Experimenting in Urban Self-organization. Framework-rules and Emerging Orders in Oosterwold (Almere, The Netherlands)

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Abstract: The intent of this article is to explore the scope and working of "framework-rules" in relation to self-organization in urban development, both theoretically and empirically. It explores the strategies promoted in Oosterwold (Almere, The Netherland), and the framework-rules that discipline its emergent development, without wanting to suggest that Oosterwold is a "best practice". It is an extreme case that helps us to broaden our thinking about governing urban development.

Key words: Almere, Oosterwold, spontaneous order, planning, emergence, Jane Jacobs

I. INTRODUCTION

Almere Oosterwold is an experimental large-scale transformation in the Netherlands, which will be developed mostly on a greenfield surface of 43 km², generating a low-density urban area (with the space for between 15,000 and 18,000 new dwellings). Oosterwold has no master plan or zoning map, but only a limited number of "framework-rules" (Moroni 2015). Oosterwold will therefore be developed in the next twenty years by largely relying on self-organization. According to the strategy promoted by the Municipality, this is an "experimental garden"[1] as there is little experience of this kind in the Netherlands, nor elsewhere (Municipality of Almere 2009). The general idea for Oosterwold is to have a fully demand-driven large-scale transformation which, with the passage of time, will emerge by small private initiatives. All this without any direct public investment as regards collective infrastructures or land preparation.

The intent of this article is to explore the scope and working of framework-rules in relation to self-organization in urban development, both theoretically and empirically. It explores the strategies promoted by the city of Almere, and the framework-rules that discipline its emergent development, without wanting to suggest that Almere is a "best practice." It is an extreme case that helps us to broaden our thinking about governing urban development. The paper is divided into four sections: the first Section structures the main theoretical questions; the second Section analyses the case study of Almere Oosterwold; the third Section discusses the results and evidence; the fourth Section presents the general conclusions.

II. THE PROBLEM

2.1 Emergent orders and urban planning

Michael Polanyi says that an emergent order "is achieved among human beings by allowing them to interact with each other on their own initiative." The crucial point is that "the use of these spontaneous forces implies that many features of the process creating the order will be beyond our control" (Polanyi 1951/1998, p. 195). An emergent order is produced by voluntary actions respecting few general and abstract rules. In this case, individuals may freely use their knowledge; while society may employ its *dispersed knowledge* (Hayek 1945). An emergent order is therefore neither a

specific product of deliberate human action nor a full natural phenomenon independent from human action. Rather, it is the result of human action but not of human design (Hayek 1967). In other words, it is the emerged product of aggregated actions of agents which shows a certain level of coherence or patterns. Patterns are not mere aggregations of actions but systemic wholes (Harper & Endres, 2012).

Thus, an emergent order differs both from "chaos" and "made order." On the one hand, it cannot be compared with a made order since it possesses an emergent and unintentional character (nobody planned it in detail or can exactly predict its evolution). On the other hand, nor can it be compared with chaos, since it possesses a certain level of internal regularities or patterns.

Jane Jacobs was the first who clearly described the city as a particular kind of complex emergent order (Ikeda 2011, 2012; Ikeda & Callahan 2014). In general, Jacobs looked at the city as a living system: a dynamic order, the place of actions and the product of actions; a never-ending process of transformation and adaptation (Cozzolino, 2015b). For this reason, Jacobs' view must be considered a watershed in the field of urban studies. After Jacobs, the challenge seems to be that of testing the concept of emergent order not only to describe the city, but also to reflect on how to regulate its evolution. In this regard Mark Pennington (2002, p. 56), writes that:

> the myriad interdependencies that link the patchwork of land uses of both urban and rural environments are classic examples of spontaneous social and economic orders, the complexities of which cannot be overseen synoptically. As Jane Jacobs' work demonstrates so well, the fundamental human character of land-use processes makes the form, pattern and place of development unpredictable and beyond the scope of planners, whether technocratic experts or members of citizens' juries.

