. However, most of these studies fail to thoroughly investigate the question of conflicts and are generally based on *ad hoc* hypotheses or on an idyllic vision in which local relations are all characterized by a desire to communicate and cooperate. We believe that analyzing the relations between land users and defining governance tools necessitate a thorough knowledge of land-use and neighborhood conflicts as they arise in natural, rural and peri-urban areas, of how they emerge and manifest themselves, of their characteristics, of their generic and idiosyncratic nature, as well as the manners in which they are managed and/or solved. However, if the increase in conflictual relations is often alleged, it is seldom proved by the facts. There is no exhaustive survey of the land-use conflicts that arise in these areas. Our study intends to breach this gap, in assessing the role played by conflicts in land use within a peri-urban context, based on studies on the Greater Paris region, and a case study on the use of agricultural soils on the urban fringe.

Competition and Conflicts Over Farmland Uses

The debate about land-use conflicts is regularly justified by concerns about the management of open, agricultural or natural spaces and to the conflicts that take place in these spaces[8–10]. After having highlighted the problematic disappearance of the rural lands that used to surround towns and cities—a disappearance caused by the increasing urbanization of society—some authors showed in the late 1980s how local communities are capable of resisting these phenomena despite the fact that the balance of economic power favors cities. They draw attention to the spatial incompatibilities between the city and agriculture and the oppositions between the 'native' rural communities and the urban society. In this perspective, the

heterogeneity of the processes of resistance indicates that they are strongly dependent on the inherited historical and cultural resources of the rural communities. Since the late 1990s, conflicts in peri-urban areas seem to have again become an object of study for rural experts, particularly because of the increase in social concern about environmental problems[10], but also because of the 'disappearance' of the rural–urban societies opposition and the emergence of a new set of 'rural' qualities which are socially constructed by local actors through new place-based governance mechanisms[11,12].

Thus, as urban studies reveal the role and impacts of land-use conflicts in the place-based governance dynamics[6,13], ruralists and territorial economists multiply local case studies in order to show how new hybrid territorial projects are currently emerging and how they can be interpreted as the beneficial result of crises between local actors[14]. These territories are then considered as experimental models that help design sustainable agricultural systems at the scale of municipal or inter-municipal urban territories. However, the method makes it difficult to adopt more generic conclusions on the relation between conflicts and territorial governance that is only possible by articulating different levels of analysis. The quantitative analysis that would usefully complement this case study approach has been driven today only by urbanists and planning experts, whose works have highlighted the spatial link between land-use conflicts and socioeconomic level of local communities at the metropolitan area scale.

Many papers have examined the conflicts and analyzed their development and local characteristics. Most authors have found that the diversity of tensions related to the many uses of land makes them, on the whole, difficult to observe and survey; as they are not always expressed, trying to make an inventory of them would be unrealistic. Focusing exclusively on actual protests[15] would drastically narrow the field of observation, at the risk of missing out on interesting information. An intermediate option—certainly the most open and operational—is to identify conflict through the observation of the act of opposition of at least one of the protagonists; it is this act, limited in time and space, that indicates a crystallization of the tensions.

In order to define the conflict as an object of study, we used a conceptual framework based on criteria that have enabled us to differentiate between the situations of tension, sometimes referred to as 'latent' conflict, from situations of open conflict. Though the antagonisms between the different uses of space generate many types of tension between the actors, the analyses based on Game Theory use the notion of credible engagement or commitment to distinguish conflict from tension. Commitment manifests itself in more or less institutional forms (verbal opposition, written signs, registered letters and administrative proceedings) or in more or less radical ways (assault, signs forbidding access and fences). In order to be credible, this engagement necessitates a monetary or more hedonic investment. It is a constraint that the actors impose on themselves and that determines their future positioning. We define as conflict an opposition between actors with antagonistic goals, an opposition that leads to the credible engagement of at least one of the parties.

We define as conflict over farmland uses all of the land-use conflicts that fulfill at least one of the following three conditions: the contested land use is related to farming or agro-industrial sector activities; the contested land use jeopardizes the efficiency of the current farming run in the area; the agricultural legal nature of the land is threatened by the contested use.

Agricultural and Land-use Conflicts in the Greater Paris Region: Nature and Diversity of the Contested Facilities

In order to assess the importance of conflicts we built a database over several situations of conflicts over various French rural and peri-urban areas (see annex)[16]. We extracted data about land-use conflicts in the Greater Paris area from the Conflict© database, based on studies on daily press articles published in *Le Parisien* (Regional daily newspaper). The choice of the Greater Paris region is motivated by the competition between various land uses and by the high number of local stakeholders, following different and often opposite goals.

A first inventory of all of the land-use conflicts reported in 2005 (182 in total), indicated that agriculture is seldom the object of conflict and that the actors of the agricultural industry are rarely involved in conflicts. However, 30% of the latter are related to the non-agricultural use of open pieces of land identified as agricultural (cultivated, fallow or meant for farming). Furthermore, this first inventory highlighted, first that local elected representatives and associations are involved in the majority of the conflicts (70%), and secondly that a large percentage of the conflicts are related not only to uses but also, more specifically, to land-use regulation (40% of the conflicts).

