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**The role of productive urban landscapes for R-URBAN
&
the role of R-URBAN for productive urban landscapes**

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An introduction / Abstract

Out of the three distinct urban localities that the R-URBAN project aims to develop, it is *Agrocite*, the urban agriculture part of R-URBAN, that this report is mainly concerned with.

Agrocite is situated in Colombes, a 'banlieu' suburb to the North-West of Paris, and within short walking distance to the other two parts of the R-URBAN project, Recyclab and Ecohab. Within the R-URBAN strategy for resilient, sustainable, participatory and localised urban space production, *Agrocite* is an urban site developed to focus on agriculture activities, whereas Ecohab and Recyclab describe urban sites concentrating on habitat and recycling retrospectively.

The adjacency and simultaneousness of the three components is of paramount importance to the project, because it is their multiple interdependencies that R-URBAN aims to explore and propose as an architectural and urban design response to the challenges set by envisioning pro-active and resilient futures for contemporary cities.

Agrocite occupies an open space of about 2000 m² in a dense, diversely used and populated area of Colombes. It is enclosed on 3 sides by neighbouring buildings and fencing and borders a road, rue Jules Michelet, on its North-side which contains the only site access. R-URBAN had started occupying the site in 2011 and food growing in 2012. When I visited R-URBAN in June 2012, *Agrocite* was the most developed aspect of the project judged by both, their physical presence and already established stakeholder networks / working order. Food growing was already well underway everywhere on the site. About 15 people belonged to the core team of stakeholders ready to take the project beyond their own tended plots...

Bohn&Viljoen Architects have been invited to participate in R-URBAN as expert consultants on the subjects of urban agriculture and productive urban landscapes. During the last 12 years, we have been working on urban design concepts enabling the integration of food growing into the fabric of (European) cities with the aim of making

cities more liveable, sustainable and resilient. *CPUL City* describes a vision for an urban future based on the planned and designed physical, social and systemic introduction of what we call '*Continuous Productive Urban Landscape*' – landscapes defined by urban agriculture - into existing and emerging cities (Viljoen *et al.* 2004). The CPUL work is embedded in a wider question of how architecture, design and urban design can contribute to more sustainable urban food systems.

After many years of food being absent from planning or urban design agendas, it has now being recognised as an important subject that can shape both, spaces and places of cities as well as the everyday life and well-being of its inhabitants.

Image 1 : The Urban Food System Star

Apart from allotment-type spaces and left-over farms within city boundaries, projects engaged with urban food growing exist in the Global North only since the 1970ies, if one takes the establishment of the New York community gardens as a starting point. Whilst the number of urban agriculture projects is growing exponentially since the last 10 years, it is only very recently that such projects have become the subject of transferability studies aiming to better prepare cities for the future. From an urban design perspective, urban agriculture projects become particularly interesting when forming (potential) part of wider productive urban landscape strategies as such strategies would significantly impact on a city's food system(s).

With all this in mind, it is of great interest and pleasure to observe and evaluate *Agrocite*, because within this project both aspects are addressed, the establishment of an urban agriculture site and the creation of a productive urban landscape.

This report is presented in three parts: first, we introduce the *CPUL City Actions* as our method of evaluation for *Agrocite*, then, *Agrocite* is looked at in detail using the four CPUL City Actions as measures of assessment and as a framework for recommending next steps, and finally, we draw all findings together in an attempt to suggest future developments for R-URBAN from a productive urban landscape perspective.

With our knowledge of the project to date and from our particular perspective, we anticipate that *Agrocite*, as integral part of R-URBAN, will be an innovative, participatory and sustainable prototype for a productive urban landscape and for a (European) urban future that provides *more experience with less consumption*.