Land-use plans and building codes play a crucial role in the extent to which emergent configurations may occur in cities and, consequently, in their propensity to host unexpected adaptations over time (Ikeda forthcoming). Thus, in a strict sense, a reliance on emergent orders means preferring framework-rules that should guarantee enough room for people to act on their own creative impulses (Holcombe 2011). In this perspective, given certain framework-rules, the independent and differentiated members of a system may self-coordinate into an adaptive and ordered configuration that activates the dispersed knowledge (Moroni 2007). In this regard, the recent theoretical and practical innovations in the Netherlands seem to offer valuable insights. Today in the Netherlands we might be observing a paradigmatic shift from a comprehensive-integrated planning approach, to the idea of "organic development" (Buitelaar et al. 2014).

2.2 Framework-rules for self-organizing emergent orders

Agents' actions in space take place within certain rules, which may be more or less favorable to the creation of viable emergent orders. This idea can be schematized using four correlated concepts: (i) "framework-rules," (ii) "individual actions," (iii) "time dimension," and (iv) "emergent order."

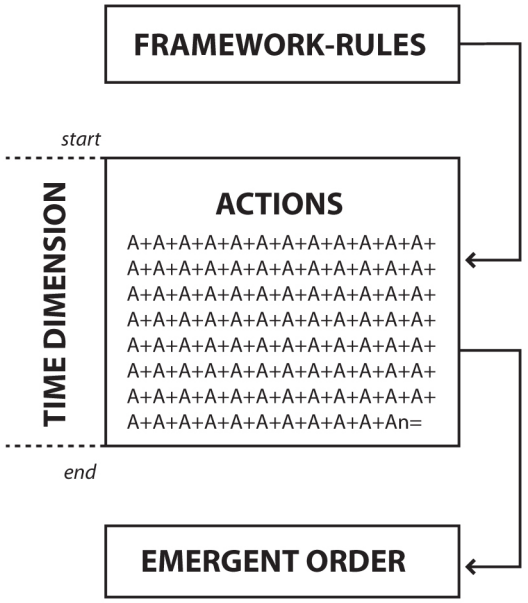

Figure 1: The interplay among rules, actions, and orders

Framework-rules have three main features (Moroni, 2010 and 2013). First of all, they are open enough to guarantee broad scope for experimentation; in this way rules allow agents to act according to their knowledge and choose the technical and design solutions that they prefer (note that rules of this kind may be stringent[2]). Second, they are as generic as possible and applicable to the whole area at issue (in the sense that they should not refer to any specific situation or land). Third, they focus on permissible and non-permissible actions (in particular, to avoid negative externalities) rather than on a comprehensive end-state.

Framework-rules discipline individual behavior in space, conditioning the range of possible actions that individuals may or may not take. Every action contributes to a complex emergent process of space modification and adaptation (in this sense every action can influence or provoke other actions). Actions are definable as purposeful behaviors taken by agents. Conscious or purposeful behaviors are, by their nature, clearly in contrast to unconscious or not purposeful behavior (Mises 1963/1998, p. 11). Moreover, free actions are distinguishable from actions that are the result of specific commands (Hayek 1960, p. 48). Private initiatives, in respect of the framework-rules, play a vital role in shaping the environment into a process of real self-organization. Therefore, public intervention aimed at deliberately constructing specific orders is kept to a minimum level (Ikeda 2004).

The time dimension is crucial in this regard. Order emerges incrementally over time (step by step), within a process of adaptation and mutual adjustments among agents (Buitelaar et al. 2014). All this happens according to agents' actual needs and opportunities. In this perspective, the framework-rules cannot predefine the final detailed outcome; rather, they leave the future open to a wide array of solutions, within a process of long-term transformation.

The main point is that in this case (framework-)rules are not used instrumentally to obtain specific (future) spatial configurations, but rather to facilitate social-spatial interaction among agents (Brennan & Buchanan, 2000) and to keep people (concentrated in a place) in peace with each other (Epstein 1995).

