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Organic farmers facing the processes of institutionalization and conventionalization. A longitudinal study in Belgium

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Abstract *– In this paper, we examine how professional practices of organic farmers and their justification of it have evolved over the past 8-10 years. We interviewed thirty Belgian organic farmers, the first time, in 2001-2003, and again in 2010-11. We draw on theories of institutionalization and conventionalization of organic agriculture and complete them with the theory of justification, especially by referring to an ecological order of justification. We adopt a longitudinal device and proceed by abduction. The research results show that for the majority of the interviewed farmers, the effects of the processes of institutionalization and conventionalization are relatively limited. For these subjects, the ecological references do not diminish in importance, but are transformed. More specifically, those farmers innovate by "accommodating" the ecological order with the industrial and commercial. A minority of the interviewees benefit from the processes of institutionalization and conventionalization and another minority is excluded from organic farming.*

Keywords: *organic farmers, organic farming, conventionalization, institutionalization, ecological order of justification, longitudinal approach, Belgium*

Les agriculteurs bios face aux processus d'institutionalisation et de conventionalisation. Une recherche longitudinale en Belgique

Résumé – Nous étudions comment les pratiques professionnelles des agriculteurs bios et la manière dont ils les justifient ont évolué au cours des 8 à 10 dernières années en nous appuyant sur des entretiens d'une trentaine d'agriculteurs bio belges menés en 2001-2003 et en 2010-2011. Nous mobilisons les théories de l'institutionalisation et de la conventionalisation de l'agriculture bio, en les complétant par la théorie de la justification, avec un intérêt tout particulier à l'ordre de justification écologique.

Nous adoptons un dispositif longitudinal.

Pour la majorité des agriculteurs interviewés, les effets des processus d'institutionalisation et de conventionalisation restent limités. En effet, leurs références écologiques ne diminuent pas en importance, mais se transforment : ils font preuve d'innovation en les « composant » avec des références industrielles et marchandes. Une minorité des interviewés tire bénéfice des processus d'institutionalisation et de conventionalisation et une autre minorité se trouve exclue de l'agriculture bio.

Mots-clés : agriculteurs biologiques, conventionalisation, institutionalisation, justification écologique, approche longitudinale, Belgique

JEL Classification: Q1, Q19

1. Introduction

For some twenty years many scholars in the social sciences have studied organic agriculture's processes of institutionalization and conventionalization, which distance it from its original status as a social movement. Institutionalization refers to the government's progressive regulation of the organic sector, while conventionalization refers to the organic sector's gradual adoption of the practices of conventional agriculture. This second process, in particular, has long been regarded as ineluctable, unidirectional and linear.

Despite the progressive enrichment of the debate, in particular thanks to the introduction of the concept of bifurcation, research on the evolution of organic farming remains trapped in a dualistic conception. Organic is often stereotypically presented as being torn between two opposing trends: good organic which is said to be small-scale and faithful to its vocation as a social movement, and suspect organic, haunted by accusations of being large-scale, industrially minded and export-orientated. Several authors, including Darnhofer (2010) regret the methodological weaknesses of most of these studies and the lack of true longitudinal research. Still, from a methodological point of view, researchers argue for increasing empirical grounds taking into account regional and local characteristics. From a theoretical point of view, scholars like Rosin and Campbell (2009) argue for greater conceptual freedom, going beyond the point of view of the political economy by integrating approaches that take into account more of the way in which actors position themselves in relation to these structures. They adopt the theory of justification (Boltanski and Thévenot, 1991) which, according to them, better reflects the diversity and complexity of organic farming.

During the years 2001 to 2003, we conducted extensive interviews with thirty Belgian organic farmers, who we interviewed again in 2011. This longitudinal device has permitted us to study the change in their professional practices over the last 8 to 10 years, due to the processes of institutionalization and conventionalization, and the way the farmers justify these changes. We rely on the two frameworks mentioned above: the first—a theory of structure—which relates to both processes, and the second—a theory of agency—takes into account organic farmer's practices and their justifications.

Our research shows three types of change. The first characterizes a majority group that we call the "green innovators": they innovate partly within their farming activities and partly in conjunction with it, by setting up other activities; they justify these practices by combining green, industrial and market justification principles in an original way. The second type, the "winners", surfs on the wave of conventionalization and refers to industrial and market principles. Finally, the "excluded" could not cope with the various institutional/conventional constraints and have left organic farming.

In the second section, we present and discuss the theories we use to understand these evolutions: the theory of organic farming's institutionalization (its increasing regulation by governments) and of its conventionalization (its tendency to adopt the conventional farming methods of production and marketing). We show the limits of this double theoretical approach and propose to complete it by drawing on the theory of justification, which requires that we complete the standard version of the theory by including green, or ecological, principals of justification.

In the third section, we show our research methodology's two specificities. For the data collection, we adopted a longitudinal approach which was based, as mentioned, on two series of interviews separated in time. To analyze the data we principally used the abduction method, that is to say that we immersed ourselves in the data in order to choose the most appropriate theoretical framework and research hypotheses.