Enabling as well as assessing productive urban landscapes

Designing for urban agriculture is a very young discipline, and more universal approaches to enable productive urban landscapes are still being explored worldwide. Agreed measures to assess projects dealing with agricultural issues, especially when there is a focus on qualitative aspects (i.e. socio-political, cultural), rather than on quantitative aspects (i.e. yields, soil/air/plant/harvest types), such as in R-URBAN, do not exist yet. Within our work and over the last 5 or so years, we have aimed to advance the subject by developing an actions kit, the *CPUL City Actions*, responding to both, the need to

synthesise findings from a large variety of own and observed projects and to provide guidelines for future urban agriculture proposals (Bohn and Viljoen 2010). For this report, we use this actions kit to reflect on the process, achievements and challenges of *Agrocite*. Bohn&Viljoen's public lecture in 2009 at AAA's project *56 St Blaise* was one of the first times that the complete actions kit was presented to the public.

Whilst there are by now various good toolkits available that focus on the transfer and dissemination of useful knowledge from one project to another, as well as to other future urban farmers (refs), there is very little guidance on how to set up, design, run and reflect on urban agriculture projects in more strategic ways that enable and advance their long-term presence in the Global North.

The four distinct *CPUL City Actions* categorise the various steps and tools most relevant to the architectural, urban design and planning professions. Their message can be condensed down to four points relevant to every individual project whatever its scale, location and specific purpose – in short: *visualise, inventorise, negotiate, keep up to speed*.

Image 2 : The CPUL City Clover

For our evaluation of *Agrocite*, we can rely on several sources and types of information. Most of these were made available by AAA, such as the brochure *R-Urban, strategie d'éco-rurbanité (aaa, 2009)*, a comprehensive introduction by Constantin Petcou into the backgrounds, aims and working processes of R-URBAN and *Agrocite* and a recorded and later transcribed workshop conversation between Doina Petrescu, Constantin and the author. Moreover, the author's 3-day research visit to R-URBAN and *Agrocite* in June 2012 allowed essential 1:1 encounters with the site(s) and its many enthusiastic stakeholders and protagonists.

All sources of information were taken into account when writing this report, and the key subjects of the workshop conversation are “recycled” to form the structure of the evaluation.

CPUL City Actions: Observing urban agriculture within R-URBAN

Action U+D = Bottom Up + Top Down

Infrastructural, as well as individual food-productive projects need parallel top-down and bottom-up initiatives, design and planning.

An urban agriculture project will have the best chance of long-term success, when it can rely on a strong base of local supporters, active and passive, and when these are engaged steadily in negotiation processes with those entities that govern their lives, for example local councils or food distribution systems. The larger, i.e. more infrastructural, a project is, the more interdependencies it needs and creates.

With regard to R-URBAN and within *Action U+D*, it is important to address the following strategies, steps or tools necessary for a successful implementation of any urban agriculture project:

- 1) develop multiple relationships between project protagonists, local communities and municipal decision makers in order to build a robust support network for the project
 "... C'est plus catalyseur..." (p4 de la conversation)
- 2) foster continuing negotiations with local food groups in the widest sense (i.e. organic seed suppliers, supermarket chains) in order to create closed-loop urban food systems that can fully integrate the specific food growing project
 "... connaître la composition ethnique du quartier..." (p3)
 "... l'idée de vendre les produits..." (p1)
 "... l'objectif de pouvoir payer des fermiers sur le site..." (p2)
- 3) stage events, create meeting occasions on the specific urban agriculture site/s in order to increase the physical site's public visibility and its desire-in-use
 "... la valeur symbolique..." I (p2)
- 4) jointly develop and advocate, discuss and refine, agree and contract aims, rules, design ambitions and process stages of the project in order to ascertain its commonly-supported long term future.
 "... un projet social..." (p7)
 "... On doit tous faire des efforts pour que cela marche..." (p8)

AAA, as *Agrocite's* protagonists, began work in Colombes in 2009 following an invitation by a local green party councillor who initiated the first contacts with 2 local food initiatives. These food initiatives had already started food growing projects and were organised in an AMAP (association pour le maintien d'une agriculture paysanne), the French equivalent to a community supported agriculture (CSA). From their search for permanent sites, localised operation modes and integration of/into effective urban systems, such as water and waste cycles, and AAA's pre-existing work and theory developing participatory strategies for resilient urban development, a fruitful collaboration between the urban farmers / local residents and the urban designers / campaigners developed.