THE CASE STUDY[3]

3.1 Traditional Dutch approach vs. organic development

The Dutch have a long history of the active coordination of land use by public bodies (in cooperation with private parties). The internationally well-known results of the large-scale land reclamations (*inpoldering*) are a clear example of how "the Dutch created Holland." This active land-use planning goes further than the passive planning which is practiced in most other countries by merely steering, through the powers of the planning system, the initiatives taken by citizens and firms to change the use of land (Needham 2014, p. 19). Instead of only avoiding the coexistence of incompatible land uses (WRR 1998; Van der Cammen & De Klerk 2003), Dutch public bodies were traditionally involved in regulating, financing, organizing and constructing integrated developments (Buitelaar, Galle & Sorel 2014). This integrated comprehensive approach is a distinctive feature of the Dutch style of spatial planning in comparison to other countries (Nadin et al. 1997); whole areas were designed by planners, including housing, infrastructure, green and public services. This "planning by projects" (Needham 2014, p. 20) has been typical of the large-scale development of suburbia since the early 1990s.[4] Dutch national planning has gained an "almost mythical status" in the international academic literature (Hajer and Zonneveld, 2000). The country is acknowledged for its "high degree of spatial ordering" (Healey 2004, p. 63). This approach is often tightly connected with an extensive system of rules and regulation, eloquently summarized by the title of Faludi's and Van der Valk's (1994) book *Rule and Order*.

Throughout the years urban land-use planning has become more legalistic as there is a growing number of legal requirements. New rules have been implemented with regard to flora and fauna, air quality, soil contamination, noise nuisance, external safety, archaeology and heritage, water quality and quantity, and more (e.g. Beunen & Van Assche, 2013; Buitelaar, Galle & Salet 2013). Paradoxically those rules—aimed at ensuring a "right" land use—have increasingly become a millstone around the planners' and developers' necks. This is because the preparatory stage of land-use plans has become very complex and time-consuming to meet all these, sometimes contradictory, requirements (Buitelaar, Galle & Salet 2013).

3.2 The economic crisis as a turning point for the Dutch development model

This comprehensive integrated approach seems less and less to be the favorable development model. This is mainly the result of the financial crisis that started at the end of 2008 and the economic recession(s) that followed, which had great effects on (re)development plans at the local level. Many plans had to be postponed or even canceled as property developers faced a drop in demand for new houses, office space, and retail space. The losses that resulted induced them to retreat from public-private partnerships, leaving local governments with undeveloped land and growing interest costs (Buitelaar & Bregman 2016).

A more "organic" development process is seen by many as a feasible alternative approach. In this case, the role of the municipality is *enabling* instead of *active*, and the type of management could be characterized as *process management* rather than *project management* (Buitelaar et al. 2012;

2014). Urban development in this respect is less dependent on a public-private partnership between the municipality and a property developer as it was in the comprehensive integrated approach. Instead, private initiatives of end-users gradually shape the development. Regulating land uses becomes less an act of planning and more one of organizing private initiatives. Organic development might be (or ought to be) accompanied by less complicated rules and thereby a less complex rule system so as to enable private initiatives. This need for "simplification" seems to have received broad consensus in recent Dutch academic and policy debates. For instance, the legal system of spatial planning, environmental protection, and nature conservation is considered too complex (Ministry of I&M, 2011), and therefore a major reform of the legal system around planning and environmental laws is taking place at the time of writing. Improving the way municipalities can facilitate organic development processes is one of the goals of the new laws.

3.3 Oosterwold as an extreme case of organic development

One of the Dutch municipalities trying to organize for "organic development" is Almere. Almere can be seen as an interesting example of moving from one side of the spectrum to the other: from the blue-print approach to more spontaneous development (Cozzolino 2015a). The city is an "extreme case" (Flyvbjerg 2006) of the change in Dutch planning and development. Almere is situated approximately 30 kilometers northeast of Amsterdam. The city was literally designed on the drawing board as a "New Town" because it is built on "new land" resulting from reclamation of a part of the IJsselmeer during the 1960s. From 1977 onwards, over 75,000 dwellings were built, providing housing for over 190,000 residents. Its construction was primarily focused on the production of houses by means of strong top-down state interventions and investments. This happened following rigid and detailed blueprint designs. Entire districts of Almere were built all at once with not much space for further adaptations. Almere-Buiten, Almere-Haven, and Almere-Stad are typical examples.