The fourth section is dedicated to our research's results. We show in particular that for the majority of the interviewed farmers the effects of the institutionalization and conventionalization processes remain relatively limited: the green references do not diminish in importance, but are transformed. More particularly this majority accommodates green references with references from industrial and market approaches, which refer in turn to institutionalization and conventionalization processes.

In the fifth section we pursue several points raised in the analyses. By introducing a new framework—Giddens' theory of structuration (1984)—we seek to better articulate on one hand, institutionalization and conventionalization theories, and on the other hand, the theory of justification.

2. Two theoretical bases

2.1. The theories of institutionalization and conventionalization and their limits

The institutionalization and conventionalization theoretical trends have developed in slightly different sociopolitical contexts. The first was largely the work of European scholars (Best, 2008; Kaltoft, 2001; Lynggaard, 2001; Michelsen, 2001) who observed that the government's progressive regulation of organic food (through certification, premiums, the creation of negotiation platforms involving public and private actors, incentives given to schools to serve organic meals, support for short food supply chains, training programs, *etc.*) cut the organic movement off from its collective action potential. Institutionalization also affects the way in which the organic sector organizes itself. However, these authors warn against a generalization of the findings and argue for greater fieldwork diversity.

The second theoretical approach was born in California and quickly spread to New Zealand and Australia, where organic farming boomed in the '90s,

due to the interest from the food industry (Buck *et al.*, 1997; Coombes and Campbell, 1998; Fairweather, 1999; Guthman, 2004; Hall and Mogyorody, 2001). The conventionalization process consists essentially in the organic sector's adoption of the same agronomic practices (processing, distribution, organization and values) as conventional farming. Major research programs have been implemented. They were quickly criticized because of their linear and unidirectional evolution (from organics to conventional and not the reverse). Some (Coombes and Campbell, 1998; Hall and Mogyorody, 2001) have enriched the theoretical corpus by the concept of "bifurcation" which consists in a more or less peaceful coexistence between industrial-scale and artisanal-scale organic production. Others have criticized the tendency to generalize these findings. For example, according to De Wit and Verhoog (2007) European countries, including Belgium, have not followed the conventionalization tendency because of a general family farm dominance and therefore a smaller place for agro-food business. Research in the United States, including Texas (Constance *et al.*, 2008) also shows that there is only "mixed support for the conventionalization thesis".

Recently, Darnhofer *et al.* (2005), Truninger (2008), Rosin (2008) and Rosin and Campbell (2009) have expressed fundamental criticism about the methodological and theoretical designs.

Darnhofer *et al.* (2010) regret that, in terms of methodology, the aggregate statistical data do not shed light on the complexity and heterogeneity of the current evolutions. They also regret the absence of true longitudinal studies; most studies presented as such, study only "changes of the 'average' organic farm at two points in time" (p. 70). These authors argue for the revalorization of research that is conducted at the farm or farmer level.

At the theoretical level, Truninger (2008), Rosin (2008) and Rosin and Campbell (2009) argue for greater consideration of how actors identify structural changes and react to them. Relying on the theory of justification (Boltanski and Thévenot, 1991) they analyze the multiple trade-offs between the competing "principles of worth" adopted by various actors in the field of organics. This, they argue, should provide a more complete and complex view of organic farming's evolution, going beyond the binary opposition between the good organics of the pioneers and the bad industrial organics, a pitfall found in most of the research.

2.2. Our use of the theory of justification

Following in the footsteps of Rosin and Campbell, we also mobilize the theory of justification, even if we use it to quite a different purpose. Our intention is more limited than that of these authors, as we want to account for very specific changes—those brought by institutionalization and conventionalization processes—observed in only one group of actors: the organic farmers.

Boltanski and Thévenot (1991) consider that, to justify their actions, people use several kinds of justifications. They propose six: industrial (the search for efficiency in project execution), market (personal profit through the purchase, or sale of goods and financial transactions), civic (the pursuit of the common good), domestic (respect for people and the structure that connects them), inspiration (the act of giving creativity or originality free rein) and reputation (to be known by many people).

Several authors agree, however, that this theory is problematic in the sustainable development, environmental, or ecology fields (Lafaye and Thévenot, 1993; Latour, 1995; Godard, 2004). They point to several difficulties. Firstly, "conceptual uncertainties" (Godard, 2004, 17) affect the debate on sustainable development and make it difficult to study on the basis of the theory of justification. Secondly, the way in which the different principles of justification have been constructed poses a problem: obviously, none of them can, on their own, account for environmental concerns. Certainly, for Rosin and Campbell, the civic principle comes close: it gives value to a "greater whole", but in a very different way, because in the one case, it is the "civic society" that is referred to, while in the other, it is the "environment" (Rosin and Campbell, 2009, 42). Thirdly, several authors mentioned above (Godart, Lafaye and Thévenot) point out that taking into account environmental issues would question some axioms of the theory, including the "principle of common humanity" put forward by Boltanski and Thevenot. This principle considers that all men should be able to be involved, in a more or less equal way, in the activity of justifying one's acts. But this principle is challenged by some environmentalists who give "future generations" and the present generation an equal status. It is also undermined by those who give non-humans and humans an equivalent value.