We then extended the inventory of agriculture-related conflicts to cover two additional years (2003 and 2004), which enabled us to build a database referencing 90 conflicts of various scopes and intensities, related to the use of agri-urban resources. Compiled in the form of a relational database, the information found in the newspaper articles, once encoded, enabled us to locate the Municipalities in which one or several conflicts occurred between 2003 and 2005.

Using these data, we are able to describe the diversity of the contested objects and the nature of the antagonisms they generate and which cause the actors' reaction. A first quantitative synthesis of the information found in the press concerning actors engaged in conflicts shows that it is less the reaction of the actual users of land (professionals, individuals) than the actions of their representatives (elected representatives, associations and

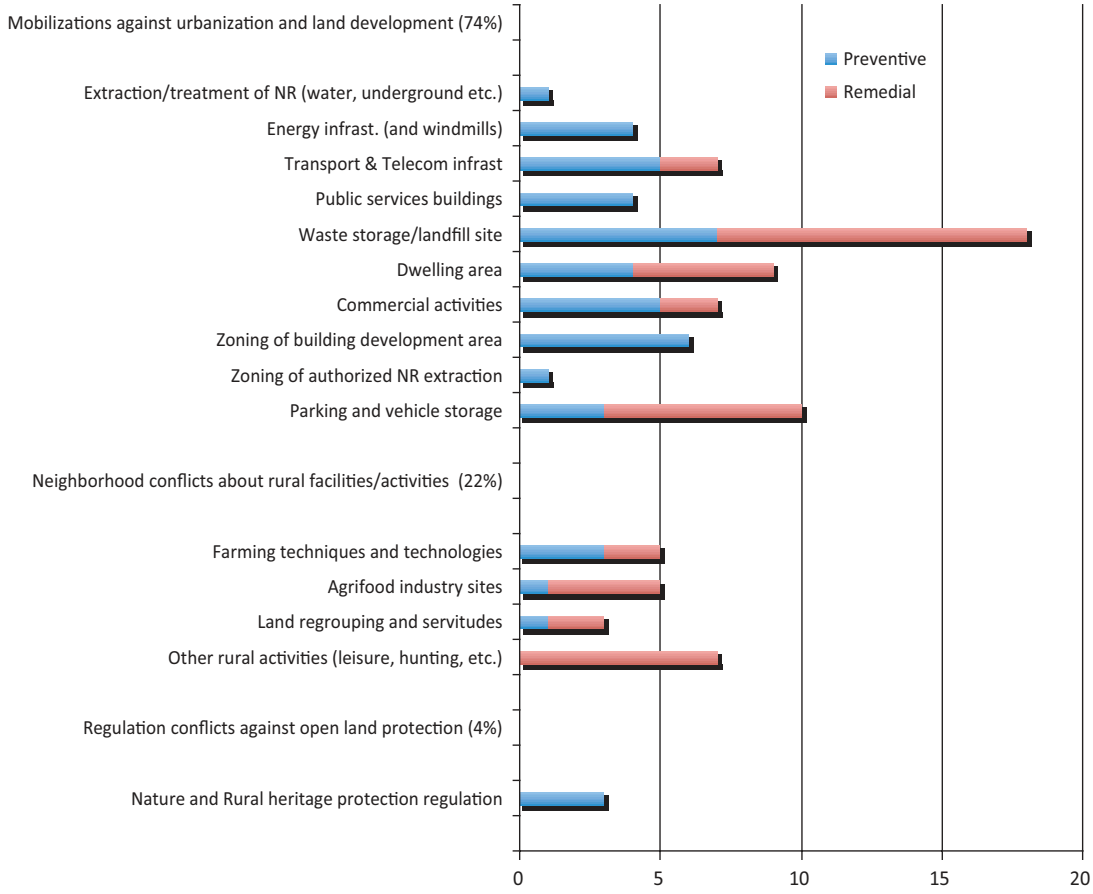

Figure 1. Categories and detailed objects of land-use conflicts found in the paper *Le Parisien* during the 2003–2005 period.

representatives of the public authorities) that are reported in newspapers. Among these representatives, municipally elected officials and local or generalist associations are those that initiate most of the actions covered by the press, whereas the representatives of State authorities, municipal elected officials and professional users are the group of actors that are the most contested. Moreover, the majority of conflicts (57.7%) occur in an attempt to prevent the creation or development of objects or facilities considered to be associated with environmental constraints (the other conflicts are remedial). They are triggered by people who seek to minimize or eliminate a nuisance they are already experiencing.

In order to go beyond this first set of generic results, we grouped the various patterns of oppositions into three main categories. It allows us to draw a qualitative and quantitative picture of the variety of farmland-use conflicts in the peri-urban area.

