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Training and action-research for sustainable rural fringe development in urban China: achievements and limitations.

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Rural fringe, Sustainability, Skills, Action-research, China

There is a wide debate on which knowledge and skills can equip future urban planners with suitable tools to tackle with the societal and environmental challenges of massive urbanisation. This is urgent especially in fast changing societies like the Chinese one. One consolidated strand of research within urban studies has traditionally looked at the integrated topic of rural fringe management and urban food planning in order to achieve more sustainable urban development outcomes. As in other parts of the world, this would require discipline-related knowledge and skills, such as country-related ones. Thus, by establishing conceptually the nexus between sustainability and rural fringe development in the particular context of China, the main aim of the paper will be to unfold the pedagogic implications of this relationship. This will be achieved by reflecting on a series of heterogeneous but interwoven experiences employed in a foreign University located in China: the development of a new “Rural planning” module and the implementation of action-research activities, in form of international workshops, mainly located in the countryside of Suzhou in the Jiangsu Province. The paper will show in the conclusion the achievements and limitations of these teaching experiences, in this particular field of study, exploring the enabling factors in urban studies education for the sustainable development/management of the urban fringe of China.

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1. Introduction

Discussions regarding the concept of sustainability and how it has been embedded in urban studies have increased in the last decade, in conjunction with the launching of the UN Decade of Education for Sustainable Development (UNESCO, 2014). This is due to raising concerns regarding the massive urbanisation of people, which is taking place in several parts of the emerging world, and the challenge to equip the future urban planners and urban experts with suitable cognitive tools to cope with this global challenge. The chapter 10 of the well-known *Global Report on Human Settlements 2009: Planning Sustainable cities* is entirely about education in planning schools across different regions of the world (*UN Habitat, 2009*). Moreover, despite the obvious regional differences this concern cannot be just regarded as a problem for the planning programmes of emerging countries. Sustainability in western cities might be mainly conceptualised by referring to categories of urban decline or shrinkage but, considering the exponential amount of foreign students (Chinese *in primis*) in European, US and Australian university, the understanding of the paradigm of urban growth in planning programmes should be regarded as a primary concern (Kunzmann & Yuan, 2014). Yet, the correlation between massive/rapid urbanisation and sustainability will be very likely at the centre of the attention of planning programmes in the near future. However by assuming the truthfulness that massive/rapid urbanisation in emerging countries is equal to excessive urban growth (it might be not be entirely true everywhere but this would not be questioned here) is it worthwhile to warn regarding an easy transferability of concepts across regions of the world. As urban growth has many country-specific connotations, this would determine the risk that a similar conceptualisation of issues and problems arising around this broad topic can be misunderstood in different contexts. This would consequently imply the utilization of the wrong set of tools for its understanding.

One consolidated strand of research within urban studies has increasingly looked at the integrated topic of rural fringe management and urban food planning in order to achieve more sustainable urban development outcomes. This is because the containment of urban growth is tightly related with the preservation of farmlands at the edge of cities (Daniels, 1991; Marin, 2007), and is normally associated with the prevention of urban sprawl, the most common ill-formed urbanisation process, which emerged in western countries since the 70s. As a matter of fact, many planners (including the author of this paper) would not identify themselves as directly involved in planning for local food systems, rather in studying the conditions for making that happen, by protecting peri-urban farms. This is one of the possible avenues by which planners can approach the study of food planning (Brinkley, 2013), in the attempt to find more sustainable solutions for cities. Nevertheless the pursuing of an effective urban food strategy and the achievement of sustainability are tightly related with the preservation of peri-urban farms.

Another important argument in favour of sustainable urban development is about the environmental and social advantages of shortening the food supply chain during the implementation of urban food strategies in order to feed the cities in sustainable forms. The literature in this case is quite impressive and has led to define precise planning agendas (Sonnino, 2009). However, this is also a quite controversial point, being the risk of the “local trap” always present. In other words, it has been argued that the local dimension is not necessarily desirable or sustainable, depending on how we observe a local food system: ecological might not mean socially just, democratic might not necessarily imply the quality of food, etc. (Born & Purcell, 2006). It is important to define what sustainable means for a local food system to avoid evident contradictions.

In summary despite the limitations briefly explained, urban growth management (being related to sprawl containment) and urban food policies (being related to localism or regionalism) are two potential conditions for achieving more sustainable urban outcomes in international best practices.