Godard seeks to solve at least the second problem. For him, two main routes are open for the researcher (Godard, 2004): one is to consider that these issues can be usefully analyzed through a combination of the six types of justification, the other is to build a new order of justification that can be qualified as "green". We choose this second way. To do this, we draw freely from the authors cited, and we also rely on scholars who have marked the history of ecological thought (Ellul, 1954; Illich 1973; Jonas, 1990).

The ecological dimensions we choose to analyze are indicated in the column 2 of Table 1 (the last two columns are explained later in the text). In its general formulation (line 2), the environmental justification consists of justifying action by showing how it contributes to rebuilding the links between man, society and nature. This has a direct implication on what Boltanski and Thévenot call the "worth" of the person (third line). The authors consider that, depending on the correspondence to the principle, people are sometimes regarded as "great", sometimes as "small". On the ecological order, people are "great" when they develop and maintain a personal balance with others and nature.

Table 1. **The orders of justification used in our analyses**

Dimensions	Ecological principle	Industrial principle	Market principle
Statement of the principle	Reconstruction of the relations between man, society and nature	Control of man and things to act effectively	Personal enrichment by material and financial transactions
Worth of the person	Those who are autonomous and develop balanced interrelations with others and with nature	Those who have professional and human skills of competence, determination and reliability	Those who have the desire to become rich and who have the skills to seize opportunities
Worth of the objets	Respect for nature in its diversity; few, simple and easy to handle manufactured objects	Lots of manufactured objects: machines, software, methods that permit measurement and assessment	Those that allow or facilitate transactions: credit cards, markets, stocks
Space	Local, related to the global	Structured (in workshops, offices, hard disks) to facilitate coordination	Wide, without limits or distances
Time	Long time period with reference to the future generations.	Valuing the future that one can control by programs, plans, schedules	The moment when the deal presents itself and must be seized

This question of "worth" is also applied to objects, in a broad sense (line 4). Concerning the ecological level, this includes nature with its integrity and diversity being preserved. Man-made objects also have their place, but they must be few in number (see the Voluntary Simplicity Movement, promoted particularly by Ellul (1954)) simple and easy to handle (see Illich on the alienation that results from mass production and the use of sophisticated goods, such as cars (1973)).

Space is another dimension of the types of justification (line 5). The ecological order stresses the local space, in other words the territory or region, which is the privileged place of action that is respectful of nature. However, this action should not lose sight of global concerns; it must be capable of changing scale (Lafaye and Thévenot, 1993); in the words of Ellul (1954): "think globally, act locally".

The last dimension is that of time (line 6). The ecological order is characterized, here too, by the change of scale, by the ability to link present action to the distant future, to future generations. We refer especially to the "Ethics of the future" and the "Precautionary principle" advocated by Jonas (1990).

In addition to the ecological order, organic farmers usually refer, to a greater or lesser extent, to the six orders set out by Boltanski and Thévenot in the standard version of the theory (1991), as Van Dam shows (Van Dam, 2005). Our purpose in this article is not to duplicate this type of analysis, but to understand the nature and rationale of the *evolution* that affect the types of justification. If these evolutions are related, as hypothesized in the introduction, to the dual institutionalization and conventionalization processes, it is relevant to try to use them by focusing on two kinds of justification that we show fit well with these two processes. On one hand what Boltanski and Thévenot call the industrial principle (which refers to specialization, mechanization, standards, *etc*.) and on the other hand the market principle (premiums, price pressure, marketing through supermarkets, *etc*.)[1]. In addition to the ecological order, it is necessary to utilize these two principles for our analyses.

Thus, we consider our research material through the prism of two complementary theoretical approaches. First, institutionalization and conventionalization theories, which describe the processes that affect organic farmers, and second, the theories of the orders of justification that enable us to understand how these actors perceive these processes and react to them.

3. The collection and data processing methods

3.1. Longitudinal data collection

While the institutionalization and conventionalization processes characterize evolutions in the system, most of the research about these processes presented above use synchronic methodologies (data collection at one point in time); so it is difficult to have a true measure of change (or lack of change) over time. As noted above, one of this paper's interests is to draw on longitudinal data collection. Before describing this, we'll give some details about the population and the sample studied.

The population studied consists of Belgium organic farmers. They include very different situations, whether in terms of cultivated area (from a small farm of a few tens of ares to several hundred ares), in terms of employed personnel (the farmers alone or with their partner, to those that subcontract some of their farming activities, to those with one or many employees, often

[1] This concerns a general correlation (the two levels of justification correspond broadly to the two processes) but it is not one to one correspondence. Thus, if the industrial order is closer to the process of institutionalization, it is not exactly identical because, depending on the case, the premiums granted during the transition to organic can have a rationale based on the market order (they can also have a civic justification, which is not considered in this study). Similarly, the market order only partially corresponds to the process of conventionalization since, for example, the trend towards standardization of products can, in some cases, meet certain industrial order rationales.

seasonal) and especially in terms of the type of activity (from a single activity, *e.g.* breeding or monoculture, up to widely varied activities that sometimes go beyond agriculture, such as tourism, social welfare services, *etc.*). A sample of 32 farmers was selected from the membership of representative associations of organic farmers, to reflect this diversity. We have also looked to contrast in particular the size of the farm (using the cultivated land area) and the type of farming activities (grain, vegetable, fruit, dairy or livestock production). We have also diversified the sample geographically (the provinces) and in terms of the number of years in organic farming (the first starting their organic production in the 1970s, the most recent in the early 2000s).