Collective mobilization against urban development and its negative impacts: The dominant feature

The most frequent conflicts are those opposing local actors about the negative impacts of urban activities and urbanization proximity upon the rural resources used by farming (soil, water and atmosphere). The initial opponents are mostly local residents. They protest against the nuisances generated by the city, which are considered as a threat to the rural quality of their life environment. Farmland and agricultural spaces are thus mentioned during debates to qualify what is preferred compared to the rejected urban developments or activities.

An illustrative example of this kind of conflict would be that of Pierrelaye. A struggle against illegal landfills is based on the public recognition of the productive value of the farmlands concerned by local government. Even if the soil here is highly polluted by decades of sewage spreading and market gardening is forbidden (even corn cropping had to be restricted because of pest control regulation linked to the proximity of international airport Charles de Gaulle), public regulation of the fields and lanes is supported by the local budget under the objective of protecting the productive spaces and resources of local farmers.

From a quantitative perspective, this category is the most important in our collection. It groups 74% of the cases. Non-governmental organizations (NGOs) and civic associations are frequently involved, which could explain why media publicity and administrative litigations are the dominant means of expressing the conflict. Among the many sources of dissatisfaction reported (Fig. 1), the

most frequent are those linked to urban waste and sewage management, before those linked to illegal parking, dwelling and commercial areas or transport infrastructures (mainly road construction).

Among the conflicts triggered by groups opposing the urbanization of agricultural land, three scales of conflicts can be distinguished that correspond to different categories of contested objects and uses. They are the conflicts related to regional development, those related to the management of municipal land, and those related to the consequences of urbanization.

- In the first case, the conflictual interactions develop at the scale of a sub-region, through alliances between elected officials and associations who oppose representatives of the public authorities accused of supporting private developers or as managers of regional development and planning.
- In the case of conflicts related to the management of municipal land, the conflictual interactions only involve members of the municipality. The municipal council plays an important role here.
- Finally, the conflicts triggered by actors who protest against the nuisance and constraints generated by agricultural activities develop mostly at the scale of the municipal territories and their neighboring areas. They involve local environmental associations and municipal officials who oppose the professional representatives of the agricultural or agribusiness sector.

Neighborhood conflicts against farming nuisance, not so numerous

As suggested by the previous results, and contrary to the opinion of many experts, neighborhood disagreements are not the main source of conflict in peri-urban areas. This category still groups 22% of our collection and shows an interesting variety of patterns.

If some articles record the case of neighbors specifically contesting cropping or livestock farming activities, another frequent case is the one against agri-food storage and logistic facilities developments and two cases concern the polemics about agricultural land development (drilling and land regrouping) and their environmental consequences upon the scarcity and quality of natural resources (here water and groves).

In terms of social interactions, even if personal interests are the main motivation of the contestants, inter-individual oppositions are not the norm in this category. Individuals often regroup within collective organizations in order to reach their elected representatives' attention and initiate an institutional regulation process or, also, to engage in litigation.

Finally, neighborhood conflicts can also be categorized not by farming activities but by rural dwellers' activities, such as motorized leisure or hunting societies. In this case, farmers often contest the development of private hunting societies (which tend to flourish around the Parisian agglomeration in order to satisfy an increasing demand from a section of the rich population and workers, but which fail to regulate the wild boar livestock they introduce). Of course, by definition, the press is only showing us the visible patterns of this category of conflicts, which we can imagine as being proportionally more important in reality.

Private landowners resisting open land regulations, the beginning of collective action

The last category that we could identify is almost anecdotal in terms of the number of cases but nevertheless represents a significantly original pattern that we could find more often in other sources, such as administrative litigations for example[17]. They involve engagement between private landowners and public administration about the legitimacy of open land regulation.

The press records here the original situation where the public landscape and natural resources protection regulation is being contested in court by landowners' collective organizations and farmers' elected representatives. The latter argue that open land protection regulation can impact farming economy by adding developmental constraints, such as architectural and land development restrictions or arboriculture constraints (in the case of forest protection regulation). This is, for example, the case of the administrative litigation engaged in against the rural landscape heritage protection perimeter of the Plaine de Jouars (Yvelines).

Complex and intricate conflict behaviors

To conclude with the conflicts, we have established that the information provided by the press indicates that the uses of agri-urban resources are regulated through social processes, and more particularly through protests against the development of regulations or infrastructures serving urban and non-agricultural activities. A number of these conflicts are related to the implementation of urban waste management facilities and to certain unplanned temporary uses of open spaces. Indeed, the urban consumption of agricultural land is regulated, and the degradation of the water and atmospheric resources circulating between different peri-urban territories is controlled through protest against these uses.

Other articles in our collection reveal, however, that other types of conflicts also play a part in this regulation; these conflicts involve protests against the impact of certain agricultural facilities or practices on the resources destined for urban consumption. The nature of the groups of actors initiating these processes of regulation is determined, on the one hand, by their ability to show the links between the resources under threat and the contested facilities or practices, and on the other, their ability to approach hierarchically or influence networks so as to be able to take action at the appropriate governance level

(i.e., territorial, governmental or economic authorities). We have also shown that all of these conditions were met, in the case of preventive conflicts, within upper and middle class residential rural municipalities, and, in the case of remedial conflicts, within middle class residential rural municipalities as well as in the newly attractive rural villages. One has to wonder whether these changes and oppositions can be handled by the new CAP in Europe, and most of all by the new smart development EU policy, which claims sustainable and inclusive development for regions and areas.