In 2006, the appointment of a new alderman Adri Duivesteijn would prove to be a key moment in the development in Almere. A former member of parliament, Duivesteijn is a strong advocate of self-build housing (Oosterman & Retegan 2015; Oosterman 2015). The previous blueprint city, developed without much citizen involvement, is now a frontrunner in facilitating private initiatives and smaller landlords. The Almere neighborhoods Noorderplassen-West and Homeruskwartier are telling examples of this new approach. In both neighborhoods the final effect has been a mix of architectural diversity and innovations (Collison 2011).

The latest plan for the development of a new part of Almere—Oosterwold—goes a step further than "just" issuing plots for self-build homes. Oosterwold's development relies on a "radical strategy of self-organization" (RRAAM et al. 2012). It is probably the most "organic" development in the Netherlands, certainly the largest.

Figure 2: The location of Almere in The Netherlands

City	Project	Dimension (ha)	Type of development
Almere	Oosterwold	4,300	Urban extension
Utrecht	A12	1,150	Urban extension
Amsterdam	Amstel III	250	Redevelopment
Assen	Havenwartier	125	Redevelopment
Bunnik	Vinkenburg	120	Urban extension
Almere	Homeruskwartier	106	New neighborhood
Rotterdam	Coolhavenelland	36	Urban regeneration
Amsterdam	Cruquiusgebled	17	Redevelopment
Deventer	Havenkwartier	15	Redevelopment
Nijmegen	Vossenpels	15	Redevelopment
Groningen	Ebbingekwartier	9	Redevelopment

Table 1. Examples of organic development projects in The Netherlands (source: Rauws 2015).

Oosterwold covers an area of approximately 43 $km^{2,}$ mostly undeveloped (agricultural) land. It is situated in two municipalities: Almere and Zeewolde. In the long run around 15,000 houses, 20 hectares of office space, 135 hectares of industrial sites, 1,800 hectares of urban agricultural land, and 450 hectares of new public green could be developed (Gemeente Almere & Gemeente Zeewolde 2013, p. 23). *Could*, because there is no predefined program. Based on the regulations for Oosterwold, these figures are "maximum thresholds" for the long term (twenty years), which could be developed or not. Both extreme scenarios—and all the results in-between—are acceptable according to the development strategy of Almere.

A first main difference between the approach chosen in Oosterwold and the traditional comprehensive integrated approach is the former's emphasis on *demand* rather than *supply*. In the comprehensive integrated approach, planning (and sometimes even construction) started before buyers and tenants were in the picture. In Oosterwold, the municipality draws up a scenario and welcomes developers' initiatives. This development is not done by means of a public-private partnership between the municipality and one or more large developers. Instead *anyone*—individuals or groups, professional developers and housing associations—interested in developing in Oosterwold is invited to participate. Only a limited number of rules are introduced to regulate the future transformation, giving guidance so that each individual initiative will contribute step by step to the transformation of the area (MVRDV 2011). Step-by-step development can be seen as the opposite of integrated development. This latter traditional mode of development is even deliberately discouraged by the way in which the plan regulates land use.

The second main difference between the approach chosen in Oosterwold and the comprehensive integrated approach is closely related to the first: instead of using a comprehensive land-use plan to organize, finance and regulate the land-use transformation, the single/individual plot is considered as the focal point. By focusing on this small scale rather than the final aggregate result, the development is the opposite of the comprehensive type, and in many respects, becomes emergent.

3.4 The framework-rules of Oosterwold

The Municipality enables the development of Oosterwold through a reduced set of framework-rules and parameters which are mostly generic and not map-dependent (there is no zoning plan within the Oosterwold area, apart from three areas designated as non-developable). Moreover, local government prevents the introduction of specifications and normative measures additional to what is already regulated at national level (contrary to what often happens in the field of land-use planning). The land in Oosterwold is partially