The collection of information has been done, as has been stated, longitudinally, with a first series of interviews conducted between 2001 and 2003, by one of the authors (Van Dam) of this article. The topics of these semi-directive interviews concerned the circumstances under which the farmer, or the couple, began their activity, how they see this activity and carry it out, as well as their commitment to collective action. The interviews thus concerned both the farmers' working practices and their justifications for them. The interviews were most often combined with a visit of the farm. The second series of interviews, using the same interview grid (with, in addition, a question about the changes since the first interview), was conducted in the early months of 2011. It was intended to include the same sample, but was in fact 28 of the initial 32 participants. Most interviews were conducted at this time by the two authors of this article.

To track changes, we proceeded mainly by comparisons between practices and justifications that we observed between 2001-2003 and 2011. We also took into account what the interviewees told us in 2011 about the changes that had occurred during this period. However, we do not describe here in detail the change processes, which are the subject of another article (Nizet and Van Dam, 2014).

3.2. The use made of the researcher's discussions and abduction

Both sets of interviews are fully transcribed and the data processing was done in two stages.

In the first, the researchers reread the interviews and discussions at multiple meetings, which served several goals: to try to understand the nature of the changes that had occurred, to choose those theories that are coherent with the changes (in this case the chosen theories are essentially the theory of justification and those of institutionalization and conventionalization; other theoretical contributions will be shown below), submit these theories to criticism and then to rebuild them so that they are coherent with the observed changes.

So, in this first stage we proceeded principally by abduction, an approach established by Apel (1995) and that, according to Van Maanen and colleagues, "gives priority to the empirical world, but uses the

service of theorizing (insofar as) the analysis proceeds by going back and forth continuously between data and concepts"(Van Maanen *et al.*, 2007: 1149). Abduction is a middle way between deduction—which, as in the case of a Popperian approach (Popper, 1959) starts *a priori* from a theoretical framework, deduces assumptions that are then tested through observations—and induction—which, like the grounded theory (Glazer and Strauss, 1967) constructs theory from observations.

In the framework of this research, the abductive approach allowed us to select the dimensions of the institutionalization and conventionalization processes to which we would be sensitive in our analysis (see below). This permitted us to adapt the theory of justification, in the way mentioned above. To restate, we first added a component of ecological (green) justification to the existing principles. Then we constructed the various dimensions of this principle. Finally, we opted for an analytical model composed of three principles (market, industrial and ecological), to the exclusion of any others. Such a model seemed sufficient as we wanted to understand the changes brought about by the processes of institutionalization and conventionalization, it further had the advantage to better adhere to the simplicity requirement put forward by philosophers of science (Boyer, 1990).

The second stage proceeded more by deduction: the theories created above were transformed into analytical grids used to examine the data and to present the following results.

4. Presentation of the results

The general hypothesis that emerges from the abductive phase is that the subjects reacted in different ways to the processes of institutionalization and conventionalization. We identified three groups:

- The "green innovators" were characterized by a dominance of green (ecological) references in 2001-2003. In 2011, they accommodated[2] these green references with the industrial and market orders of justification that refer to the processes of institutionalization and conventionalization.
- The "winners" adopted mostly the industrial and market references in 2001-2003. In 2011, these references have been strengthened, because of the effects of the processes of institutionalization and conventionalization.

[2] In the following part of the article, we will adopt the term "accommodation" to refer both to what Boltanski calls "compromise" (*i.e.* a sustainable and legitimate combination of two or more orders) and to what they (Boltanski and Thévenot, 1991: 337-347, 408-410) call "arrangement" (more casual association). This distinction between compromise and accommodation does not seem necessary for the analysis of our results and so we will not refer to it in our article.

- The "excluded" from organic agriculture were characterized, in 2001-2003, by the dominance of green references. In 2011, they were partly forced, because of the processes of institutionalization and conventionalization to leave organic farming.

As can be seen, the distinction between these three groups combines two criteria. The first is factual: subjects continued or abandoned organic farming activity. The second refers more to the predominance of one or more of the three justifications: "green", "industrial" and "market".

4.1. The green innovators

This first group is in the majority, with 15 of the 28 subjects. In Table 2 (see appendix), we present the subjects in alphabetical order (first column), the second column specifies their age and number of years in organic and the third column presents their type of farming activity. In the fourth column we describe how their activities have evolved over the last 8-10 years, provided that this evolution has had an ecological dimension[3]. This gives a total of 37 activities.

These 37 activities are shown in Table 3 below. They are organized according to their purely ecological character, or their accommodation with the market order, the industrial order respectively or both. The two columns distinguish between activities that changed since 2001-2003 and any totally new products or services[4].

About half of this group mixes the ecological and the market order. This is the case of Line Coene[5], who, with her husband, has managed a vegetable farm for 20 years and who recently attended training classes in the "life stories technique". She proposes coaching activities, sometimes individualized, sometimes in groups, to women farmers. This support helps women to reflect on their personal life and their relations with others in their private and professional life. Such coaching activity combines a concern for personal relationships (the "worth" of the person in the ecological order) with the concern for supplementary income (market order).