Looking at AAA's process of getting people around the table, finding sites, acquiring funding for R-URBAN and setting out a working framework for its stakeholders, it is evident that *Agrocite* can build on a solid, locally embedded and expert-led foundation. From an urban agriculture perspective, it will be of great importance to establish strong working relationships with local agricultural experts, such as agronomists, horticultural experts or local food groups in the widest sense, either on a consultancy basis or, probably more in the spirit of the project, as immediate project participants. The more extensive the urban food growing aspect of *Agrocite* is intended to become, the more important is the early integration of urban food system's thinking. For urban designers, the most comprehensive, although not local, reference document on urban food systems planning to date is probably the *Policy Guide on Community and Regional Food Planning* by the American Planning Association (APA 2007).

Because AAA already communicates with Colombes city council since more than 2 years, R-URBAN's relationship to the local authorities has already developed. This is of advantage in comparison to many grass-roots initiatives that start their growing activities at the same time as their negotiations. **Should the following negotiations not have already**

happened, it might be important for *Agrocite* to:

- set up a site usage agreement with the local council containing time scales on and responsibilities of both sides and spell out any financial arrangements, such as rent, maintenance or street cleaning fees,
- for urban agriculture, specifically communicate with those departments of the council that look after open/green space protection and management, agriculture, biodiversity,
- find out whether the council has a dedicated community garden (or food planning or allotment garden) coordinator, and if not, lobby the council,
- check out the local food hygiene regulations, especially when food grown on site is being sold or communally consumed on site,
- take out basic liability insurance to cover accidents, especially when larger public events are planned on site,
- liaise with related local initiatives, such as AMAP (link already established), Local Agenda 21, Transition Town.

Attending a public workshop on site showed how those interested in *Agrocite* (i.e. local residents with an interest in gardening and/or the open space, ecologists, small entrepreneurs and students) had started to investigate ways of integrating their food production into the local food systems of this particular neighbourhood of Colombes. Ways of procuring agricultural components, such as soil or seedlings, selling/processing produce, utilising food waste or connecting to existing food projects were discussed. As in many projects of similar nature, the possibilities seem endless, and private/individual as well as communal/commercial, smaller-size as well as larger-scale, more or less intensive growing options are under discussion. At the moment, *Agrocite* is taking in all possibilities that emerge during such exchanges of information, knowledge and desire, whilst having also started to produce edible crops in two types of planting beds at on-demand basis.

It will be necessary to filter out the more likely agricultural options and agree early on (i.e. prior to the next gardening year?) on key parameters for their establishment in *Agrocite*, because their impact on the arrangement of space, on the community's daily routines, on the site's visual and use character and on its infrastructure will depend very much on the type of food production *Agrocite* decides to develop. At the moment, AAA is guiding this decision process, and it might be of advantage to establish a dedicated steering group for the urban agriculture component of *Agrocite* which would jointly agree on the criteria and methodology for filtering options.

Agrocite hosts open days every weekend when local residents can visit the site and active gardeners tend their plots. I understand that the site has become much more dominant in the residents' perception since *Agrocite* started with the number of people visiting and/or being interested in an individual plot continuously increasing. Coordinated by AAA, regular public workshops, one-off events and a newsletter are being used to discuss the general future of the site and agree on its management, layout and development process. All participants clearly have the possibility to be heard and to engage in the project's development.

On my visit, it seemed that the site only opens at the weekends to the wider group of local residents, and that during weekdays only a limited number of core group members

have more regular access. Whilst this is a reasonable precautionary measure for such a young experimental project, this might have to be reassessed once the food growing is expanding, because of higher-capacity maintenance tasks, such as regular watering, or more frequent tasks, such as harvesting.