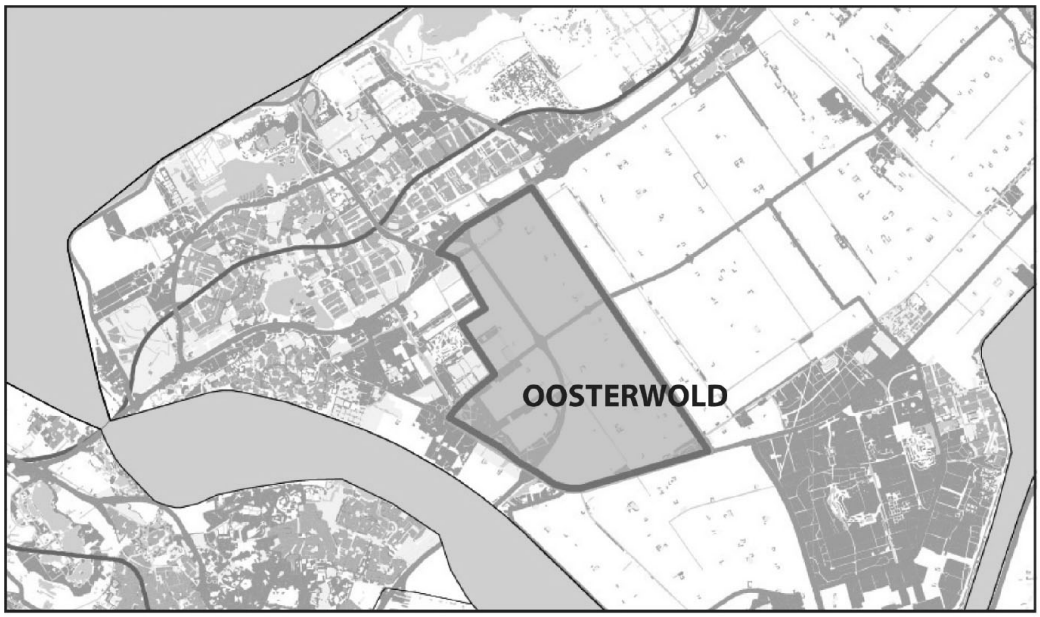

Figure 3: The Oosterwold area

owned by the national government, and a public agency manages the process of land selling.

Land-use developments are regulated in the Oosterwold "plan" (*bestemmingsplan*). Rules regulating the development of Oosterwold are generic (there is no predetermined land subdivision) and they mostly aim to avoid conflicts among initiatives instead of prescribing a certain kind of end state (Gemeente Almere & Gemeente Zeewolde 2013, p. 43). These rules regulate the relationship between private actions and the public interest, and assess fair play between existing landowners and development by new initiators. Public investments will follow private investments, instead of the other way round, as is more common in the Netherlands. These rules regulate not the entire Oosterwold area, but only the part on the territory of the municipality of Almere. This is called phase 1. The other part of Oosterwold, on the territory of the municipality of Zeewolde, will be regulated later on. However, the general plan is sufficiently clear for initiators to be able to apply for a building permit (*omgevingsvergunning*) with the shortest procedure.[5] Particularly interesting is article 13 (*Ontwikkelregels*) of the plan: the development rules. Other articles define for instance the concepts used in the plan and regulate the existing land uses.

Plots are developed according to the development rules (article 13). Once initiators can demonstrate that the rules will be respected, they sign a contract with the municipality. This private law contract is used by the municipality in addition to the public law plan to ensure cost recovery for planning costs and possible future infrastructure investments. After signing the contract initiators can start to build on their plot. In order to coordinate different private initiatives, and monitoring the overall development of Oosterwold, the municipality provides an open-source map representing the location of different initiatives, as well as their phase of development.[6]

The framework-rules in Oosterwold mainly cover four issues: (i) the choice and the spatial layout of plots, (ii) permitted uses, (iii) the floor area ratio, and (iv) the self-reliance of plots (in terms of energy production, sanitation, and financial issues).

Choice and layout of plots. Initiators can choose between three types of plot: "standard plot," "agricultural plot," and "landscape plot." The total amount of land allocated to each type of plot across Oosterwold is regulated: "Standard plot" 73%; "Agricultural plot" 10%, and "Landscape plot" 17%. These types of plot have different parameters and must be developed with a maximum and minimum of land uses (two adjacent plots can be combined to meet the maximum and minimum demands). See the following table:

Land-use parameters	Plot type		
	Standard	Agriculture	Landscape
Buildable area	≤25%	≤7.0%	≤6.0%
Infrastructure (incl. parking)	≤11.0%	≤2.0%	≤2.3%
Publicly accessible "natural green"	≥0.0%	≥0.0%	≥80%
Publicly accessible "dispersed green"	*≥7.0%*	*≥1.5%*	*≥1.5%*
Water	*≥2.0%*	*≥1.5%*	*≥2.3%*
Agriculture	*≥50.0%*	*≥80.0%*	*≥0.0*
Total subdivision in Oosterwold	*73%*	*10%*	*17%*

Table 2. Plots types and land-use parameters.