Line Coene has also recently started a bed and breakfast, another activity that combines the desire to bring visitors in contact with nature (ecological order) and also provides a supplementary income (market order). The same

[3] Some evolutions—in the minority—are in line with the strengthening of the industrial and/or market orders, show more sharply the influences of the institutionalization and conventionalization processes. We don't include them in the table but will describe them later in the course of the article.
[4] For each of the cases in the table we introduce an example. For more illustrations, we refer the lecturer to Table 2 in the appendix.
[5] Names have been changed.

Table 3. **The evolutions of the activities within the green innovators by type of activity and by type of accommodation of the orders of justification**

	Previous activity	New activity	N
Pure ecological	Partial replacement of dwarf apple trees by standard for more pleasant work – Dhooghe (a); also Hessel (a), Gomans (b), **3 cases**	Establishing a network for production and exchange of local seed varieties – Dressel (a); also Dressel (b), Geens (b), Hessel (b), Hessel (c), Vanacker (a), (b), Voers (c), **8 cases**	11
Accommodation with the market order	Limitation of the selling radius of the "vegetable baskets" – Geens (a); also Coene (b), Noël (c), Noël (d), Roost (a), Vanacker (c), Voers (a), Voers (d), Vuist (a), **9 cases**	(Paid) coaching of women farmers – Coene (f); also Beghin (a), Coene (c), (d), (e), Dansart (a), Gomans (a), Noël (e), (b), Voers (b), **10 cases**	19
Accommodation with the industrial order	Purchase of a large farm machine to aerate the soil and increase its quality– Wilmot (a); also Noël (a), Noël (b), **3 cases**	Application of the sociocracy to the management of the farm workers – Beghin (b); **1 case**	4
Accommodation with market and industrial orders	Corporate restructuring in different legal entities to reach efficiency, income and personal fulfillment – Coene (a); **1 case**	Creation of an organic cheese factory – Wilmot (b); also Forman (a); **2 cases**	3
N	16	21	37

type of accommodation is observed by several subjects who have established small farm shops, an activity that combines income (market order) and the concern to shorten the distribution channel (ecological order). This is particularly true for Voers, de Vuist and others who have created a "supermarket", a relatively well-stocked shop, where you can buy not only the on-site production but also other organic and/or fair trade products, such as cereals, juices, cosmetics, *etc*.

Dansart has a modest shop where he sells his own cheese and some other organic products (fruits, vegetables, eggs, bread, *etc*.). This farmer opened his store in very special circumstances. In 2008, his farm was visited by the health inspection agency which found abnormally high levels of PCBs on his land. He was forced to stop his milk and cheese production for several months. At that point he opened his shop and set up other activities such as "concert meals" at the farm which helped him to maintain a minimum income.

A small minority of green innovator's activities combine the ecological and industrial order. This is Wilmot's case, he transformed his farming activity by buying a machine that aerates the soil and improves soil quality. The combination here concerns a relatively sophisticated object (industrial order) that respects and restores the soil (ecological order). Another case is

Beghin's vegetable farm which has grown significantly in recent years and now employs a dozen farm workers. At one point he realized that alongside his work as a farmer, he had also become an *entrepreneur*. He then attended a training program about "sociocracy", a human resource management method, which consists in giving as much autonomy as possible to each employee and distributing decision-making authority to all the workers. He now applies this approach to the management of his staff. Certainly, this method combines the ecological concerns for the balance of social relations ("social") and the industrial concern for effective management ("-cracy").

Another minority of activities includes the three orders: ecological, industrial and market. Take the case of Forman, who produces and markets food supplements from organic mare's milk. She is very concerned about her customers' health and the relationship's quality (double reference to the ecological order); she is also concerned by improving the effectiveness of the treatments she recommends (industrial order) and finally she wishes to increase sales and income (market order).

In addition to these various accommodations, we should point out the appearance of a large number of activities that relate exclusively to the ecological order. This is the case of Vanacker, who raises cattle and who has recently created a natural meadow of 4 hectares to promote biodiversity. He notes with satisfaction the return of some birds and a multitude of flowers and plants. Another example is the decision of Dooghe to partially replace his dwarf apple trees with standards, in order to increase the pleasure of his work. We should also note two initiatives taken by Dressel: the establishment of a production and exchange network of local seed varieties in the region and the creation of an association to support peasant-farmers in India.

Among all these activities—whether they consist of exclusively ecological activities or combine with the industrial or market considerations—we can also distinguish on one hand, those that existed in 2001-2003 and have evolved in the directions indicated above (first column Table 3), and on the other hand, new activities, which didn't exist at the time of the first interview (column 2). An example of existing activities includes Dhooge replacing dwarf with standard apple trees and Geens limiting the size of the area they serve with their vegetable boxes. New products and services are for example Coene (as a life coach for farming women and the new bed and breakfast), Dansart (concert meals at the farm) or the introduction by Beghin of the "sociocracy" in his human resource management.

Let's return for a moment to the institutionalization and conventionalization processes, described previously.