Territorial Governance at the Heart of the Competition between Land-use Competition

We have seen that various conflicts arise around competition for land use or, most of all, for agricultural land. We will demonstrate that these conflicts are part of the territorial governance process, and that they occupy a particular position in this complex arrangement. They are ways to improve the decision around the development of the territories and the choice of uses for agricultural soils.

The notion of governance is rather blurred and ambiguous; Pasquier et al.[18] define it as 'a set of rules and styles making possible the conduct of a public action' in a context where society is becoming more and more differentiated (and autonomous) and where there are more and more interested parties, or the notion is sometimes presented as a government of compromise or as a process of multi-level and multi-polar coordination in a strongly asymmetric context where there are many decision centers.

Following institutional innovations brought about by decentralization and contractualization in many countries, the participants have been led to try out new forms of public action and involvement in decision making, passing from a pyramidal or hierarchical organization, founded on the public institutions, to a network-type organisation[19,20] that combines public–private partnerships[21] and involves a highly varied group of players[22] and multiple territorial levels[23].

Yet, the government must continue. The tools of governance are therefore aimed at easing the participation of more and more varied public of parties or of those with interests (public representatives versus private lobbies, political agents versus members of associations) in decision processes that are more and more fragmented and dispersed and at the same time less and less certain. This is the rupture of the governmental approach to public affairs by hermetic administrative and political devices, and the upsurge of questions of local democracy in the management procedures of people and organizations.

Governance involves the participation of players with heterogeneous preferences in the decision process, people from different groups each with their particular incentives. It becomes a focal point, focusing the numerous contributions in coordination, interaction, collective action, empowerment and learning—with a special emphasis on participation and consultation. In some human sciences—institutional economy, political science, sociology and management—discussions may be about a specific object, but much interdisciplinary work revolves around a few key themes: expertise and public action, the general interest, participative governance, property rights, community governance, development, public policies, governance *vis-à-vis* the issue of proximity, voluntary schemes, equal access to resources, as borne out by the terms of world, European, urban or environmental governance, etc.

Thinking in terms of territorial governance refers to concrete objectives in terms of local and rural development[24]:

- to favor the setting up of territorial development projects;
- to contribute to the design of wide consultation schemes;
- to facilitate the coordination of heterogeneous groups of players;
- to limit the spatial exit of people with certain profiles;
- to avoid sterile confrontations;
- to decide on development pathways.

Through this stance there also appears a renewal of the methods whereby a representation or a common project is constructed. It shakes up the schemes to be set up and calls for a reinforcement of the processes of local democracy or deliberative democracy.

Territorial Governance and Land-use Conflicts

Our research on the conflicts in rural and peri-urban areas shows that they are essential in the land development processes or in the management of various local functions. Land-use conflicts are a form of expression of opposition to decisions that leave part of the local population unsatisfied[4]. Some local innovations provoke resistance which can give rise to conflicts. Major changes, which involve reconfiguration of the use of space (introduction of transport or waste treatment infrastructures, new local urbanism plans, and territorial or environmental zones) generate conflicts whose spatial and social extent can become very considerable.

Conflicts are thus one way of entering into the discussions on the stakes and ways of territorial development, and of affecting the decisions by involvement in processes from which one had been excluded[25]. This is the reason why they bear either on the decisions that have been taken on development (arbitrated negotiation) or on the composition and representativeness of the bodies in charge of the decision (arbitration). The conflict is also

an integral part of the process of deliberation at the local level, allowing an expression of local democracy and the re-integration of players who were forgotten or left aside in a previous phase of project design.

Territorial governance is not limited to an idyllic vision of economic and social relations, i.e., to forms of cooperation and common constructions[26]. It is also about interaction between forces promoting cooperation and other forces promoting conflict. The processes of territorial development and their progress over time do not in any case resemble a long and tranquil river. They are made of phases of negotiation, collaboration or appeasement, and of much rougher periods when certain groups or categories of players clash, sometimes violently, in defining the steps to be followed and the options to be adopted. The process of the governance of territories thus has two complementary sides, the reciprocal importance of which varies with periods and situations. It feeds on opposing tendencies[27], whose reconciliation leads to a definition of path development.

Our research shows that this dimension is also key in processes of territorial management, regional development or the governance of various local activities. It appears in the form of litigation, media events or violent protests. In most cases, land-use conflicts are not blind oppositions or purely egoistical in origin but constitute a way of initiating discussions on the issues and paths of territorial development and of influencing decisions by participating in processes underway from which one had been excluded[25].