Initiators can choose any plot size in any shape. This freedom is restricted only by the financial possibilities of initiators and the availability of land. In particular, the availability of land is restricted by two public conditions.

The first condition is that, at the end of the development, the *overall subdivision* of land uses in Oosterwold should be equal to: 20% housing, retail, services and office buildings; 6.5% pavement; 20.5% of public green; 2% water, and 51% agriculture (the area manager is responsible for controlling that the aggregate sum of all initiatives respect such parameter).

The second condition states that all the land in Oosterwold is available for initiators except for three specific zones, which have detailed collective previsions: the area indicated as *Eemvalley* developable only as landscape plot; an area reserved for a *future railway*; certain areas indicated as *forest* in which real estate development is prohibited (however, the mayor and aldermen can decide to deviate from this rule for publicly accessible facilities if they contribute to the "recreational attractiveness" of Oosterwold and do not "disproportionally damage" the existing values of the landscape).

List of permitted buildings uses. Some specific uses in Oosterwold are clearly forbidden, such as large-scale shops (bigger than 2,000 m²), intensive livestock farms, casinos, and brothels. Apart from these, all other uses are permissible: the rules allow for residential development, services, hotels/B&Bs, infrastructures, offices, commercial (shops,

bars, cafes and restaurants), industrial (within limits of environmental classification, listed separately in an appendix based on national regulation). (As regards industrial activities, the mayor has the power to grant exemptions if the pressure of these activities on the environment is equal or less than those activities already permitted).

Floor Area Ratio. A Floor Area Ratio (FAR) of 0.5 is applied to the buildable area of each plot. An exemption from this rule is possible, and the FAR can be stretched to 1. In that case the extra built-up area should be compensated on an adjacent plot so that the combined plots have a maximum FAR of 0.5. In general, there are no (local) restrictions as regards the number of floors or the maximum height of buildings, as well as there are no specific restrictions as regards building designs, construction materials, and technological solutions.

Self-reliant plots. All initiators in Oosterwold have to take care of their own energy production, sanitation, and negative externalities. These rules mainly aim to avoid external effects, instead of regulating a certain predetermined end. Therefore, as regards ecological values, public safety, noise, or water, no "uneven situation should emerge." In this regard, in the appendix of the plan various "decision trees" are added to help initiators to determine: whether or not their application will meet these requirements; and whether further proofing is necessary (by means of investigations) or other steps are required (request a deviation from existing rules). The point is that these rules oblige initiators to internalize all negative external effects. To provide some examples, these rules require that: anyone who wants to start a business in Oosterwold must keep a certain distance from adjacent plots in order to internalize the external effect of nuisances (the distance depends on the kind of activity, specified in an appendix, and activities that involve a great deal of noise must be situated on a larger plot);[8] facilities for generating sustainable energy (such as a wind turbine) may not hamper the possibilities of other plots to generate sustainable energy on their own; each initiator should connect its plot to the existing road network and provide sufficient parking spaces according to national norms for parking spaces (the City can decide to deviate from these guidelines and accept fewer parking spaces, if there are no particular problems).

DISCUSSION

With Oosterwold the municipality of Almere is clearly promoting and favoring the realization of a particular urban-agricultural lifestyle. However, this is certainly a remarkable case study that highlights the relationship between self-coordination and planning. Moreover, it is a good example of large-scale development governed only by few public framework-rules (without previous public investments).