We see that institutionalization is indeed present in the case of the public health control that the Dansart farm underwent. He talks about a "big problem" because of the controller saying: "You can't sell your milk anymore, or your animals. Nothing at all, it's finished." Strictly speaking, this particular situation doesn't concern institutionalization of organic farming, but rather

regulation of public health in general. In other examples, shown in Table 2, are the tax regulations that—positively or negatively—affect the activity of our interviewees. This is the case of Coene who restructured his farm into different entities in order to reduce the tax burden, among other things. It is therefore necessary to broaden the concept of institutionalization, taking into account regulations that are not specific to the field of organic farming.

Conventionalization is also clear in many cases, for example when several interviewees equip themselves with relatively sophisticated machinery to improve the effectiveness of weeding or harvesting. This is Wilmot's case who explains, "We went to Libramont (a conventional agricultural fair) and there we bought a machine to aerate the soil".

These institutionalization and conventionalization processes don't only occur through what we called combining, they are also sometimes reflected in a "pure" way. For instance, Gomans has multiplied almost threefold the volume of his juice production, by better managing his sale channels. Geens has doubled the production of his vegetables in order to meet the increased demand. Wilmot had to increase his herd of cattle to deal with the loans he had contracted in order to "upgrade" his storage tanks, imposed by regulations. These cases of "pure" influence are however limited in number, compared to the accommodation cases that we describe above.

From a quantitative point of view, Table 3 reveals a minority of previous activities (16 cases) compared to new activities (21 cases). We can see on each line that the changes to "pure" ecological activities are fewer (11 cases) than those that result from combinations ($19 + 4 + 3 = 26$ cases) and that among these combinations, those that combine the ecological and market orders are by far the most numerous (19 cases compared to 7 for all the other accommodation combinations).

The "green innovators" group is both the largest and the most complex; that is why it received a detailed analysis. We will proceed more quickly for the other two groups, minorities in the sample.

4.2. The winners and the excluded

The winners (7 subjects) benefited clearly from the institutionalization and conventionalization processes which ensured growth and profit for their farms. The industrial and market references, which were already dominant 8-10 years ago, have become even more dominant today. The ecological references, however, occupy a more limited place.

A first example of a "winner" is Soter. Over the past decade he has focused on the expansion of his farm by the purchase of all available agricultural land in his municipality. He has drastically reduced the varieties of vegetables in order to keep only those that were easiest to commercialize, by establishing trade agreements with other vegetable producers, by totally abandoning multiple short supply chains (except for sales on his own farm, for emotional

reasons) and by diversifying his export chains to several European countries. In addition, he has equipped his farm with machinery and high-tech tools to reduce the hard, labor intensive work on the land. He is convinced that he has been able to combine his entrepreneurial spirit with his strong belief in the benefits of organic food for better health and for the environment. He is proud to say that his entire family, including all his children and grandchildren, eat only organic. He is also proud to say that he has been able to seize opportunities at the right moment.

Another example is Dubois, who decided in the 1990's to partially convert his large farm (350 ha) to organic where he grows cereals, vegetables and breeds cattle. The premiums and the added value of his production have motivated him. During the last ten years Dubois continued to equip himself by purchasing machines that allow him to work more quickly and efficiently. In addition, he chose the most profitable sectors to sell his production: wholesalers and supermarkets. Dubois also explains that he is sensitive to the quality and the taste of food, two reasons that he and his family eat some organic food.

These examples show how the "winners" benefit mainly from the conventionalization process: increased acreage, efficient equipment, export of part of the production, subcontracting part of their activities. The latter is illustrated by Dubois who contracted out commercialization of some vegetable production to a cooperative. "Because I had logistical concerns, we had to deliver daily, in the early morning, to shops". Other cases illustrate, albeit to a lesser extent, how they also benefit from the institutionalization process: obtaining premiums, the use of labels to penetrate markets, *etc*.

The excluded (6 subjects) were constrained to leave their work as organic farmers. Either they returned to conventional farming, retired early or moved to other activities outside farming.

A first case, Lescaut, was an organic farming pioneer in his region. He created several collective projects: milk collection, processing and meat marketing. Over time, constraints related to the certification of the various components of the processing sector, and commercialization difficulties became too problematic. After a brief return to conventional farming, he decided to take early retirement.

A second case is Nollaux who, in 2001, had an organic chicken farm and sold organic feed for chickens. Because of a change in the regulation of land use, he lost his permit. "Suddenly, my land was classified as a protected natural area. I was able to benefit from a derogation for a few years, but then the derogation suddenly ended." He said that if he had been younger, he would have brought a lawsuit or would have sought another location for his chicken farm, but because of his age, he chose to retire early. He started an organic vegetable garden for his family and is involved again in local activist movements, promoting organic farming.