However, when these concepts are translated into the Chinese context a series of complications come out. This is because, as it will be explained in the next session, the Chinese institutional context appears to be rather unique with the risk that lessons from abroad cannot be easily implemented. These introductory considerations bring to the main research focus of this paper, which is to analyse conceptually the relationship between sustainability and rural fringe management in urban China and its pedagogic implications. The goal will be to identify, consequently, the mayor challenges in teaching this specific area of urban studies education in order to equip students with knowledge and skills, which are both discipline-related and country-related, to properly address the concept of sustainability in their future practice. In other words, this would imply to research the enabling factors in urban studies education for the sustainable development/management of the urban fringe of China.

Thus, the paper will present a theoretical framework to understand the relationship between urban food planning, rural fringe management and sustainability in China (session 1). It will later introduce the pedagogic implications of this field of study and how it has informed the design of a module in "Rural Planning" for the undergraduate programme in Urban Planning and Design at XJTLU, in China (session 2), and the implementation of an action-research activity located at the fringe of the city of Suzhou, using the format of an International Workshops with the involvements of students (session 3). The discussion session will draw on these heterogeneous educational experiences to outline those factors which should enable the sustainable development/management of the urban fringe of China, by referring to the very recent URBACHINA Report for the Directorate General for Research of the European Commission on the University level syllabi on urbanisation in China, Europe and the rest of the world (Bina et al., 2015).

2. Rural fringe management, Urban Food planning, and sustainability in China

According to recent projections China will be the second largest contributor after India to the increasing of urban dwellers worldwide in the period 2014-2050². The addition of urban population should not repeat the pattern of the past as strongly advocated by the joint Report on *Urban China* by the World Bank and the Development Research Center of the State Council of China (WB & DRC, 2014). According to the Report "if urbanization continues to follow current trends, an additional 34.000 square kilometres, an area about the size of the Netherlands, would be required to accommodate the growth of cities in the next decade" (p. 27). Rural land conversion potentially has implications for China's food security, and currently the availability of land is close to 120 millions hectares which is the "red line", according to the Report, considered to be necessary to ensure food security.

Food security has been considered for long time a strategic issue in China. This is mainly due to the massive trend of urbanisation especially affecting the most fertile areas of the country in the east coast. Even recently, the National Urbanisation Plan (2014-2020) clearly states that there is

² Recent data shows that the increasing of urban population of both China and India will account for almost 1/3 of the total world increase till 2050, which is estimated to be at nearly 2,5 billion people. India should contribute for almost 404 millions and China for almost 292 millions (United Nations, 2014).

an urgent need to ensure national food security and effective supply of agricultural goods (SCPRC, 2014).

In China policies have been already applied to limit the city size, to preserve the peri-urban farmlands and, in some case, to establish agricultural parks at the urban fringe, but less has been done to support and facilitate the development of integrated local food systems. According to International Organizations, like FAO, a coordinated governance of local food systems and the improvement of the local food chain, from both the demand and supply side, could enhance the overall sustainability of cities, shortening the food supply chain, preserving the peri-urban open space and improving the nutrition quality of citizens. In general terms the planning practice in China has statutorily limited influence in fostering effective forms of urban agriculture, not to mention to strengthen city or regional local food systems. Few attempts have been made in this direction although there are signals of change from different parts of the country.

Research regarding the revision of existing practices of food planning and urban agriculture in China has been done. According to Lang and Miao (2013), in China, despite the existence of a relative high “Self-sufficiency ratio”³ in some fast-growing cities of the country cities are not addressing holistically the implementation of local food systems or employing comprehensive urban food strategies. However, some seeds of change are emerging in respect to urban agriculture experimentations, although these are very scattered and diverse, and they have never been systematised (Verdini, 2015).