The framework-rules for Oosterwold are generic and do not refer to any specific situation or plot. Instead of having different regimes for different zones within the Oosterwold development area, framework-rules are applied equally

Rules for initiators	Degree of freedom	Comments
Plots availability	High	Almost all the land of Oosterwold is open for private actions. Initiators can choose any plot shape, size, and dimension.
Plots layout	Low	Plot layout is determined by land-use parameters ensuring the agricultural vocation of Oosterwold.
FAR	Low	The density of Oosterwold is low and will be always concentrated in the middle of plots. Once all the FAR is used, there will not be any room for further expansion.
Buildings	High	Initiators are free to design their buildings according to their preferences, knowledge and resources.
Admitted uses	High	All uses are permitted with exception of large-scale shops, intensive livestock farms, casinos, and brothels.
Self-reliance	High	Initiators are free to find or use the technological solution they consider more suitable to internalize negative externalities.

Table 3. "Degrees of freedom"

to the total area. They discipline the overall development of Oosterwold by regulating the construction of plots (for instance by setting certain parameters that the plots must respect within their boundaries, and the relation that plots shall have with their neighbors). All this is reached by setting rules that mainly aim to avoid certain negative externalities (Moroni 2012), and set few positive conditions to facilitate the creation of collective benefits (for instance, the edge of every plot must be publicly accessible and at least two meters wide). Moreover, the preference for using "open" rules leaves more room for initiators to find new solutions, and experiment with innovative actions. This leaves space for the greater use of dispersed knowledge.

Although all the plots will be mostly devoted to agricultural activities, the way in which the framework-rules regulate the list of permitted uses in Oosterwold allows for a large degree of flexibility to initiators, who can voluntary choose the use (or combination of uses) of their plots, as long as they respect the requirements of the overall land-use subdivision. Therefore, over time, the spatial distribution of activities will be driven by social and market demand.

The transformation is incremental. The framework-rules last for twenty years, within which an independent (but at the same time correlated) succession of private initiatives will shape the emergent character of the area. All initiatives will be correlated to each other; in fact, to include new plots within the previously built environment, all initiators must meet certain conditions. These conditions will ensure the evolution of an overall organic development between different and independent initiatives (for instance, the creation of the road network, open green areas, pedestrian and cycle paths, etc.). In other words: step by step, each initiative will be inserted into a framework, respecting and reinforcing the evolutive process of transformation.

However, the framework-rules introduce some conditions which tightly bind the future of Oosterwold, constraining the "range" of possible emergent orders. We may call these conditions "invariants." Such invariants are unmovable and stable conditions that must be shared by all initiators: their function is to raise the level of predictability of future transformations toward some preferred collective situation. Obviously, the more use is made of "invariants" the less room there will be for unpredictable initiatives.

Three "invariants" are of particular interest: (i) the assignment of particular prescriptions to three different areas; (ii) the total amount of buildable FAR (floor area ratio); and (iii) the overall land subdivision. Therefore, although the development of Oosterwold comprises a great degree of internal flexibility (and it closely relies on self-organization), to some extent part of the final configuration of Oosterwold is already known since the beginning.

The first is a case of "spatial invariant." Three areas have been withheld from free private initiatives receiving specific vocations: first, the *Eemvalley* that has landscape destination; second, an area preserved for *future railway* construction; third, an area indicated as *forest* prohibiting real estate development. Spatial invariants introduce stable conditions that do not complicate the transformation of Oosterwold; they are very simple and easily understandable.

The second is a case of "dimensional invariant" as regards the maximum density of Oosterwold. A Floor Area Ratio (FAR) of 0.5 is applied to the buildable area of each plot. This means that when and whether all the FAR is built, there will be no space for future expansions. In other words: the plan sets a clear limit on the future growth of Oosterwold, which compels the area to remain a suburb. However, after twenty years the rules may be re-discussed, with the possibility of increasing the FAR.

The third is a case of "performative invariant" as regards the overall land-use subdivision. This condition is more complicated than the others. The final configuration of Oosterwold (that will be reached through unknown future voluntary private actions) has to conform to a general and generic land-use subdivision (that is: 20% housing, retail, services and office buildings; 6.5% pavement; 20.5% of public green; 2% water and 51% urban-agriculture) which disciplines the final combination of aggregate actions. Moreover, the implementation of this process is complicated. On the one hand, the area manager has a fundamental role in organizing the initiatives; on the other hand, as the area is developed, the space for new initiatives will decrease, and the implementation will become in its turn more complicated. In brief: with the passage of time, in order to obtain the general overall land-use subdivision, the range of possible initiatives will diminish, and the rules will be more prescriptive.