Land-use conflicts thus constitute one form of resistance and expression of opposition to decisions that leave part of the local population unsatisfied[4,14]. Some local innovations, whether technical or organizational in nature, give rise to resistance which can turn into conflict. Major changes requiring reconfiguration of the use of space (creation of transport, energy or waste-processing infrastructure, new urban master plans, territorial or environmental zoning, etc.) generate conflicts whose spatial and social extent can quickly grow. Conflicts are signals of social, technological and economic changes and indicators of novelty and innovations. They demonstrate the opposition aroused by the latter, lead to discussions on their implementations and their possible (non-) acceptability as well as on the adoption of governance procedures, and their transformation under the influence of the dynamics of change. All of the changes encounter opposition or resistance of varying relevance and justification. However, it would be simplistic to see this resistance as a systemic sign of reactionary opposition to change because, in a number of cases, they are more a reflection of differences over the direction taken by the new initiatives that are being imposed on the public than of a stubborn desire to maintain the status quo. During these phases of conflict, social and interest groups tend to reconstitute themselves and may even undergo technical or legal changes. Once a conflict ends, it leaves behind new local agreements, new modes of governance, new configurations of discussion forums as well as new technical procedures (changes in direction, various adjustments, changes in urban planning documents, etc.), all arrived at during the negotiations. Harbingers of territorial innovation, conflicts are thus both the result as well as the cause of territorial changes, as shown below, with the case study of the Plateau Briard, located on the border of the Paris agglomeration.

Conflicts and Territorial Governance: The Case of the Plateau Briard

In order to assess the development of conflicts related to (mostly) agricultural land uses in the greater Paris region and to reveal the role they play in the process of territorial government of local areas, we will examine the example of the three 'farming domains' located 20 km from the center of Paris, in the Plateau Briard district (Fig. 2). This area is composed of six municipalities which share a common concern about the preservation of farmland in the context of great urbanization pressure due to the direct proximity of the Parisian conurbation. Its demographic growth rate was still high in 1999 (+4.3% between 1990 and 1999, compared to +1% for the Val-de-Marne département) due to the qualitative living environment and the quantity of building lands available. On the 3169 ha of the district, 23% are farmlands (747 ha) divided between the 45 local farms of four municipalities: Varennes-Jarcy, Santeny, Mandres-les-Roses and Périgny-sur-Yerres, the two last municipalities being already totally urbanized. In Santeny and Varennes-Jarcy, the majority of the farmlands are used for grain production and some horse-breeding farms.

In the municipalities of Mandres-les-Roses and Périgny-sur-Yerres, horticulturists and market gardeners are living and producing within the perimeter of three original housing estates dedicated to farming activities: the Roseval, Rosebrie, and Saint-Leu domains. Since 2001, they have been integrated in a local action program implemented by six municipal councils which aims to preserve the last farmlands of the Plateau Briard district. Even though they were created at the same period of time, the domains show significant differences in terms of estate planning and architecture and of collective functions of open land.

The two domains of Mandres-les-Roses (Roseval, 29 ha, and Rosebrie, 65 ha) are dedicated to horticulture. The settlement design follows the plans traditionally used by the administrative agents in charge of the project at the time (Agents of the Direction Départementale de l'Agriculture (central state farm development agency) and Société d'Aménagement Foncier et d'Etablissement Rural (SAFER: public institution in charge of public rural settlement operations).). It looks like a classical housing estate, each farmer's house being regularly distributed along the two sides of a circular lane equipped with public