Shortly before the first interview, in 2001, Lhermitte took over a farm of twenty acres that had already been converted to organic. At that time, he had a few cows, made butter and cheese which he sold to local customers and markets. After much trial and error in marketing his products, he decided to leave farming. He attributes his failure to the fact that the market had become too unfavorable to small farmers. "Organics rose to an industrial scale, to really a very large scale. Supermarkets have done their job very well (forced laughter)". He then worked in several "green" jobs. At the time of the second interview, he worked as a trainer, paid by the government, to give classes to future organic farmers about food self-sufficiency at his, now converted, educational farm.[6]

These three cases show that exclusion can sometimes result (in the case of Nollaux) mostly from institutionalization processes, sometimes (in the case of Lhermitte) mostly from conventionalization processes and sometimes (in the case of Lescaut) from both. We should note that the institutionalization and conventionalization processes are not always the only ones at work, they can be combined with more personal considerations: for Lescaut and Nollaux, it was approaching retirement age, for some others, it may be (partly) due to insufficient management skills. Finally, as Lhermitte's case illustrates in its own way, the hypothesis of the accommodations made between the ecological order and the market and/or industry also characterizes some of the "excluded". Indeed, by providing training in food self-sufficiency and other agro-ecological topics, Lhermitte developed a new activity that combines ecological references and market references (providing income). The major difference however is that for Lhermitte and some of the "excluded", the new activity *replaces* farming activity, while for the "green innovators" new activity *complements* it. The hypothesis of accommodation is thus verified for a large majority of our sample.

5. Discussion of the results

Table 4 summarizes the characteristics of the three evolutions that we have identified, with regard to the two theories we make use of in this article: the theory of institutionalization and conventionalization (first and second lines) and the theory of justification (third and fourth lines).

These two theoretical approaches are complementary. The theory of institutionalization and conventionalization allows a more "objectivist" (Giddens, 1987) approach (what we earlier called structuration theory) in understanding how global social processes affect the activities of organic farmers. However, the theory of justification permits an understanding, in a more "subjectivist"

[6] In the case of Lhermitte, the exclusion corresponded with maintaining strong ecological references; in other cases, these references lessened.

Table 4. **The three evolutions of the organic farmers**

	Green innovators	Winners	Excluded
Degree of influence from the processes of institutionalization-conventionalization	Moderate, because limited by the ecological innovations	Strong	Strong
Effects of these influences	Encourage innovations	Positive effects (growth, profit)	Negative effects (cessation of the activity of organic farming)
Importance of the references to the ecological order	Strong	Weak	Strong for some, weak for others
Modalities of these references	Sometimes pure references, sometimes accommodations with the market and/or industrial orders	Limitation to one or two areas of their professional or private activities	Concerning now non-(professional) farming activities

manner[7] (what we earlier referred to as agency theory) of how organic farmers establish themselves as actors and respond to these processes.

In his structuration theory, Giddens (1984) explicitly attempts to reconcile these objectivist and subjectivist approaches. According to his hypothesis, social structures both constrain and enable actors. It is pertinent to review our results using this integrative hypothesis.

It appears that depending on the case considered—green innovators, winners and excluded—the "constraint" component and the "enabled" component of the processes vary. Winners perceive the processes of institutionalization and especially conventionalization as opportunities (See Dubois above who contracted out a part of the production of his vegetables to a cooperative). The excluded take these same processes as constraints that push them to abandon their organic farming activity (See Nollaux above,

[7] We are well aware that the association between theory of justification and the actantial perspective contrasts somewhat with the position taken by Boltanski and Thevenot, who associate the orders of justification with the characteristics of situations more than the actions of individuals. The latter typically adjust to situations. It is only when terms are "closely (limited) by the situation" that they refer to another principle that is part of the situation (Boltanski and Thévenot, 1987: 266-267). However, our analysis shows how many mobilizing levels of justification are important to people. In particular, we see that the reference to the ecological order persists over the years, while situations change and move towards institutionalization and conventionalization. We can, more accurately, assume that what we called accommodations are born on one hand from encounters between ecological references related to people and on the other hand, to (predominantly) market characteristics and (to a lesser extent) industrial related situations.

forced to stop his chicken farm because of a change of land use regulation. See also Lhermitte who wasn't able to match competitive supermarket prices). As for green innovators, they feel both the constraint and the enabling aspects. The constraint of having to deal with the two processes in the context of their agricultural activity (see Dansart above forced to stop milk and cheese production because of a health agency inspection). Enabled, since they innovate both within and outside the agricultural sector. Within the organic sector enabling is shown in the case of Wilmot when he buys a machine to aerate the soil at a conventional agricultural fair. Enabling actions outside the area of agricultural are revealed in the social (reintegration of youth), educational (collaboration with schools), cultural (concert-meals), psychological (life story) or tourism (bed and breakfast) sectors. It is possible that these innovations help to disseminate ecological practices and ideas outside the area of organic agriculture, to other sectors of society. Does this type of outgrowth of ecology occur elsewhere in society? Do other fields, also strongly marked by green references also help to disseminate these references? Further research is needed to demonstrate the case.[8]

6. Conclusion

Disposing of two sets of interviews with organic farmers at an 8-10 year interval, we were able to consider the issue of the change in their practices and justifications.