FINAL REMARKS

The (public) framework-rules for Oosterwold have been designed to allow a high degree of flexibility; however, inevitably, such framework-rules are top-down and imposed, while the aggregation of all initiatives (i.e., the final spatial configurations) will be obviously mainly emergent and bottom-up.

Completely emergent configurations are by definition unpredictable and beyond anyone control: evidently, this is not the case of Oosterwold. In fact, the emergent development of Oosterwold is influenced by certain "public conditions" which determine and control some salient aspects: for instance, the agricultural vocation of the whole area. However, in the opinions of some initiators, these framework-rules enable the action of private actors and the self-organization of different individuals having similar lifestyles.

The transformation of Oosterwold is now slowly emerging in the wake of small initiatives (so far, plots average ranges from 1,000 to 3,500 m²). On May 2016, [7] "initiators" started to build a total of 42 houses, and other 30-40 will start to build their plot before the end of the year. Besides them, 140 "initiators" started the application process for new developments (2016).

Three types of initiator are recognizable: (i) "the self-builder," a single initiator who directly build and develop the plot; (ii) "the cooperative," self-organized initiators that jointly act to diminish certain collective costs (for instance the costs regarding energy production or sanitation, as well as the design costs, or procedural costs); (iii) "the real estate," initiators who buy, organize, build, and then sell plots to future inhabitants.

Most of the initiatives are concentrated in the same area sharing the road previously developed by the first initiator. In this regards, it is noticeable that initiators have voluntarily created a "road-association" to share all the costs regarding road development and subsequent maintenance.

Oosterwold is definitely an interesting experiment. But, there are some critical points that could create problems during the development. For instance: the degree of discretionality of the area director, and of the mayor and aldermen; the concrete form and content of the signed agreements between the public party and the private ones; possible frictions between initiators for collective spaces construction and maintenance (for example, streets and green areas); or possible problems regarding the interpretation of "agricultural land-use" (some initiators have already expressed doubts about the vagueness of such a term; in their opinion, this can bring the public agency to behave in a discretional manner, and favor some initiators over others).

Only at the end of the development process will it be possible to assess in detail what has worked and what has failed in this particular experiment (and what is tied to specific local conditions, and what is instead exportable). Further research and evaluation will therefore be necessary as the experiment proceeds and on its conclusion to express a more thorough critical judgment. As said in the introduction, the case of Oosterwold is not considered here as a sort of "best practice," but as an interesting experiment that requires assessment and monitoring.

NOTES

1 The term "experimental garden" was used by Esther Geuting in September 2014 in an interview. At that time Esther Geuting was the area director of Oosterwold, working for the municipality of Almere.

2 For instance, as we will see later, in Oosterwold the edge of each plot must be publicly accessible.

3 From a methodological point of view, to reconstruct the case, in addition to the study of official documents (for instance the land-use plan, the strategy plan, and so on), and of particular websites (e.g. http://maakoosterwold.nl/), the research group went three times to Almere (September 2014, October 2015 and May 2016) to see the place and interview the area director of Oosterwold Esther Geuting, and Ivonne de Nood (new area director since November 2015). In 2014, a meeting with Jeroen Zuidgeest (responsible for the strategic project carried out by the MVRDV design firm) was organized to understand their choices and motivations.

4 In Dutch commonly known as *Vinex-wijken*. *VINEX* is the Dutch abbreviation of the Fourth Policy Document on Spatial Planning Extra, the planning document 1988 which appointed (among other things) the locations of these suburbia.

5 This is a broad building permit that integrates several previously separate permits such as the building permit, demolition permit, and permit for felling trees. The shortest "regular procedure" takes eight weeks. The building permit is regulated in the General Provisions for Environmental Law Act (*Wet Algemene bepalingen omgevingsrecht*, abbreviated as "*Wabo*").

6 The map is shared and visible online (http://maakoosterwold.nl). On the map such initiatives are marked with four different colors. Each color represents a specific phase of advancements: (i) *declaration of interest,* (ii) *letter of intent,* (iii) *agreement,* (iv) *construction*.

7 However, exemptions can be made if different initiators of plots decide to cooperate and accept the nuisance.

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