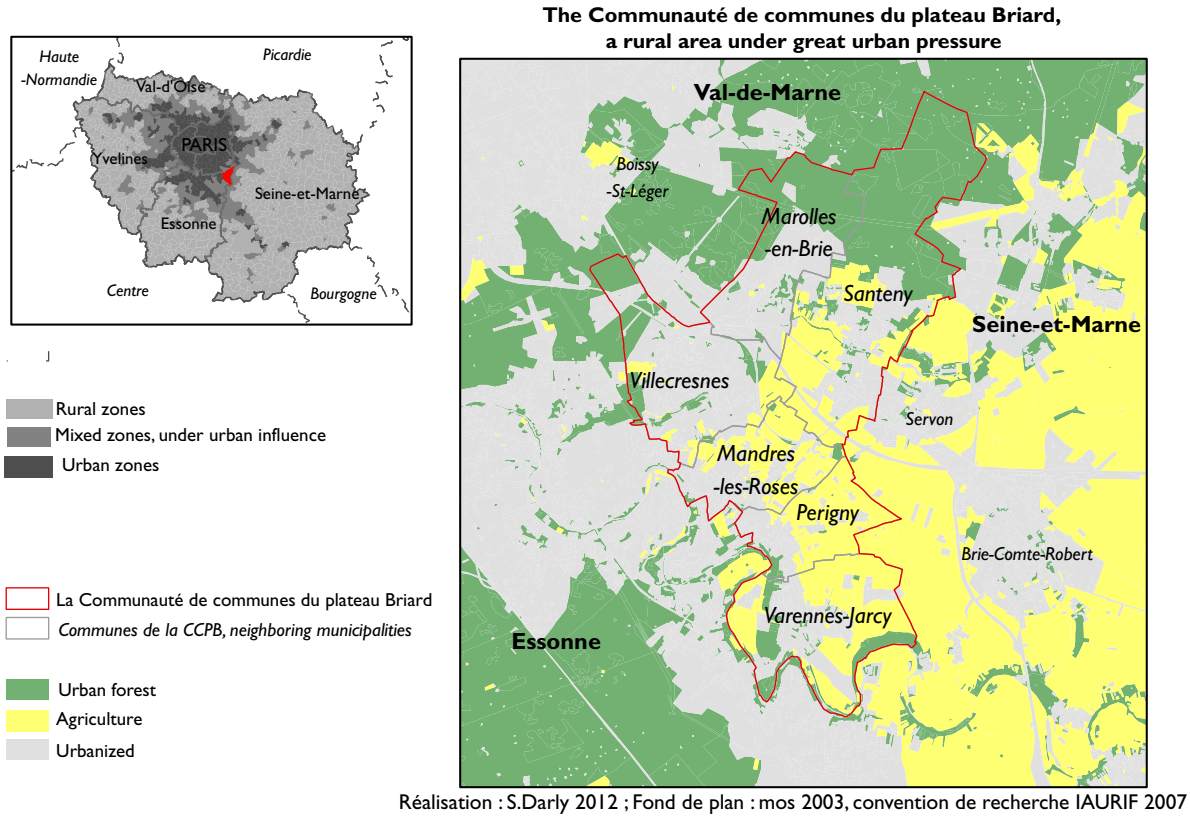

Figure 2. The Plateau Briard, in the Greater Paris Region.

lighting and sidewalks, except that the plots have been specifically sized (2000 m^{2}each) and arranged (with fences) for the growing and production of fresh flowers in greenhouses, which were to be exported on the international market. This spatial configuration leaves today very few possibilities of developing other farming activities. By comparison, the Saint-Leu Domain, 86 ha, looks very different. The land is mainly used for market gardening (no greenhouses), also sold on the international market. The plots are bigger (2–3 ha) and with no fence closing them. There are no 'streets' but farming lanes with no sidewalks but green hedges, and a public 'House of the Nature' welcomes visitors at the entrance of the estate.

We interviewed several elected representatives and farmers who took part in the decision making of the domains' creation and, later, of the Plateau Briard district. This field survey gave us empirical material to illustrate how conflict interactions are at the core of a local dynamic for the preservation of specific interests linked to the protection of open farmlands and how they participate to the differentiation of the city countryside.

Making of the domains: tensions arise

The production of roses was developed at Mandres-les-Roses in the 18th century. At that time, they were transported directly by train to the market place of La Bastille in Paris. This activity almost ended with the rapid growth of the capital in the 1960s when the high rate of house and road building consumed all of the farmland and greenhouses owned by rose producers. The rose production tradition survived on other plots in the municipality and only thanks to state intervention. In 1965, the Caisse des Dépôts et Consignations (CDC) bought one vast farmland of a local cereal farming family. By the beginning of 1970, state representatives intervened to stop the urbanization process of the area and managed to locate on the plot, through SAFER mediation, several horticulturists who had been expelled from newly created new towns. In the 1980s, when the state encouraged the adoption of local planning documents, the plots had been integrated under a 'C' zone (C meaning that the land located in the zone can only be used for farming). This was seen as a minor detail at that time but became, as we will see below, a major object of tension 10 years later.

The story of Saint-Leu is quite different. If the resistance to urbanization is also at the basis of the domain project, it has been carried on mostly by local actors and not by central state representatives. During a municipal council meeting in 1967, the mayor asked the council to allow the notification of a public housing project that was planned on a plot sold 2 years earlier to the CDC (along with the plots of Mandres-les-Roses). The council rejected the request, arguing against the high cost of the operation and, most of all, the loss of valuable farmlands in a locality that included several market

gardeners in search of land. A few days after the vote, the mayor resigned and a new council was elected, led by a non-farmer resident and several market gardeners. Very soon, the newly elected team had to face a great number of similar housing projects and searched for public regulation tools that would help them to regulate the conversion of the remaining farmlands. In cooperation with the central state services, they experimented in 1974 with local planning documents (Plan d'Occupation du Sol), using for the first time 'C' zoning in order to forbid building on farmlands. The C zoning sent a strong message to the landowners (one cereal farmer and several non-farmer owners). They gradually agreed to sell their plots at a lower price than the housing land price (but still higher than the current farm land price) so that a regrouping of lands could be performed.

In the mid-1970s, a rise of energy costs and strong international competition in the fresh flower market began to reveal the weakness of the greenhouse and rose monoculture systems implemented at Mandres-les-Roses. As the classical farm housing estate projects were designed for greenhouses and horticulture, the Périgny farm workers who were candidates to buy farmland were planning on developing market gardening. However, plain field market gardening requires bigger plots and therefore increases the total cost of the operation. To compensate for this fact, market gardeners thought about lowering the cost of the domain settlements (road, lighting and sidewalks). They failed at convincing SAFER to design a new form of farm housing estate. Hence, the group of market gardeners, helped by the municipality, created its own local land settlement agency through which they were able to divide and equip the plots as they planned. In the process, the non-farmer members of the municipal council negotiated that part of the domain would be dedicated to collective uses through what was called at the time an 'agro-touristic complex': hedges were designed for biodiversity protection, pedestrian lanes were include in the plans, and a plot was set aside for a communal 'House of the Nature'.