In general terms intra-urban farming in Chinese cities is still rather scattered. For example, the current planning practice in China allows the establishment of agricultural parks within the city perimeter, although their effect is still very limited. They normally tend to be more profitable tourist attraction rather than reservoir of food for the city. On the other hand urban agriculture is not normally allowed, and relocation sites where former peri-urban farmers live (and where they would be willing to practice city farming) are not designed for this purpose. In addition to this, peri-urban farming faces several challenges that should not be underestimated, due to specific land tenure issues. The combination of land-consuming local financing systems and uncertain property rights in rural areas, makes the fringe a profitable business for government and private developers (the so called growth coalition) with high social and environmental costs. In order to achieve a more holistic understanding of the current threads of the peri-urban belt the following aspect should be considered together:

- The Chinese model of urbanisation is highly land-consuming due to the existing local financing system heavily relying on land sell (Ran, 2012);
- The costs of urban growth at the fringe of Chinese cities, given the current policy framework, are often hidden, so it is difficult to appreciate how more sustainable patterns of development would bring to long-term benefits (Verdini, 2014b);
- The urban containment strategies in place are still mainly top-down and very often relying on purely regulative command-control instruments, lacking of meaningful stakeholders involvement and market-based mechanisms to curb sprawl (Bengston et al., 2004; Zhao, 2011);
- The industrialization of the countryside that happened during the 80s and 90s, especially in the most dynamic coastal areas of China (Friedmann, 2005) has determined a scattered presence of

³ We refer to the quota of consumed food that is produced within the municipality or a region.

polluted sites in rural areas potentially undermining the quality of peri-urban farmlands and consequently the quality of healthy food.

In summary the institutional, socio-economic, and the environmental constraints of peri-urban farmlands here depicted, advise against any easy shortcuts in evaluating the current Chinese situation. Rather, it advocates for a deeper understanding on whether or not the provision of local food could be safe, sufficient and sustainable in the medium-long term. In order to provide a holistic framework for assessing the sustainability of a local food system it is necessary to evaluate its distinct dimensions. It would imply the evaluation of the different components of sustainability of local food systems (ecological, social, economic and institutional) in China, as it has been already tested in the West (Schonhart et al., 2009), which is not currently existing.

3. Pedagogic implications for planning a sustainable urban fringe

Based on the comprehensive survey already mentioned about the comparative University graduate syllabi for urban studies (Bina et al. 2015), 4 dimensions and 36 topics of higher education for sustainable development have been identified. For each dimension (society, S; economy, E; environment & resources, E&R; planning & governance, P&G) at least one topic for each dimension can be directly associated with the issue here presented, namely the sustainable planning of the rural fringe: urban-rural relationship (P&G), Food and urban sustainable development, such as urban farming (E&R), Circular Economy (E) and public participation & stakeholders' engagement in planning process (S) (p. 36).

Similarly, three dimensions/orientations of urban studies education have been identified. In summary, programs with a stronger sustainability focus should privilege a trans-disciplinary approach having a balanced mix of: Design, Policy and Management. The UN-Habitat reports comes to a similar conclusion arguing that obstacles to ensure sustainable outcomes in planning programmes are embedded in traditional disciplinary rivalry such as: design vs policy; rationality vs deliberation, master planning vs development management and (quite interestingly) 'one-world vs context-specific planning education' (UN-Habitat, 2009, p. 185-188).

Since the establishment of the department of Urban Planning and Design at XJTLU in 2010, discussions regarding the balance of planning and design skills and contents, such as of international or context-specific topics, have constantly characterised the development and revision of the UG programme, being initially imported from Liverpool University. These discussions have also influenced the PG programmes, although in this case the programmes have been designed starting from scratch⁴. The underlying concern in this delicate phase of setting-up new programmes was to address the international debate, here depicted, by looking specifically at the Chinese higher education evolution. The reform of HE in 2011 has attributed more clear disciplinary status to *Urban Planning*, previously categorised as a sub-category of architectural studies, by introducing a new independent category of *Urban and Rural Planning*. Before 2011 urban planning was largely associate with physical design and was mainly focused on urban issues (Kiddle et al., 2016). Such reform has inspired a discussion among the departmental staff on how to contain and re-define the design component in teaching, which was an expectation of Chinese students, and has legitimated the approval of a new module titled "rural planning" in a programme which was quite urban-centric⁵.

⁴ I refer to my direct experience, being from 2012 and 2015 the Chair of the Departmental Learning & Teaching commission and being from 2013 to 2014 the Programme Director of the Master in Urban Planning.

⁵ The new module 'Rural Planning' was approved during the DLTC meeting of May 2013, being enforced force

The expectation of Chinese students of an urban planning programme mainly based on teaching design comes from the traditional Chinese educational system (UN-Habitat, 2009, p. 191), and partly from concerns regarding their employability given that a florid real estate market still largely requires a workforce of designers for allocating urban expansions. The module of 'Rural Planning' was apparently denying two pilasters of the planner's career in China: the design approach and the centrality of the urban dimension of education.