Action VIS = Visualising Consequences

The qualities and aims of urban agriculture and productive urban landscapes, such as CPULs, need visualising to influence decision makers and raise public awareness. Visualising ideas and concepts is one of the primary skills of architects, planners and designers. Usually, this is done through the design and/or test-building of the idea in question thereby predicting and discussing its potential outcomes - i.e. spatial, user, environmental or financial. In the case of productive urban landscapes, this action widens to include urban agriculture experts into the multi-disciplinary visualisation process. It encompasses the public and visually descriptive dissemination of ideas, data and best-practice examples mostly in form of exhibitions, installations, prototypes and online/paper/live presentations. Here, the design professional becomes the “agent of change”, which carries on a long, and at times problematic, tradition of the architectural manifesto as a herald of future change and challenges.

With regard to R-URBAN and within *Action VIS*, it is important to address the following strategies, steps and tools necessary for a successful implementation of any urban agriculture project:

1) create images and visions – drawn, built and/or verbalised – that can convey the spatial, use and environmental values of urban agriculture projects to any members of the public in order to gain active and long-lasting support

“... le côté innovant... de mettre tout ensemble plutôt que de tout séparer...” (p7)

2) advocate the potential for urban agriculture and productive urban landscapes as organic ornament in the city in order to broaden the public perception of what constitutes beautiful landscape and desirable lifestyles

“... la valeur symbolique...” II (p2)

3) think 3D - raised beds, walls, roofs, fences, streets etc. can become food-productive spaces - in order to maximise the potential impact of alternative urban food systems

“... le maraîchage expérimental...” I (p6)

“... la production de nourriture dans l'Agrolab...” (p8)

4) provide visually-descriptive guidance on the design and design-based realisation of productive landscapes in order to enhance their variety, usability, durability and aesthetic quality.

“... la dimension du design...” (p4)

Over the 2 or so years that preceded the start of *Agrocite*, AAA had visualised the joint concepts of how the site at rue Michelet could be transformed as part of the R-URBAN project in ever evolving series of images. These images (f.e. available in brochure **XXX**, on AAA's website and in various slide shows) conveyed a vision strong enough to gain

European funding, municipal support and the enthusiasm of local residents. With regard to enabling productive urban landscapes, this process has been very successful so far.

As an urban agriculture space type, *Agrocite* is a community garden. Community gardens are currently experiencing an unprecedented amount of attention, and, to some extent and fortunately, it has become obsolete to visualise their qualities in public debate. *Agrocite's* innovation therefore lays in its orientation towards a participatory, yet designed process of space production which exceeds the ambitions of many recent community garden initiatives (ref Carrot City case study base). The coincidence of design and campaigning within AAA with the already better known characteristics of knowledge and curiosity within a project's stakeholders and of generosity and boundaries within a municipality has the potential to make *Agrocite* an important example of urban agriculture beyond Colombes and Paris.

As with many urban agriculture projects, *Agrocite* is more than just a food growing space: it creates an experienceable vision of landscape, productivity and lifestyles in the city, and, through its open invitation to participate, challenges and channels public perception and desires of how urban space can be formed and occupied. Testimony of these desires to participate is the fact that local schools, residents' associations and individual inhabitants begin to take an interest in the project and want to join or be heard. Moreover, local food growing experts, such as a *Terre de Liens* and Kokopeli are regular attendants of the workshops and the open days.