The life of the domains in the 1990s: from tensions to conflicts

In the 1990s, tensions grew to conflicts in the Plateau Briard area. During the early 1990s, horticulture and market gardening were strongly exposed to international competition, whereas the two sectors stayed outside of the European common market policy. The interest of the landowners in farming activity was therefore strongly decreasing: the lack of private investments, the closing of the weakest farms, and the high costs of greenhouse destruction explain the multiplication of fallow lands inside the domains. The period seemed to have favored the expression of neighborhood tensions between residents and farmers: horticulturists from Rosebrie complained about the lack of public maintenance of their lane, while requests were addressed to the municipal council about the mud tracks left by the tractors on the roads. In Périgny, the 'Home of the Nature' was no longer used, the pedestrian lanes began to deteriorate and the market gardeners intended to cut the hedges whose roots plugged the drains. However, if the tensions were numerous, a few of them were expressed through open conflicts. This period appears as a transition, through which the physical and economic environment evolved slowly as the tensions were regulated by the key elected representatives that created the domains.

From the middle of the 1990s, the acceleration of retirement departures in the domains and the renewal of the members of the elected council set the grounds for a period of further conflict. In Mandres-les-Roses, fallow lands were more and more numerous and tensions between horticulturist landowners and the members of the municipal council resulted in the crisis that surrounded the rewriting of the local planning documents in 1994. C zoning of the two domains was indeed confirmed in the new project, whereas the landowners counted on the end of the zoning to sell and stop farming activities. Strong oppositions were expressed, and one council meeting was interrupted by the violent intrusion of farmers.

In Périgny-sur-Yerres, the fallow lands problem is nonexistent and the market gardening business is more resistant to global economy competition. Still, several market gardeners facing marketing difficulties would prefer to convert farmland if the zoning becomes less restrictive. To secure the protection of open lands, the municipal council, with the regional council of Ile-de-France, established in 2003, a PRIF (regional perimeter for public intervention over farmland property) over the domain and other locations. The strong tensions remaining between pro- and anti-domains in Mandres-les-Roses made it impossible for the municipal council to vote for the extension of the PRIF on its territory. In 2007 (when the last interviews were held), land property regulation was still highly conflictual, even in Périgny-sur-Yerres. Administrative agents are openly criticized during public meetings and the information notices installed along the pedestrian lane are frequently damaged.

From municipal conflicts to inter-communal governance

Since the end of the 1990s, local stakeholders have tried to set up a new period of cooperation, in order to improve local governance. The elected representatives of Mandres-les-Roses tried to support the local farming development program in order to lower the tensions due to farmland property rights regulation. During this period, the central state was trying to reform the collectivities' organization by gathering municipalities into intercommunalities (inter-municipalities). The Plateau Briard district is one of these new intercommunalities, formed by the gathering of six municipalities in 2002, and was designated to

manage the farm development project (named 'agri-urban' program) that the institutional partners agreed to finance.

The geography of the district reveals the tensions between the municipalities that cooperate to protect farmlands and the urban agglomerations that surround them: Community of agglomeration (CA) of la Plaine Centrale du Val de Marne around Créteil, CA of Haut Val de Marne around Boissy St Léger, CA of Val d'Yerres around Yerres, and Syndicat d'Agglomération Nouvelle (SAN) of Sénart. The identity of the new district is therefore based on a common objective of resistance to urbanization rather than on a common vision of farmland development. This incidental association must not mask the differences between Mandres and Périgny that are still structuring the public action for farmland preservation.

Even if the risk of housing development is higher in Mandres-les-Roses (due to a weaker farming sector), the municipal council, as we said before, rejected the PRIF in 2003, and, several year later, refused the 'agri-urban' action program of the Plateau Briard which includes the project ZAP (Zone d'Agriculture Protégée) proposed by the council of Périgny. For the elected representatives of Périgny and Mandres, the Plateau Briard district is on the one hand a common platform used to resist urbanization, and on the other hand, a new arena of conflict between two very different municipal 'agri-urban' legacies.

To sum up, the limit revealed by the early stages of the Plateau Briard conflict chronology was the 'top-down' government paradigm that most central states services were following in the 1970s and their inefficiency with regard to agricultural land planning. Rigidity not only in the urban but also in the rural development models adopted by the CDC or SAFER have been condemned throughout conflicts that led to the early experiment of innovative local planning governance. The multiplication of conflicts between the municipal council and the landowners highlights the need to re-evaluate public and private decisions as the interests of the landowners change with time, and also reveals the innovative role of the conflicts, which gave birth to new solutions in terms of territorial governance, such as the so-called agri-urban programs.