The module of rural planning, for year 3 students, 'aims to introduce students about landscape and rural planning policies and their implementation in the regional and urban development process. It aims to further develop an understanding of the relationship between the tools of planning and the issues of: natural resources conservation, landscape preservation and governance, countryside and urban-rural fringe management'⁶. One of the main Learning Outcome is 'to be able to comprehend how sustainability thinking can be applied in practice' and the syllabus is divided in three main parts: 'regional planning for open space', 'rural policy in China, 'reshaping the countryside: rural design and community empowerment'. There are moreover two assignments: an individual essay to reflect about the bottom-up practices of rural development at the fringe of Chinese cities and group work which require students to review rural policies, to conduct site analysis and evaluation of a selected site (normally a rural village where agricultural activities are still in place) and to 'propose spatial schemes and design solutions that could facilitate a sustainable model of local development'.

In addition to that the teaching experience has been associate with extensive research and field works on local food systems and peri-urban areas management, supported by grants from the Suzhou Academy of Social Science (2012) and the Department of Education of the Jiangsu Province (2013). The research has resulted in concrete action-research activities in forms of extra-curricular intensive workshops in rural villages, with the partial involvement of local stakeholders and commitment of the local government. Students which had undertook the rural planning module were generally involved in this activity, providing design solutions for a selected site with possibility of better interaction with local people and local officials. Three international Workshops have been organised from 2012 to 2015, with the support of ILAUD, the International Laboratory of Urban Planning & Design⁷. The workshop is a client-based action-research activity with the aim to solve real problems arising from a specific site. Students are involved in field works and local stakeholders involvement. In the first two editions contextual problems have prevented real commitments of the local government and for this reason, the final results could not have been shared with local stakeholders and citizens. However, in the last summer workshop in July 2015 the results were presented in plenary session and discussed among citizens. Considering the holistic approach adopted, the results of the intensive work in Shuang Wan Village has been even acknowledged as one the pilot cases in China for the implementation of the UNESCO 'Historic Urban Landscape' combining: a proposal for sustainable development for a peri-urban village, a strategy of heritage and landscape preservation and an experiment of civic engagement (Verdini, 2015).

from the Academic Year 2013-2014.

⁶ The quoted parts are coming from the Module Specification (2014-2015).

⁷ ILAUD a no-profit association founded by Giancarlo De Carlo in 1976 and currently run by Paolo Ceccarelli and Etra Connie Occhialini.

4. Discussions and conclusions

One of the main findings of the research which has been conducted in the last years on the rural fringe in China, regards the evidence that emerging “mutual beneficial synergy between the urban and the rural realm, especially in social and economic terms, provide arguments to challenge a mono-directional and pro-growth Chinese model of development, highly relying on urban expansion” (Verdini et al., 2015). This new scenario depends on the increasing urban demand for quality local food and leisure activities at the fringe of Chinese mega-cities, which is tightly linked with a changing national political discourse regarding the need of preserving the rural dimension of cities. Although there are many limitations in the Chinese urban planning, primarily institutional, which prevent to achieve real sustainability at the fringe (Zhao, 2015), this is a privileged observatory and an area to explore for further achievements. At the same time it requires a meaningful combination of discipline-specific and country-specific knowledge and skills to be correctly understood.

The teaching experiences here reported, the case of the module of ‘rural planning’ and the co-curricular experience of the international workshops, will be now discussed in light of the 7 ‘enabling factors’ in higher education for achieving sustainable urban development, identified by the Report on Syllabi for urban studies (Bina et. al., 2015). In more details:

1. ‘Integrating physical design and social science/policy approaches, as well as urban management’: the RP module attempts to combine design/policy/management, although the component of design is often marginalised. This is because design requires a studio-based class organisation which many hours of tutorials, while such module is a lecture-based one (13 hours) with additional tutorials (26 hours). This can be partially compensated by additional co-curricular activities where, instead, the intensive weekly work (at least 40 hours) is mainly about design. However, the rural setting is more easily understandable than the urban one and more easily students can suggest proposals of physical change;
2. ‘Skills towards Sustainable urban development’: there is a balance between analytical, technical and communication/negotiation skills thought in the module of RP although;
3. ‘Merging theory and practice’: the RP module is a client-based project (the local government) but the teaching activity normally still takes place at the University. A residential workshop offers the opportunity to experience a real work, working in the town hall or in a public building, with frequent interactions with local people and policy makers;
4. ‘Geographical focus on the local-global nexus’: this is a topic, which is implicit in the module specification. This is due to the particular international nature of XJTLU, where international best practices are often compared with Chinese cases;
5. ‘Promoting participatory processes and deliberative approaches’: this can be achieved by teaching relevant experiences but can be put into practice only developing co-curricular activities;
6. ‘Ethical values and critical reasoning’: the selection of case of rural village at the fringe of a Chinese city, provides a series of factual evidence of the ethical value of the selected