When looking at the project from an urban food system point of view, *Agrocite's* food production has “symbolic value”. Potentially, this could then be a problem for the success of the R-URBAN project as a whole, when urban agriculture became, due to its general popularity, a token gesture. To this end, R-URBAN might want to address the following:

- aim for higher yields and a certain degree of self-sufficiency from the onset and spell this out as a project goal,
- now, that the first crops are coming in, develop more applied concepts of how and where the produce of *Agrocite* will be used, probably across all 3 sites. Such concepts are already sketched out in the initial projects strategies.
- map where/how the current crops are being used. These might be mini urban food systems which are well worth visualising to shown the potential impact of urban agriculture on people's lives and lifestyles. This type of post-quantifying could also be very helpful for the urban agriculture research in general, because many food growing initiatives don't manage to fit this into their schedules.
- there are numerous activities around the urban food system, that could be run, even if no substantial food growing will take place on the *Agrocite* site (or because of that), such as: production and/or storage of seeds and seedlings for distribution around the city, space for teaching about growing and preparing food, composting schemes, event space for food-related events or the hosting of food banks and markets or CSA activities.

The project is in a stage of experiment that practically visualises the search into what grows well and where and how. At the moment, the urban gardeners at *Agrocite* grow their produce in the ground which seems an appropriate first step to take ownership of the

site and show what urban agriculture could achieve on it. Here, it may be suggested to start exploring other forms of urban agriculture, be it using the existing fencing or structures on site to grow on/from or building a variety of “test beds” of vertical or ground-elevated nature. Given that R-URBAN extends to two other sites, there is also an opportunity to think strategically and practically about extending the food growing into all sites.

Action IUC = **Inventory of Urban Capacity**

An inventory is necessary for each location, especially of spatial, resource, stakeholder and managerial capacities in order to best respond to local opportunities.

At the beginning of the relatively short history of the urban agriculture movement in the Global North, emphasis (in planning) was given to identifying and mapping available urban space (i.e. soil quality, pollution, water, exposure, adjacency to markets and compost) as shown, for example, in the city of Portland's *Diggable City*, one of the first of this kind of reports (Balmer *et al.* 2005). In recent years, it has become clear that stakeholder and managerial/maintenance capacity is as important. Moreover, available resources need to be recorded and systematically integrated into the planning and execution of productive urban landscape projects.

With regard to R-URBAN and within *Action IUC*, it is important to address the following strategies, steps or tools necessary for a successful implementation of any urban agriculture project:

- 1) map physical sites and resources taking into account that suitability for urban agriculture includes of issues such as land, orientation (sun), soil, air, boundaries, access, supply (water) and ownership in order to build a catalogue of spatial opportunities
“... un conflit d'intérêt sur un espace...” (p6 de la conversation)
- 2) identify potential stakes and stakeholders for the project's different development stages from start-up to establishment to longer-term prominence in order to ascertain and/or grow sufficient local capacity to maintain the project
“... une question de capacité personnelle, mais c'est aussi une question de capacité d'espace...”
(p3)
“... D'espace et aussi de gestion...” (p3)
- 3) aim for no-waste systems – grow, eat, compost, grow... - as one aspect of maximising the Ecological Intensification on open urban space
“... les questions de la terre...” (p1)
- 4) identify local resource and managerial capacities as a basis for new economic models, environmentally-friendly production and fair trade for urban farmers.
“... plus que simplement un endroit, ce sont les deux autres endroits aussi...” (p8)

At my visit in June 2012, many physical and spatial capacities of the *Agrocite* site had already been mapped and assessed. Because the site is already in urban agricultural use by R-URBAN, one of the biggest challenges to urban agriculture, the access to land, had already been dealt with.

The land is public land, owned by the local council. Here, it will be important to agree with the local council legally safe tenure for that number of years that R-URBAN deems to be acceptable for a successful running of the project. For urban agriculture enterprises in general, one would aim for a minimum lease of 10 years to make the setting-up effort worthwhile and, to an extent, sustainable. Depending on the specifics of each project, this duration may be more, from the onset, for commercially viable schemes (aim for a minimum 15 years), and less for communally-aimed schemes, esp. those that understand itself as being of a more nomadic or change-of-use nature.