Taking an initial theoretical approach, we hypothesize that the practices and justifications evolved under the continuing institutionalization and conventionalization processes. In this paper, we confronted this more structural approach with another, which takes greater account of the role of the actors. We build on the theory of justification which we adapt by introducing a green justification. This allows us to highlight the reactions of the majority group in both processes. The reaction of the green innovators consists of the development of new activities (in agriculture but also in social, educational, psychological, and tourism areas) which refer to the ecological order, but they also consist of new activities combining green references with the industrial and market references. In terms of Giddens' theory, the green innovators suffer from the constraints imposed by the institutionalization and conventionalization processes on their agricultural activities, but also seize new "green" opportunities within and outside the agricultural sector. Winners, fewer in number, seize the opportunities with both hands presented by the institutionalization and conventionalization processes for the development of their agricultural activities. The excluded consider these influences exclusively as constraints which push them to abandon their work as organic farmers.

[8] We think for example of government energy policy which also affects other fields, for example energy audits, the construction industry, *etc*.

By combining two theoretical frameworks—structuration theory (theories of institutionalization and conventionalization of organics) and agency theory (the theory of justification)—our approach has the merit of overcoming the dualism of opposing objectivism and subjectivism (Giddens, 1984) which has prevailed up to the present in the study of organic farming. This originality combines two other novel features of our study. At the methodological level, the longitudinal nature of our research contrasts with most previous works. At the theoretical level, the way we have specified the different dimensions of the green order of justification allows for much finer analysis than most other studies, in which this principle is only considered globally.

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Appendix

Table 2. **The orders of justification in the evolution of the activities among the green innovators**

Name	Age and n° of years in organic farming (2011)	Area of organic land (2001-2003/2011) and type of crops (2001-2003/2011)	Evolution of the activities between 2001-2003 et 2011
Beghin	40 years 10 years	60 ares/6 ha Vegetable production/ idem	(a) organic supermarket and association between the quality of the relations and the increase of sales (b) Sociocracy, mode of human resource management that associates a balance of the human relations and efficiency
Coene	60 years 20 years	2,5 ha/4,3 ha Vegetable production/ idem	(a) Corporate restructuring in different legal entities to reach efficiency, income and personal fulfillment (b) Limitation of the selling radius of "vegetable baskets" (c) Bed and breakfast at the farm (d) Hiring an employee on a European Education project (e) (Paid) hospitality for young people in reintegration (f) (Paid) coaching of women farmers
Dansart	50 years	29 ha/29 ha Dairy cows, cereal, bread/ Dairy cows and meat, cheese	(a) Small store at the farm (b) Organization of concert meals at the farm
Dooghe	60 years 30 years	10 ha Arboriculture dwarf/standard	(a) Partial replacement of dwarf apple trees by standard for more pleasant work
Dressel	58 years 29 years	4 ha/4 ha Vegetable production/ idem	(a) Establishing a network for production and exchange of local seed varieties (b) Creation of NGO to aid peasant agriculture in India
Forman	52 years 14 years	Mare's milk/ idem	(a) Production of food supplements and care given to the relationship with customers to improve the effects of the products
Geens	53 years	1 ha/1 ha Vegetable production/idem	(a) Limitation of the selling radius of "vegetable baskets" (b) Developing links with ecological peasant groups in Congo
Gomans	50 years 30 years	Fruit production (juice) 80,000 liters/200,000 liters	(a) Collaboration for the sale of products with an environmental association (b) Moving to a work space that uses renewable energy

(Continued)

Table 2. **The orders of justification in the evolution of the activities among the green innovators (continued)**

Name	Age and n° of years in organic farming (2011)	Area of organic land (2001-2003/2011) and type of crops (2001-2003/2011)	Evolution of the activities between 2001-2003 et 2011
Hessel	48 years 30 years	15 ha/15h Beef cattle and vegetable production, farm for reinsertion/idem	(a) Adaptating crops to provide handicapped farm workers with fulfilling work (b) Recourse to a wholesaler who is more respectful to the handicapped farm workers efforts (c) Creation of a small farm store that enables the handicapped farm workers to develop contacts
Noël	63 years 34 years	44 ha/44 ha Beef cattle, cereals, vegetable production/ idem	(a) Buying a more powerful thermal weeder (b) Sowing oats to control weeds (c) Increasing the number of polytunnels in order to spread production and direct sales (d) Increasing the diversity of vegetables (e) Installing a butchery to sell beef products
Roost	44 years 20 years	9 ha/9 ha Vegetable production	(a) Changes of vegetable varieties in order to facilitate the work and spread out the production and sales
Vanacker	52 years 20 years	15 ha/40 ha Beef cattle, fodder cereals/idem + natural grassland	(a) Management agreement with an association of environmental protection to use land in an ecological way (b) Creation of a natural grassland (c) Extension to the production of fodder cereals for self-sufficiency for the livestock
Voers	55 years 20 years	5 ha/5 ha Vegetable production/ idem	(a) Installation of unheated greenhouses to spread out production and permit direct sales (b) Involvement in a European Education Project which also means publicity for the farm (c) Collaboration with a university and an association for the implementation of Community Supported Agriculture (d) Conversion of the shop into a small supermarket
Vuist	62 years 30 years	2,5 ha/2,5 ha Vegetable production/ idem	(a) Conversion of the shop into a small supermarket and reduction of the selling radius of the "vegetable baskets" in order to reduce transportation costs and to increase well-being
Wilmot	64 years 35 years	80 ha/80 ha milk cows	(a) Purchase of a large farm machine to aerate the soil and increase its quality (b) Establishment of an organic cheese factory