topic. Urban-rural conflicts in China are in fact deeply embedded in the unfairness of the urbanisation and the peri-urban farmers relocation. A perspective, which aims at raising the visibility on (relatively) marginal areas, has to take into account issues of justness, environmental concerns, etc.

7. 'Inter-disciplinarity and cross cultural collaboration': this is not an easy task during an ordinary teaching activity, due to the departmental ownership of modules, but it might be easily achieved in extra curricular and less strict activities.

In conclusion there are several discipline-specific and country-specific issues to take into account to achieve greater sustainability in studying the rural fringe of China. Many of them are quite general and probably applicable to many fields of urban studies, with the conditions of taking into account the local context. For example point 2, point 3, point 4, point 5 and 7. However, even in this case they cannot be achieved just by delivering a module in class, but they require an extra effort outside of the ordinary teaching duties to be effective, as it has been experienced during the international workshops. Regarding point 1 and 6, the topic itself seems to be more suitable to constitute a real enabling factor to achieve greater sustainability in higher education. Point 1 has to do with the scale and point 6 with the topic(s): the small scale of rural villages which are the objective of the teaching activities favour the integration of design, policy and management. The scale itself makes this more manageable from a students' perspective. The topic instead, namely the peri-urban fringe, offers a unique and privileged observatory on some of the most contradictory transformation of urban China. Social injustice and dramatic environmental problems which are all embedded in this conflictive part of the city can foster the development of critical thinking and the formation of ethical value. There are few many areas in China that offers so comprehensively the unique opportunity to see how sustainability could be put into practice, or be entirely denied.

5. References

- Bina, O., Balula, L., Varanda, M. and Fokdal, J. (2015) University Graduate Syllabi for Urban Studies: a comparative perspective: China, EU, World – URBACHINA WP4 Deliverable, 15 July 2015.
- Born, B. and Purcell, M. (2006), Avoiding the local trap. Scale and Food Systems in Planning Research, *Journal of Planning Education and Research*, 26, 195-207.
- Brinkley, C. Avenues into Food Planning: A Review of Scholarly Food System Research. *Int Plan Stud.* 2013 Apr 1; 18(2): 243–266.
- Daniels TL. The Purchase of Development Rights: Preserving Agricultural Land and Open Space. *Journal of the American Planning Association.* 1991;57(4):421–431
- Marin MC. Impacts of Urban Growth Boundary Versus Exclusive Farm Use Zoning on Agricultural Land Uses. *Urban Affairs Review.* 2007;43(2):199–220.
- Klaus R. Kunzmann & Liu Yuan (2014) Educating Planners from China in Europe, *disP - The Planning Review*, 50:4, 66-70, DOI: 10.1080/02513625.2014.1007652
- Sonnino, R., 2009. Feeding the city. Towards a New Research and Planning Agenda. *International Planning Studies*, 14, 425-435.
- United Nations, Department of Economic and Social Affairs, Population Division (2014). *World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SER.A/352)*.
- Verdini, G. (2015), Assessing local food systems in China for building healthy mega-cities', in: J. Zhou (Ed.), 'Better planning, healthier cities', Suzhou: Soochow University Press. Pages 264-276
- Verdini, G., Yiwen, W. and Zhang, X. eds. 2016. *Urban China's Rural Fringe. Actors, dimensions and management challenges*. Farnham: Ashgate.
- Zhao, P., 2015. The evolution of the urban planning system in contemporary China: an institutional approach. *International Development Planning Review*, 37(3), 269-287.

- United Nations, Department of Economic and Social Affairs, Population Division (2014).
- World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SER.A/352).
- World Bank and the Development Research Center of the State Council, P. R. China. 2014. Urban China: Toward Efficient, Inclusive, and Sustainable Urbanization. Washington, DC: World Bank. DOI: 10.1596/978-1-4648-0206-5.