Conclusions

Territorial governance processes are today undergoing intense upheaval and are subject to intense periods of discussions and conflictual opposition. These latter shape the phases of territorial innovation and thus change the directions of development and growth in rural or urban territories. Such governance mechanisms and their associated conflicts can be viewed as laboratories of change because they accompany, and sometimes anticipate, the changes underway in the territories by giving them shape, by helping maintain a dialogue and expressions of opposition, and by preventing violent confrontations or failures of development due to sluggishness or expatriation. Therefore, these changes in land-use occupations and the subsequent oppositions they gave birth to are embodied in the opposing and twin forms of conflict and consultation which constitute the modes of expression and the vehicles of transmission of on-going innovations at the territorial level.

The Plateau Briard case study highlights how conflicts reveal and regulate the limits of farmland governance, and give birth to territorial innovation, in terms of local arrangements or institutional set-ups. From a more general perspective, it shows that the conflicts give us an insight into the interests defended by each actor involved in the farmland governance and on the power relations associated with innovative collective projects that emerge from them. Cooperation and conflict relations are the two faces of territorial governance relations, and interactions and tensions between the local actors are constituents of the modalities of territorial governance of various land-use projects and expectations.

As a matter of fact, land-use configurations strongly depend on the balance between conflicts and negotiations in the territories. If negotiation is successful and local compromises are reached, then the actors are likely to develop relations of cooperation, and even of trust and synergy. If, on the contrary, the actors oppose one another, conflicts emerge and condition the relations between the local actors. Recourse to territorial governance is all the more necessary as the conflicts intensify. Indeed, few are the territories that can go through long periods of time without conflict, if only because conflicts serve to reveal social, institutional or technological innovation in the territories.

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Annex—Observing conflicts: Sources and methods

In order to better understand and analyze the conflicts that have emerged in rural and peri-urban areas we have initiated a program of research on neighborhood and land-use conflicts. This program is based on an empirical and deductive approach and aims to analyze how conflicts emerging on the French territory develop and how attempts to solve them are undertaken. It has proved not only the importance of land use conflicts over agricultural soils, but also their core role in the process of territorial governance.

Analyzing conflict events necessitates data on actual conflicts so as to be able to empirically measure the opposition phenomena, the modes of expression of conflicts, their causes, origins or the solutions proposed to end them. However, the data related to conflicts is scarce or incomplete for two main reasons: the little interest taken until the year 2000, in this question, as well as the complexity of the conflicts—conflicts which find expression in various modes (tribunals, media coverage, and demonstrations)—make it difficult to represent conflicts and require the input of various disciplines for their definition. The analysis of conflicts can only be conducted on the basis of information collected from different sources.

In France, as in other countries, there is no system of statistics on conflicts related to the use of land and territorialized resources (landscapes, etc.). A group of INRA, CNRS, and university researchers in different fields (economics, sociology, geography, and social-psychology), among whom the authors of this article, have developed—with public financial support—a database on land-use conflicts that occur in the French territories. It is original and responds to a desire to make an exhaustive inventory of the conflicts, and is fed by three different types of sources: the Daily Regional Press, civil disputes, and qualitative surveys. The data from the first two sources are made compatible by a common nomenclature and common variables, developed collectively and which are combined to data related to the socio-economic context. The scale used is the commune (or town/ municipality).

– The definition of land use and neighboring conflict rests on three elements:
  The distinction between conflicts and tensions. In relation to tension, a conflict implies the crossing of a qualitative threshold, corresponding to the engagement of the parties in a conflictual relation and aims to give credibility to their positions. Engagement implies a cost—which may be financial or hedonistic—and which can take different forms: Actions at law, bringing the matter to the attention of the public authorities or of the civil service representatives; Mediatization (bringing the matter to the attention of the media, press, radio, and television); Assault or verbal confrontation; the destruction of property or infrastructures, Putting up visible signals (signs forbidding access, fences and gates, etc.).
– The spatial dimension of land use conflict. Land use conflicts concern a physical good; they arise between neighbors, around the use of localized support material, or immaterial goods; They have an institutional dimension in that they are determined by both the actions of local and supra local authorities and by the rules they introduce.
– Materiality. The conflicts we are interested in are related to a materiality of the actions that have taken place or are anticipated. The oppositions between people or groups of people refer to concrete objects, to technical acts that are taking place or will take place and imply concrete actions.
– Development and infrastructure projects have been identified as the material objects triggering conflict: installation of a mobile telephone relay station, construction of a road, etc. This material object can be formulated in legal terms in a different register, for example, when the petitioners protest against a decision to modify a local urban development plan the ultimate purpose of which is to allow for the construction of an infrastructure. The documentary base enables us to identify the material object of each conflict and the juridical field of the motion.

The overall structure of the Conflicts© database is based on three main data tables:

– A table containing the variables relative to the geographical locations of the conflicts (in relation to a municipality, a community of municipalities, or a *département*)
– A table indicating the variables describing the conflicts *per se*, that is, the cross sectional categories—which are identical whatever the source of the survey, and the categories relative to a context of observation (The legal categories defining, for example, the nature of a request made to a jurisdiction.);
– And finally a table providing information about the profile of the actors involved.