AAA's current strategy drawings for the development of the site show a good understanding of issues related to:

- access (identified as coming from rue Michelet only, therefore safeguarding of an already existing entry gate),
- boundaries (the site's 3-sided enclosure is being maintained, the 4th side, facing the public, is understood as both a community interaction threshold and the project's showcase facade),
- orientation (use of well-lit areas for growing / placement of planned larger building structures so as not to overshadow the growing areas),
- water supply (an existing mains water outlet on site is available, however, I am unsure what the agreements with the local council are about its longer-term and intensive usage).

Most urban agriculture projects in the Global North aim for organic and local modes of production. To this end, R-URBAN might want to address the following:

- professionally measure and assess air and soil quality across the entire site and especially close to the road and the surrounding former small-scale industries,
- set up an organic waste recycling (composting) system that allows the gradual replacement of existing soil with fresh humous-rich soil and the reactivating of the used soil,
- agree on sustainable codes of practice with the urban gardeners as to the use of fertilisers and pest control,
- procure (swap?) organic seeds and seedlings from which to produce their own plant base material.

Given that *Agrocite* will have the 2 other R-URBAN sites at its disposal, the concepts of cyclical and no-waste or exchange systems could be exemplary developed in the future.

In June 2012, *Agrocite* had already established an enthusiastic and knowledgeable stakeholder basis.

According to Doina and Constantin, this young community is the result of a detailed “inventory” of potential actors around the site and an appropriate community engagement process led by AAA. Even though the stakeholder community still has the potential (and ability) to grow, this important site capacity seems to be sufficiently available and the methods for its integration well utilised.

As with many urban agriculture projects, identifying and activating the necessary managerial capacities for its smooth running is also a future challenge for *Agrocite*. Here, two aspects may have to be considered:

- because a lot of the work in setting up an urban agriculture project often rests with volunteers, at least at the beginning, this work should be well distributed amongst all actors. The distribution process itself needs careful managing.
- (ii) if the food growing aspect of the project is being further developed as the key characteristic of *Agrocite*, dedicated urban farmers should lead the on-site production process. These farmers could be trained from the enthusiastic, but lay stakeholder group.

Action R = Researching for Change

Constant research, development and consolidation of productive urban landscape projects and concepts is needed to respond to changing circumstances.

Social and environmental conditions can rapidly change – locally, regionally, nationally and globally. To keep pace with such developments, but also to scrutinise the achievements of concepts such as *CPUL City*, urban agriculture projects have to undergo continuous evaluation and evolution. Theory and practice need to be able to accommodate change, to anticipate the future by having understood the past. Shorter and longer-time research is needed to improve on different procedural, spatial, user and business models for various scales of production.

The main partners for this action are the multi-disciplinary experts and researchers in universities or other research institutions on the one side and the practising urban farmers on the other.

With regard to R-URBAN and within *Action R*, it is important to address the following strategies, steps or tools necessary for a successful implementation of any urban agriculture project:

1) stay flexible and open so as to be able to respond quickly and/or radically to changing circumstances - economic, climatic or socio-political – and defend the urban agriculture project

“... nous ne savons pas qui viendra...”

“... une opportunité qu'on... donne...”

2) consolidate the urban agriculture and/or productive landscape project by constant search for and adaptation to both, new agricultural research (plants, yields, soil, air) and emerging methods of urban space production and usage

« ... maraîchage [= market garden] expérimental... » II

« ... le lien que l'on peut créer entre les trois endroits... »

3) understand productive urban landscapes as part of (an) urban food system/s in order to develop economically viable structures for both, a specific urban agriculture project and the resilience of its hosting local community

« ... le côté commercial de l'agriculture urbaine... »

« ... d'essayer de développer une économie locale avec ce projet... »

4) think strategically – productive urban landscapes can become urban infrastructure – in order to respond to different urban conditions, such as lower and higher housing densities, socially deprived and well-off areas, inner-cities and city edges or greener and less-open neighbourhoods.

“... les trois zones : la zone expérimentale agricole, la zone pour les résidents, et la zone pédagogique...”